

Asia-Pacific Economic Cooperation

APEC Key Documents 2012

Advancing Free Trade for Asia-Pacific Prosperity



Asia-Pacific Economic Cooperation

APEC Secretariat

35 Heng Mui Keng Terrace Singapore 119616 Tel: (65) 68 919 600 Fax: (65) 68 919 690 Email: info@apec.org Website: www.apec.org

Contents

20th APEC Economic Leaders' Meeting, 8 - 9 September 2012	
2012 APEC Leaders Declaration: "Integrate to Grow, Innovate to Prosper"	1
Annex A: Towards Innovative Growth	9
Annex B: Strengthening APEC Energy Security	10
Annex C: APEC List of Environmental Goods	11
Annex D: Promoting Cross-Border Education Cooperation	25
Annex E: Fighting Corruption and Ensuring Transparency	27
24th APEC Ministerial Meeting, 8 - 9 September 2012	20
Joint Statement	
Annex A: APEC Model Chapter on Transparency for RTAs/FTAs	
Annex B: Towards Reliable Supply Chains	
Annex C: Recommendations of the Innovation Technology Dialogue on Nanotec	•
for Energy Efficiency	
Annex D: Outcomes of the APEC International Education Conference "Shaping	
within APEC"	
Annex E: Investing in Human Capital	
19th APEC Finance Ministers' Meeting, 30 August 2012	
Joint Ministerial Statement	
Annex: Policy Statement, APEC Ministers of Finance	
APEC Telecommunications and Information Ministerial Meeting, 8 August 2012 Saint Petersburg Declaration	65
Saint Petersburg Declaration	65
Saint Petersburg Declaration	
Saint Petersburg Declaration	69
Saint Petersburg Declaration	
Saint Petersburg Declaration	
 Saint Petersburg Declaration	69 71 75 78 Fourism
Saint Petersburg Declaration	69 71 75 78 Fourism 80
Saint Petersburg Declaration	69 71 75 78 Fourism 80
Saint Petersburg Declaration Special APEC Transportation Ministerial Meeting, 3 August 2012 St. Petersburg Ministerial Declaration APEC Small and Medium Enterprises Ministerial Meeting, 3 August 2012 Joint Ministerial Statement APEC Tourism Ministerial Meeting, 24 July 2012 Khabarovsk Declaration Annex A: List of Attendance Annex B: Input to the APEC 2012 Economic Leaders' Declaration from APEC T Ministers Annex C: APEC Guidelines on Ensuring Tourist Safety APEC Meeting of Ministers Responsible for the Environment, 16 - 18 July 2012	69 71 75 78 Tourism 80 81
Saint Petersburg Declaration	69 71 75 78 Tourism 80 81
Saint Petersburg Declaration	69 71 75 78 Tourism 80 81
Saint Petersburg Declaration Special APEC Transportation Ministerial Meeting, 3 August 2012 St. Petersburg Ministerial Declaration APEC Small and Medium Enterprises Ministerial Meeting, 3 August 2012 Joint Ministerial Statement APEC Tourism Ministerial Meeting, 24 July 2012 Khabarovsk Declaration Annex A: List of Attendance Annex B: Input to the APEC 2012 Economic Leaders' Declaration from APEC T Ministers Annex C: APEC Guidelines on Ensuring Tourist Safety APEC Meeting of Ministers Responsible for the Environment, 16 - 18 July 2012	

Joint Statement	
APEC Energy Ministerial Meeting, 24 -25 June 2012	
St. Petersburg Declaration	
Meeting of APEC Ministers Responsible for Trade, 4 -5 June 2012	
Statement	
Statement on supporting the multilateral trading system and resisting prote	ectionism 109
Second APEC Ministerial Meeting on Food Security, 30 - 31 May 2012	
Kazan Declaration	
Fifth APEC Education Ministerial Meeting, 21 - 23 May 2012	
Joint Statement	117
Abbreviations and Acronyms	

Introduction

Key APEC Documents 2012 is the 19th in a series produced by the APEC Secretariat. The Key Documents' publication provides a reference set of the key policy decisions and initiatives endorsed by APEC Leaders and Ministers each year. Collectively, these documents frame the policy directions for APEC's annual work programmes.

This issue presents a compilation of the statements from each of the APEC Ministerial Meetings held during 2012 together with the APEC Economic Leaders' Declaration from their recent meeting in Vladivostok, Russia.

The APEC website, *www.apec.org*, offers a further source of documentation of policy and reference papers; APEC committee reports; and information relating to APEC's wide-ranging activities.

APEC Secretariat

December 2012

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

20th APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration Integrate to Grow, Innovate to Prosper

We, the Leaders of the Asia-Pacific Economic Cooperation (APEC), gathered in Vladivostok, Russia on 8-9 September 2012 for the 20th APEC Economic Leaders' Meeting under the APEC 2012 theme of "Integrate to Grow, Innovate to Prosper" to reveal the pathways to strengthen the region's prosperity and leadership in the global economy.

APEC economies have made enormous progress over the past two decades and are looking forward to continuing to grow and prosper in the coming years. Since the first APEC Leaders' Meeting in 1993 in Seattle, USA, our trade has grown four times and foreign direct investment in the Asia-Pacific region has been growing at an annual rate of more than 20 percent. We are looking forward to building on this success by taking additional steps to promote our shared economic growth and prosperity in the coming years.

We recognize that robust international trade, investment, and economic integration are key drivers of strong, sustainable, and balanced growth. With all APEC economies now being members of the World Trade Organization (WTO), we strongly reaffirm our commitment to trade and investment liberalization and facilitation in the Asia-Pacific region.

Since we last met, the global economy has continued to face a number of challenges and is subject to downside risks. The financial markets remain fragile, while high public deficits and debts in some advanced economies are creating strong headwinds to economic recovery globally. The events in Europe are adversely affecting growth in the region. In such circumstances, we are resolved to work collectively to support growth and foster financial stability, and restore confidence. We are committed to strengthening domestic demand where appropriate, facilitating job creation, reducing high public deficits and debts, and implementing structural reforms to boost growth in our economies.

We welcome the European Leaders' commitment to take all necessary measures to safeguard the integrity and stability of the Euro area. We remain committed to reducing imbalances by strengthening deficit economies' public finances with sound and sustainable policies that take into account evolving economic conditions and, in economies with large current account surpluses, by strengthening domestic demand and moving toward greater exchange rate flexibility. We reaffirm our commitment to move more rapidly toward market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying fundamentals, avoid persistent exchange rate misalignments, and refrain from competitive devaluation of currencies. While capital flows can be beneficial to recipient economies, we reiterate that excess volatility of financial flows and disorderly movements in exchange rates have adverse implications for economic and financial stability.

Fiscal sustainability remains an important element of sustained economic growth, but it was negatively impacted by recent financial crises. Under these circumstances, we remain committed to ensuring the long-term fiscal sustainability of our economies while recognizing the need to support their recoveries within the available fiscal space. Expenditures related to aging population should be taken into account in fiscal projections. Fiscal sustainability can be at risk from high private indebtedness and vulnerable banking sectors, which need to be closely monitored.

We welcome the outcomes of the G20 Los Cabos Summit. We support the G20 commitment to pursue strong, sustainable and balanced growth, which we are convinced will promote higher job creation and increase the welfare of people around the world. We will continue to take coordinated and collaborative efforts to reach these common goals.

We note the review of APEC's work undertaken to support the APEC Leaders' Growth Strategy, welcome the steps taken to implement the APEC Growth Strategy and appreciate the progress made, especially towards sustainable and innovative growth in 2011 and 2012. We encourage Ministers and officials to continue working to promote growth elements in advance of their 2015 report to Leaders on APEC's progress in promoting the Growth Strategy.

We strongly commit to fight against corruption to ensure openness and transparency in APEC. Acknowledging that corruption fuels illicit trade and insecurity and is a tremendous barrier to economic growth, the safety of citizens, and to the strengthening of economic and investment cooperation among APEC economies, we endorse commitments on fighting corruption and ensuring transparency (see Annex E).

Trade and Investment Liberalization, Regional Economic Integration

We reiterate the importance of international trade to economic recovery, job creation and development, and the value and centrality of the multilateral trading system as embodied in the WTO.

We reaffirm our commitment to strengthen this system. In working towards the successful multilateral conclusion of the Doha Development Round, we reaffirm the instructions to our officials in Geneva to continue exploring different, fresh and credible negotiating approaches while respecting the Doha mandate, the principles of transparency, the importance of the multilateral trading system, and development. We remain firmly committed to advancing the technical discussions actively taking place in Geneva on trade facilitation and other development-related issues as mandated by the 8th WTO Ministerial Conference. We direct our Ministers to continue to work to advance these objectives, and to comprehensively and realistically review the progress achieved in the WTO by the next meeting of APEC Ministers Responsible for Trade in 2013.

In view of the rise in protectionist trends and continuing uncertainties in the global economy, we reaffirm our pledge to refrain through the end of 2015 from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing WTO-inconsistent measures in all areas, including those that stimulate exports. We reaffirm our commitment to rollback protectionist measures and continue maximum restraint in implementing WTO-consistent measures with a significant protectionist effect. We recognize the important role that the WTO plays in reducing protectionism and encourage the WTO and other international organisations to deepen their monitoring of protectionist measures, consistent with their respective mandates.

We welcome the ongoing work to expand the product coverage and membership of the WTO Information Technology Agreement (ITA) and instruct our officials to work in earnest in order to swiftly achieve a good outcome of the negotiations.

We underline the importance of the Bogor Goals, and reaffirm our commitment to address issues that will help APEC economies to achieve them. We recognize that Free Trade Area of the Asia-Pacific (FTAAP) is a major instrument to further APEC's regional economic integration agenda. Taking note of various regional undertakings that could be developed and built upon as a way towards an eventual FTAAP, we direct Ministers to continue to facilitate APEC's role as an incubator of a FTAAP and to explore ways forward towards its realization by providing leadership and intellectual input into the process of its development.

We remain committed to addressing next generation trade and investment issues as an important aspect of our work to further integration of APEC economies and expansion of trade throughout the region.

We welcome addressing in 2012 transparency as a new next generation trade and investment issue, and the endorsement of the APEC Model Chapter on Transparency for RTAs/FTAs to be used as a guide by APEC economies. Transparency is one of the basic principles underlying trade liberalization and facilitation, important to our businesses and workers, and to eliminating and addressing barriers to trade. We believe this work will contribute to the successful implementation of APEC's regional economic integration agenda, will

promote convergence on how APEC economies address transparency issues in their RTAs/FTAs and provide for concrete steps towards establishment of a FTAAP.

We recognize the importance of addressing unnecessary barriers to trade by advancing regulatory convergence and coherence to achieving our shared objectives of strengthening regional economic integration and ensuring product safety, supply chain integrity, and environmental protection. In this regard, we reaffirm our 2011 commitment to strengthen implementation of good regulatory practices, including through capacity building. Taking these steps is essential to building a high-quality regulatory environment across the Asia-Pacific, and to achieving our goal of achieving free and open trade and investment in the region.

We recognize the importance of adopting and maintaining laws, regulations, and practices that facilitate investment. We reaffirm the importance of continued efforts to improve the investment climate in the APEC region, including through the exchange of experiences in mechanisms for dispute avoidance and resolution. We acknowledge the critical importance of private sector investment in regional infrastructure development, and encourage broader work in the format of public-private partnerships.

We reaffirm our commitment to promote green growth and to seeking practical, trade-enhancing solutions to address global environmental challenges. In 2012, we made considerable progress in this regard. We welcome and endorse the APEC List of Environmental Goods that directly and positively contribute to our green growth and sustainable development objectives (see Annex C). We reaffirm our commitment to reduce our applied tariff rates to five percent or less on these environmental goods by the end of 2015, taking into account economies' economic circumstances without prejudice to their positions in the WTO. By reducing tariffs on environmental goods, we will help our businesses and citizens to access important environmental technologies, which will facilitate their deployment, and use contributing significantly to our green growth and trade liberalization objectives.

While supporting sustainable growth, we agree that promoting green growth should not be used as an excuse to introduce protectionist measures. We are committed to ensuring that our actions to protect the environment are least trade restrictive and consistent with our international trade obligations.

We recognize that natural resources and the ecosystems upon which they depend are important foundations for sustainable economic growth. We therefore, are concerned by the escalating illicit trafficking in endangered and protected wildlife, including marine resources, and associated products, which has economic, social, security, and environmental consequences in our economies. We commit to strengthen our efforts to combat illegal trade in wildlife, timber, and associated products, to implement measures to ensure sustainable marine and forest ecosystems management, and to facilitate sustainable, open, and fair trade of non-timber forest products. We will take meaningful steps to promote sustainable management and conservation of wildlife populations while addressing both the illegal supply and demand for endangered and protected wildlife, through capacity building, cooperation, increased enforcement, and other mechanisms.

We recognize the importance of information and communication technologies (ICT) as a crucial driver for further integration in the APEC region. We believe it is possible and necessary to be more active in promoting confidence and trust in electronic environments globally by encouraging secure cross border flows of information, including electronic documents. We reaffirm the necessity of multi-stakeholder cooperation to continue efforts to expand and strengthen the Asia-Pacific Information Infrastructure and to build confidence and security in the use of ICT. We encourage the cooperation of member economies to improve disaster preparedness, response and recovery through the development of ICTs and promotion of appropriate systems and technologies and welcome the discussion on supporting people affected by disasters and emergencies through enhanced and timely access to information about risks.

We acknowledge the need for joint actions to prevent the negative influence on the world's economy from carbon emissions. We commit to strengthen APEC energy security (see Annex B), to promote energy efficiency and develop cleaner energy sources for sustainable development.

We reaffirm the importance of structural reforms to raise productivity and growth potential in our economies and welcome progress on the APEC's New Strategy for Structural Reform (ANSSR) endorsed in 2010. We instruct our officials to provide a mid-term assessment report in 2013 to track progress towards ANSSR implementation and encourage collaboration and capacity building among developed and developing economies to expedite the achievement of structural reform objectives.

Strengthening Food Security

We recognize growing challenges to regional and global food security in the risks facing the world economy. Given the growing world population, reducing the number of undernourished people by raising food production, improving the individuals' or households' economic access to food and improving the efficiency and openness of food markets will require more concerted effort by and cooperation among all APEC economies. APEC has given its efforts to strengthen food security through the implementation of the Niigata Declaration and progress made in the Kazan Declaration on Food Security. To advance this work, we are committed to increasing sustainable agricultural production and productivity, considering the diversity of environmental conditions world-wide and positive externalities of agriculture, further facilitating trade and developing food markets, enhancing food safety, improving access to food for vulnerable groups and improving farmer's welfare. We will implement measures to help ensure sustainable marine ecosystems management and combating illegal fishing and associated trade.

Sustainable agricultural growth is a priority for all our economies. In pursuing this goal we will take concrete actions to raise productivity in agriculture by boosting investment and adopting innovative technologies in agriculture, including agriculture biotechnology. We emphasize the importance of open and transparent market mechanisms in ensuring food security. We stress the need to create an enabling environment that encourages increased public and private investment in agriculture, and we recognize the important role of public-private partnerships in the field of investment. We appreciate the positive role of foreign direct investment in increasing agricultural production, we note the Principles for Responsible Agriculture Investment (PRAI) and welcome ongoing work in other international organizations to identify best practices for responsible agricultural investment.

We acknowledge the increasing importance of encouraging the safe development and implementation of innovative agricultural technologies since land, water, forest and other natural resources are limited. This requires a significant increase of long-term investment into agricultural research, and development along with the adoption of transparent, science-based regulatory approaches for innovative agricultural technologies that are consistent with international obligations. We agree that it is also necessary to strengthen domestic and international agricultural research systems. We will facilitate better coordination, interaction and capacity building among research institutes and innovative technologies by farmers in an effective, market-driven, and voluntary manner. We will also look for ways to mitigate the effects of agriculture on climate change and support efficient and sustainable use of agricultural and natural resources, in particular, land, forests, water and biodiversity.

We recognize that a more open, stable, predictable rule-based and transparent agricultural trading system has a crucial role to play in enhancing food security. Recognizing that bans and other restrictions on the export of food may cause price volatility, especially for economies that rely on imports of staple products, we reiterate our pledge against protectionism. We are determined to ensure fair and open markets, reduce price volatility, and establish greater regional and global food security and confirm our commitment to develop food markets infrastructure, reduce post-harvest losses along the entire food supply chain.

Noting the important contribution of greater transparency and effective food market monitoring to reducing food price volatility, we welcome the progress made in implementing the Asia-Pacific Food Security Information Platform (APIP) and therefore support cooperation between APIP, the Agricultural Market Information System (AMIS) and the Rapid Response Forum, launched by the G20.

We believe that deeper involvement of the relevant private and public sector stakeholders into APEC's food security efforts will contribute significantly to addressing our shared goals. We welcome the establishment of the Policy Partnership on Food Security (PPFS) and the outcomes of its meeting in 2012.

We will also take the following steps to promote our food security goals:

- Supporting the effective and multi-faceted work of the Food Safety Cooperation Forum;
- Encouraging further cooperation and dialogue among the economies on understanding, recognition and capacity building regarding the benefits of harmonizing domestic regulations on food safety and quality with international standards consistent with the WTO Agreements on Technical Barriers to Trade and on the Application of Sanitary and Phytosanitary Measures;
- Striving to improve domestic food safety systems by implementing preventive control measures, building information sharing networks, strengthening laboratory capacity, and building regional capacity to respond to high priority food safety hazards and minimize food safety incidents;
- Exploring ways to improve economic and physical access to food for vulnerable groups, including those facing an emergency due to natural and anthropogenic disasters; encouraging exchange of best practices on the provision of food for vulnerable populations, including through social and school feeding; strengthening sustainable social protection and social safety nets;
- Enhancing cooperation to combat illegal, unreported and unregulated fishing and associated trade; working towards sustainable management of marine ecosystems; improving capture fisheries management and sustainable aquaculture practices; and facilitating sustainable, open and fair trade in products of fisheries and aquaculture.

Establishing Reliable Supply Chains

We reaffirm our commitment to achieving an APEC-wide target of a ten percent improvement in supplychain performance by 2015, in terms of reduction of time, cost, and uncertainty of moving goods and services through the Asia-Pacific region, taking into consideration individual economy's circumstances. We welcome the adoption of a more systematic approach to addressing existing chokepoints in supply chains through targeted capacity-building and concrete steps towards making supply chains more reliable, resilient, safe, efficient, transparent, diversified and intelligent, and direct officials to advance this work in 2012 to be completed by 2014.

Recognizing the large volume of trade in our region, we agree that the reliability of supply chains is crucial to facilitate trade, maintain sustainable development, and ensure economic, energy, food, and environmental security in the APEC region and around the world. We encourage continued discussion with the business community and other relevant stakeholders on the diversification of transportation routes in the region and resiliency planning in order to build the most efficient supply chain networks. We believe that it is essential to continue work to streamline customs procedures among APEC economies.

We agree that it is also crucial to advance the discussion on the technological enhancement of supply chains with a view to promoting greener, smarter, more efficient and intelligent supply chains. We support continued discussion with the business community and other relevant stakeholders on Authorized Economic Operators programs, in line with the World Customs Organization/APEC SAFE Framework of Standards, and on improving supply chain performance, coordination and visibility through information sharing, enhancing the capacity of local or regional logistics sub-providers, developing early warning systems for emergencies to increase the safety, security and reliability of cross-border transactions, wider implementation of tracking technologies and better control and tracking of the movement of bulk cargo, dangerous goods and hazardous materials. We welcome work on services liberalization and innovation to facilitate global supply chain connectivity and enhance economies' capacity.

We acknowledge that terrorism is a serious threat to economic growth, security, stability and supply chain reliability within the APEC region. Thus, we reaffirm our commitments to implement the APEC Consolidated Counter-Terrorism and Secure Trade Strategy and support deeper cooperation and capacity building across the Strategy's priority areas of secure trade, travel, finance, and infrastructure to make regional commerce more secure, efficient, and resilient.

We recognize the significance of travel and tourism as a vehicle for job creation, economic growth and development in the Asia-Pacific. Tourism represents a special case of cross border supply chains where a variety of services are supplied to meet the requirements of increasing international tourist flows. Supported by adequate infrastructure, this leads to creating new growth and employment opportunities throughout the whole supply chain. We therefore commend the efforts by APEC Tourism and Transport Ministers to encourage facilitation of international travel, to assess the liberalization of air transportation services and to improve safety and security of tourist products.

Recognizing the vulnerabilities of our economies to natural and anthropogenic disasters, we reaffirm the importance of enhancing preventative measures, emergency preparedness, disaster resiliency and fostering of scientific and technical cooperation among APEC economies, communities and businesses in this regard. We recognize the importance of easing the mobility of relief assistance in the aftermath of disaster to minimize casualties. Highlighting the need for greater coordination and better connectivity in disaster management, we support the idea of promoting and facilitating business continuity and resiliency planning especially among small and medium-sized enterprises. We also support fostering public-private partnerships, establishing common standards for emergency early warning systems in cross-border transportation, furthering the development of an operational trade recovery communications mechanism based on the APEC Trade Recovery Program and developing cooperation for emergency management and disaster response preparedness among Crisis Management Centers (CMCs) in APEC economies, including with other regional CMCs such as the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management, based in Jakarta, Indonesia.

In view of high economic costs incurred by many APEC economies due to natural catastrophes in recent years, we note timeliness and the importance of strengthening our resilience against disasters through the development of disaster risk management (DRM) strategies. We recognize that integrated disaster risk financing policies are part of overall disaster response preparedness. In this regard we recognize the value of knowledge exchange within APEC and beyond and appreciate the joint efforts of the World Bank, the OECD, the ADB and other bodies' joint efforts to elaborate practically applicable guidelines for financial authorities' responses to natural disasters with due regard the work undertaken by the G20. In developing these policies, attention should be given to advance planning and preparation measures by financial authorities.

Intensive Cooperation to Foster Innovative Growth

Recognizing the importance of innovation to our shared goals of economic growth, prosperity, and job creation, in 2012 APEC economies took important steps towards the development of effective, non-discriminatory and market-driven innovation policies and refinement of our vision of innovation cooperation and networking in the region (see Annex A).

This year we have advanced these objectives by transforming the Industrial Science and Technology Working Group into a Policy Partnership on Science, Technology and Innovation (PPSTI) to bring together the three key groups of innovation stakeholders – business, government, and academia – to address common challenges, enhance innovation capacity. The PPSTI will also organize Innovation Technology Dialogues - a mechanism to explore and identify how emerging innovative technologies and related policies and instruments can address current challenges faced by APEC economies and what are the prospects for their application. We welcome the results of the first ever Innovation Technology Dialogue on nanotechnology for energy efficiency.

We also welcome New Zealand and Indonesia's willingness to jointly co-chair a meeting of APEC Chief Science Advisers in 2013, to reinforce senior science relations across the Asia Pacific.

We recognize the importance of small, medium and micro-sized enterprises (SMMEs) and believe that they are a significant driver of development and innovation in the Asia-Pacific region that will improve the quality of economic integration and competitiveness of our economies. To support SMMEs' growth potential, we commit to continue building competitive, open and transparent business environments, assist SMMEs' internationalization and support of export-oriented SMMEs, strengthen their access to markets and financing, and promote innovation as a key competitive advantage for SMMEs.

We note the importance to our innovation goals of assisting SMMEs at an early stage, and expanding opportunities for youth and women. Given the significance of start-ups and young entrepreneurs to economic growth in the Asia-Pacific region, we support the implementation of the Young Entrepreneurs Network and APEC Start-up Accelerator Initiative. We encourage the mutually beneficial collaboration among firms, big or small, to foster their intellectual capital, optimize their core competencies, and minimize potential disputes that would discourage SMME development.

Education is an essential driver of innovative growth in the APEC region and we support the steps taken by our economies to pursue practical and sustainable cooperation in this field. This includes efforts to enhance the mobility of students, researchers, and education providers within APEC through the development of higher education cooperation (see Annex D).

Recognizing that a healthy population is crucial for sustainable development of human resources, and therefore, for sustainable economic development and innovative growth in the APEC region, we support the efforts made by our economies to address health issues across sectors, and encourage further concrete steps to strengthen health systems by preventing non-communicable diseases, promoting and investing in health and healthy lifestyles and wellness across the life course starting from maternal, infant and child health through to the end of life.

We reaffirm the crucial role of women in achieving economic prosperity and inclusive growth in the APEC region and encourage investing in women through the creation of better business opportunities for women and including them in the innovative economy. We acknowledge that many barriers still exist, especially in the areas of access to capital, access to markets, skills and capacity building, and women's leadership. We welcome the outcomes of the APEC Women and the Economy Forum and reaffirm our commitment to take concrete actions to increase women's participation and empowerment in the economy.

Looking Forward

We believe that the work that has been done in APEC in 2012 to build a more integrated society and ensure innovation-based economic growth will contribute to our common goal of achieving prosperity for APEC economies. We endorse in full the Joint Statement of Ministers at the 24th APEC Ministerial Meeting.

We support the increasing engagement of the APEC Business Advisory Council which contributes significantly to greater collaboration between the public and private sectors. We remain fully committed to facilitate the role of APEC's business community and to provide more opportunities for its participation in APEC's work.

We reaffirm our commitment to provide effective economic and technical cooperation (ECOTECH) activities outlined in the Osaka Action Agenda and to assist APEC members in accordance with the Manila Framework.

Facing threats to growth and financial instability, we will continue to take necessary and concrete actions to mitigate negative effects, build resilience of APEC economies and reach new heights in the development of our region.

We welcome the offer of the People's Republic of China, the Philippines and Peru to host APEC in 2014, 2015 and 2016 respectively.

We welcome the invitation from the President of Indonesia to meet again in Bali in 2013.

20th APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration

Annex A Towards Innovative Growth

Innovations permeate all areas of the economy and society. In order to promote innovation, to create new and unique combinations of inputs and to implement advanced technological, organizational and other solutions, we need to effectively combine the potential of all economies.

The APEC Leaders' Growth Strategy in 2010 recognized innovation development as one of the key factors of economic growth and prosperity. The 2011 Honolulu Declaration emphasized that open and non-discriminatory trade and investment policies that foster competition and encourage the creation of innovations and the capacity to innovate are critical aspects of innovation strategy.

To take this work forward and intensify regional cooperation, we, the APEC Leaders, agree to:

- Strengthen cooperation among innovators of APEC economies to boost the accumulated innovative potential and improve innovation capacity of the APEC region;
- Increase and formalize opportunities for the private sector to provide input into APEC's ongoing work on innovation to ensure that our work is responsive to the needs of business;
- Continue cooperation among government, scientists, and business to promote innovation and address issues that impact specific innovative technologies, including through the newly established APEC Policy Partnership on Science, Technology and Innovation, future Innovation Technology Dialogues, and continued work in the APEC Life Sciences Innovation Forum;
- Organize a meeting of APEC Chief Science Advisors, bringing together APEC economies' most senior science advisers with the goal of reinforcing senior science and innovation relations across the Asia-Pacific;
- Promote innovation through increased trade and investment and broader implementation of information and communication technologies, including by supporting regulatory coherence and cooperation in the field of e-commerce;
- Consistent with the 2011 Leaders' commitments in this area continue work to implement policies that will promote effective, non-discriminatory, and market-driven domestic innovation policies by producing innovation practices in 2013 that will assist economies in integrating these commitments into their domestic policy frameworks;
- Promote an innovation-friendly environment and stimulate jobs and economic growth in APEC economies by strengthening intellectual property protection and enforcement that provide for and protect the incentives that encourage creativity and innovation and provide the tools for successful management and utilization of intellectual property;
- Enhance SMMEs development as a source of innovative ideas and expand their capacity to innovate;
- Support start-ups and young entrepreneurs through various mechanisms, including by rewarding the efforts of young scientists through the APEC Science Prize for Innovation, Research and Education (ASPIRE);
- Facilitate women's participation and empowerment in the innovative economy by enhancing business opportunities, fostering engagement in innovation and promoting investment in human capital;

We direct Ministers and officials to develop activities that will assist economies to effectively implement these steps, identify and address the challenges of innovative growth, and promote long-term innovative development in the Asia-Pacific.

20th APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration

Annex B Strengthening APEC Energy Security

Global financial uncertainties, political developments in the Middle East and North Africa, and carbon emissions from fossil fuel consumption can negatively influence the world's economy and pose new challenges to the secure and sustainable growth of global and regional energy markets.

We recognize the major role fossil fuels will continue to play meeting the growing energy demand in the Asia-Pacific energy mix. At the same time we will further promote energy efficiency and cleaner energy supplies as a priority to boost both sustainable development and energy security, and reduce carbon emissions.

We, the APEC Leaders, agree to:

- Continue working on improving sustainability, efficiency, predictability, and transparency of traditional energy markets;
- Review the current state and prospects of energy markets of the APEC region, with a view to increasing the share of natural gas in the energy mix as one of the most widespread and cleanest burning fossil fuels in the region in order to facilitate the transition to a lower carbon economy without prejudice of other energy sources;
- Evaluate production, trade potential and environmental impact of shale gas and other unconventional natural gas resources;
- Promote steady investment in energy infrastructure, including natural gas liquefaction facilities, as appropriate for increasing energy security and economic growth in the APEC region;
- Promote activities to improve the response to oil and gas emergency situations in the APEC region;
- Ensure the safe and secure use of nuclear energy as a clean energy source in interested economies by sharing expertise, knowledge and best practices, improving nuclear safety standards and coordinating emergency response and preparedness mechanisms;
- Strengthen cooperation among interested APEC member economies and relevant international organizations in the sphere of peaceful use of nuclear energy;
- Promote technology development and deployment of a low-emission energy supply including carbon capture, storage and use, and renewable energy sources such as bioenergy from sustainable biomass sources;
- Note the recommendations adopted at the first Innovation Technology Dialogue "Nanotechnology for Energy Efficiency";
- Implement the APEC Transportation and Energy Ministerial Conference Action Agenda adopted in San Francisco, United States in 2011 to promote energy efficient and sustainable transport systems development, including municipal and railway transportation, gas and electric vehicles and more fuel-efficient conventional vehicles in order to reduce oil dependency and harmful emissions from transport;
- Rationalize and phase out inefficient fossil-fuel subsidies that encourage wasteful consumption, continue to build regional capacity for the reform of those subsidies and report annually on progress using the Voluntary Reporting Mechanism;
- Share the results of research and analysis, develop an Action Plan in order to achieve the aspirational goal to reduce APEC's aggregate energy intensity by 45 percent by 2035 while noting that individual economies' rates of improvement may differ due to varying domestic circumstances.

20TH APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration

Annex C APEC List Of Environmental Goods

APEC plays an important role in pursuing green growth in the region. While each economy has its own environmental and trade policies, it is vitally important to pursue common approaches to environmental challenges, and take coordinated actions to address climate change, such as promoting trade and investment in goods and services needed to protect our environment and developing and disseminating relevant technologies.

Trade and investment liberalization in environmental goods will help APEC businesses and citizens access important environmental technologies at lower cost, which in turn will facilitate their use and benefit the environment. In addition, it will contribute significantly to APEC's core mission to promote free and open trade and investment, as embodied in the Bogor Goals.

In that light, we are pleased to endorse the below APEC List of Environmental Goods that directly and positively contribute to green growth and sustainable development objectives on which we will reduce applied tariff rates to 5 percent or less by the end of 2015 taking into account economies' economic circumstances and without prejudice to their positions in the World Trade Organization (WTO), as we committed in 2011.

We commit to continue capacity-building activities to assist economies in implementing tariff reductions on the agreed list of environmental goods.

We believe that reducing our tariffs on environmental goods demonstrates our commitment to pursuing green growth objectives, addressing climate change and securing sustainable economic development, and are committed to continuing APEC's leadership role in this regard.

APEC LIST OF ENVIRONMENTAL GOODS

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
	441872		Other Assembled Flooring Panels, Multilayer, of Bamboo (44187210)		Renewable bamboo-based products are substitutions of wooden necessities.Since bamboo is characterized by short growing cycle, these enviroment-friendly products can save a great deal of water,soil and air resources.
840290	840290	840290	Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers. [Ca, J, NZ, K] Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers; Parts: [US] Parts for super-heated water boilers and steam or other vapour generation boilers (other than centra heating hot water boilers) [HK] Super-heated water boilers and parts of steam generating boilers [S, BD]	Au] Parts for biomass boilers. [US] Management of solid and hazardous waste [BD]	Parts for the biomass boilers described above. [Ca, J, NZ, US, K, HK, Au] Parts for the boilers for the production of heat and power on the basis of (renewable) biomass fuels. [HK] Part for biomass boilers for the production of heat and power on the basis of renewable biomass fuels. This product should be seen in relation to HS840219, biomass boiler. Biomass in heating systems uses agricultural, forest, urban and industrial residues and waste to produce heat and electricity with less effect on the environment than fossil fuels. This type of energy production has a limited long term effect on the environment because the carbon in biomass is part of the natural carbon cycle. [S, BD]
840410	840410	840410	Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units. [C, J, NZ, K, Au, Ru, M, BD] Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recovers'). [US] Auxiliary plant for use with steam or other vapour generating boilers, super-heated water boilers and central heating boilers. [HK] Auxiliary plant for steam, water and central boiler [S]	Auxiliary plant for use with 840219x. [Ca, J, NZ, K, Au] For central heating boilers of heading 8403 [M, BD]	Components of industrial air pollution control plant which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, or renewable energy resource recovery applications. [Ca, J, NZ, K, Au, BD] Components of industrial air pollution control plant which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, [biomass energy generation - <i>US only</i>] and other renewable energy resource recovery applications. [US, HK, M] These are soot removers and components of industrial air pollution control plant, which minimise the release of pollutants into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment or renewable energy resource recovery applications. [S]
840420		840420	Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units.		Used to cool gas streams to temperatures which allow the removal of contaminants, e.g. volatile organic compounds (VOC) like benzene.
840490	840490	840490	Parts for auxiliary plant for boilers, condensers for steam, vapour power unit. [Ca, J, NZ, K] Auxiliary plant for use with boilers of heading 8402 or 8403 (for example, economizers, super-heaters, soot removers, gas recovers'); condensers for steam or other vapour power units; Parts. [US, Au, Ru]	Air pollution control [BD]	These parts are used in the repair and maintenance of the equipment classified under 840410 above. This secondary equipment is also used to support waste heat recovery processes, such as boilers mentioned above, in waste treatment, or renewable energy resource recovery applications. [C, J, NZ, US, Au, R, Th, M] Components of industrial air pollution control plant which minimise the release of pollutants

HS	HS	HS	US Cada Description	EX-OUT / ADDITIONAL	
(2002)	(2007)	(2012)	HS Code Description	Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			Parts for subheading 840410100 [M, BD]		into the atmosphere. This equipment is also used to support waste heat recovery processes in waste treatment, or renewable energy resource recovery applications. [BD]
840690	840690	840690	Parts for steam and other vapour turbines. [Ca, J, NZ, K, Au, BD] Parts of steam turbines. [US, M]	Optional ex-outs may include parts suitable for use with stationary steam turbines over 40MW; stationary steam turbines not over 40 MW, other vapour turbines; parts for 840681x and 840682x. [Ca, J, NZ, K, Au] Parts for 840681x and 840682x. [US] Renewable energy plant [BD] Only for stator blades, rotors and their blades [R]	Parts used for repair and maintenance of energy recovery turbines listed in 840681 and 840682 above. [Ca, J, NZ, K, Au] Parts for the aforementioned ex-outs/goods of 8406 [US] Turbines designed for the production of geothermal energy (renewable energy) and co- generation ((CHP) which allows for a more effective use of energy than conventional generation) [BD]
841182	841182	841182	Other gas turbines of a power exceeding 5,000 kW. [Ca, J, NZ, US, Au, Th, S, BD] Gas turbines, except turbo-jets and turbo-propellers, of a power exceeding 5,000 kW. [HK] Turbojets, turbo-propellers and other gas turbines of a power exceeding 5,000 kW [M]	Possible ex-out may include gas turbines that burn natural gas [Au] Gas turbines for electrical generation from recovered landfill gas (exceeding 5,000 kW) [BD] Of a power exceeding 5000 kW but not exceeding 50 000 kW [R]	Gas turbines for electrical power generation from recovered landfill gas, coal mine vent gas, or biogas (clean energy system). Note that these turbines do "exceed 5,000 kW". [Ca, J, HK, NZ, Au, M, BD] Gas turbines for clean power generation including recovered landfill gas, coal mine vent gas, or biogas. [US] Gas turbines are used for electrical power generation from recovered landfill gas, coal mine vent gas, biogas or national gas. Lower emission of pollutants compared with traditional fire power generation methods. [S]
		841199	Parts of gas turbines.	Parts for 841181 and 841182.	Parts for gas turbines described above.
	841290	841290	Engine and motor parts, nesoi [US] Parts of the engines & motors of 8412.10-8412.80 [S, BD]	Wind turbine blades and hubs [US] Only for civil aviation [R]	These blades and hubs are integral components to wind turbines. [US] Parts thereof wind turbines. Parts used for repair and maintenance of wind turbines with the attendant benefits. [S, BD]
841780	841780		Other industrial or laboratory furnaces and ovens, including incinerators, non-electric [Ca, J, NZ, K, Au, Ru, M, BD] Industrial or laboratory furnaces and ovens, including incinerators, nonelectric, and parts thereof: Other, except parts. [US] Municipal Waste Incinerator (ex- 84178090); incinerators for radioactive waste (84178020) [Ch]	K, Aú, M] Waste incinerators; Heat or catalytic incinerators [US] Waste incinerator; Flue gas treatment system for incinerator [BD]	These products are used to destroy solid and hazardous wastes. Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. [Ca, J, NZ, K, Au, M, US, BD] Used to achieve innocent treatment and disinfection of household waste through high- temperature incineration disposal.Used for radioactive waste disposal. [Ch]
841790	841790	841790	Industrial or laboratory furnaces and ovens, including incinerators, non- electric: Parts. [Ca, J, NZ, K, Au, Ru, M] Industrial or laboratory furnaces and ovens, including incinerators, nonelectric, and parts thereof: Parts. [US] Parts [BD]		These parts can help maintain and repair products that are used to destroy solid and hazardous wastes. Similarly, the parts for catalytic incinerators can help maintain and repair items that can assist in the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. [Ca, J, NZ, US, K, Au, R, BD]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
841919	841919	841919	Instantaneous or storage water heaters, non-electric (other than instantaneous gas water heaters). [Ca, J, NZ, K, HK, BD] Instantaneous or storage water	Solar water heaters. [Ca, J, NZ, US, K, HK, Au, BD] Excluding other Domestic; of copper and other [M]	Uses solar thermal energy to heat water, producing no pollution. Use of solar water heating displaces the burning of other, pollution-creating fuels. [Ca, J, NZ, US, K, HK, Au, Th]
			heaters, non-electric: Other [US, Au] Solar water heaters [S]		Uses solar energy to heat water, producing no pollution. Use of solar water heating displaces the burning of other pollution-creating fuels. [S, BD]
			Solar water heaters (84191910) [Ch]		Used for water heating through solar energy which is regenerative and clean compared to burning fuel. [Ch]
841939	841939	841939	Dryers, other:	Sludge driers.	Device used in waste water management, which requires sludge to be treated
841960	841960	841960	Machinery for liquefying air or other gases.		For separation and removal of pollutants through condensation. [Ca, J, NZ, US, K, Au] Air Pollution Control. Used in condensation to remove condense contaminants from vapor to liquid form for easier removal and storage [Th]
841989	841989	841989	treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilising, pasteurising, steaming, drying, evaporating, vaporising, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage	Evaporators and dryers, for water and waste water treatment. Condensers and cooling towers. Biogas reactors; digestion tanks and biogas refinement equipment. [Ca, J, NZ, Au] Evaporators and dryers, for water and waste water treatment. Condensers and cooling towers. Anaerobic biogas reactors, digestion tanks and biogas refinement equipment. PV cell coaters. [US]	For processing water and waste water and the separation and removal of pollutants through condensation. Includes fluidised bed systems (bubbling, circulating, etc.) and biomass boilers. Can also help anaerobic digestion of organic matter. [Ca, J, NZ, Au] For processing water and waste water and the separation and removal of pollutants. Includes fluidised bed systems (bubbling, circulating, etc.) and biomass boilers. Can also help anaerobic digestion of organic matter. Wet cooling towers are very efficient air scrubbers. PV cells generate renewable energy. [US] Used in producing chlorine dioxide. These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch] Thermal cyclers serving multiple environmental purposes.
841990	841990	841990	Parts of machinery, plant and equipment [BD] of heading No 84.19. [Ca, J, NZ, CT, Au, Ru] Parts of machinery, plant or laboratory equipment for the treatment of material involving temperature change (except domestic machinery), nesoi. [US] Parts of machinery, plant or laboratory equipment of heading 84.19 [S] Parts, other [M]	Optional ex-outs may include: Parts for 8419.19 ex, including for solar boiler/water heater; insulation, temperature sensor for solar boiler/water heater; Differential temperature controller for solar boiler/water heater; Evacuated glass tubes for solar boiler/water heater; Heat pipes for solar boiler/water heater. Parts of 841940x, 841950x, 841960, 841989x [Ca, J, NZ, CT, Au] excluding 8411990100,	Parts used in the maintenance and repair of solar water heaters (etc). which use solar thermal energy to heat water, producing no pollution. Use of solar water heating displaces the burning of other, pollution-creating fuels. [Ca, J, NZ, CT, Au] Parts for aforementioned goods/ex-outs of heading 8419. [US] Parts used in the maintenance and repair of the above products. [S] These are parts and accessories for the solar water heater classified in 8419 and described

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
				841990200, 841990300 [M]	above [BD]
			Parts of Water Heaters (84199010) [Ch]	Solar water heater parts [BD]	Used for water heating through solar energy which is regenerative and clean compared to burning fuel. [Ch]
	842121		Filtering or purifying machinery and apparatus for liquids: for filtering or purifying water. [Ca, J, NZ, K, Au, Ru, S] Water filtering or purifying [M] machinery and apparatus. [US, BD] Household filtering or purifying water machinery and equipment (84212110), Device for the removal of Heavy metal ions for industry uses; Membrane bioreactor; High rate anaerobic reactors; reverse osmosis filters for industry uses; Water purification Machine; EDI ultra-pure water equipment (ex- 84212190) [Ch]	Waste water management [BD]	Used to filter and purify water for a variety of environmental, industrial and scientific applications, including water treatment plants and wastewater treatment facilities. [Ca, J, NZ, K, Au] Used to filter and purify water for a variety of environmental, industrial and scientific applications, including water treatment plants and wastewater treatment facilities. This line also includes newer water/wastewater filtration technologies like ozone and ultraviolet disinfection equipment. [US] For wastewater. Used to filter and purify water for a variety of environmental, industrial and scientific applications including water treatment plants and wastewater from wastewater, seawater or brackish groundwater, either through purification or filtration; [S] Such devices are essential components for filtration and purification of drinking water. [Ch]
842129	842129	842129	Filtering or purifying machinery and apparatus for liquids: other. [Ca, J, NZ, US, K, Au] Other [M] Press Filters (84212910); etching solution recycling equipment for printed circuit board; equipment for the recycling and treatment of reclaimed water; ion exchanger; complete sets of equipment for alkali recovery of black liquor; aerator; electrodialysis device (ex-84212990) [Ch]	Refrigerant recovery and recycling units. [US] excluding oil filter and for use in oil drilling operation [M]	Used to remove contaminants from wastewater, by chemical recovery, oil/water separation, screening or straining. [Ca, J, NZ, K] These units recover both liquid and gaseous refrigerants from refrigeration and air conditioning equipment and purify the refrigerant after its recovery. This process prevents the emission of a variety of air pollutants. [US] Excluding other filters of a kind used as components in motor vehicles. [Au] Used for filteration by injecting mechanical force on filtering media. [Ch] Etching solution is an essential component of PCB etching but is on kind of high pollutant. These equipment are designed for recycle- processing-reuse of etching solution through solvent extraction,membrane treatment and electrode method. [Ch] These equipment are used to turn wastewater into nonpotable water, which can be widely applied in irrigation,afforestation,flushing supply,etc. [Ch] These equipments are designed for water softening,alkali removal and desalination by ion exchange resins swaping bits of themselves with ions which have same electrical property in the pre-treated water under certain conditions. [Ch] These equipment, designed for the purification and recycling of black liquor,effectively eliminate pollution and improve resourve utilization.Applications include pulp washing machine,causticizer,etc. [Ch] Aerators both above and below the water's surface are essential components of oxygenic aeration of drainage. [Ch]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
					Electrodialyzers exploit ion exchange membrane and DC electric field, making electrolytes develop migration selectivity, thereby desalinate the water. [Ch]
842139	842139	842139	Filtering or purifying machinery and apparatus for gas (other than intake air filters for internal combustion engines). [Ca, J, NZ, K, S] Filtering or purifying machinery and apparatus for gases, nesoi. [US, Au, Th] Laminar flow units [M] Filtering Purifying Machines For Gases Nes, Househ (84213910); Electrostatic Dust Collectors For Industry Uses(84213921); Baghoused Dust Collectors For Industry Uses (84213922); Cyclone Dust Collectors For Industry Uses (84213923); Other Dust Collectors for Industry Uses (84213929); Flue Gas Desulfurization Apparatus (84213940); Spraying Saturator; Concentrated adsorption - catalytic combustion equipment; Activated carbon fiber - granular activated carbon equipment; (ex-84213990) [Ch]	Optional ex-out may include: Catalytic converters / Gas separation equipment / Pneumatic fluid power filters rated at 550 kPa or greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators). [Ca, J, NZ, K] Excluding other filters of a kind used as components in motor vehicles. [Au] Catalytic converters / Dust collection and air purification equipment / Gas separation equipment / Pneumatic fluid power filters rated at 550 kPa or greater / Industrial gas cleaning equipment / Electrostatic filters (precipitators) / Ozone disinfection equipment. [US] possible ex-out: air purifier and laminar flow units, catalytic converter and carbondyoxide removal unit imported to use at natural gas service station [Th]	Physical, mechanical, chemical or electrostatic filters and purifiers for the removal of COV, solid or liquid particles in gases, etc. [Ca, J, NZ, K, Au] Catalytic converters convert harmful pollutants, like carbon monoxide, into less harmful emissions. Other technologies in this line include physical, mechanical, chemical and electrostatic filters and purifiers for the removal of VOCs, solid or liquid particles in gases, etc. [US] For wastewater. Used to filter and purify water for a variety of environmental, industrial and scientific applications including water treatment plants and wastewater treatment facilities. For instance, membrane systems can be used to produce water from wastewater, seawater or brackish groundwater, either through purification or filtration. [S] Air Pollution Control [Th] Indoor hazardous gas purification equipment, especially for formaldehyde and benzene. [Ch]
842199	842199	842199	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases: parts (other than of centrifuges and centrifugal dryers): filtering or purifying machinery and appartatus for water and parts thereof. [Ca, J, NZ, K] Parts for filtering or purying machinery and apparatus forliquids or gases [US] Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases: parts (other) [Au] for subheading 842129300 [M, BD] Parts Of Household Filtering and Purifying Machines For Gases (84219910) [Ch]	Parts for 842121 and 842129 [Ca, J, NZ, K], excluding parts for other filters of a kind used as components in motor vehicles [Au]. Parts for 842121, 842129x and 842139 [US]. Excluding for subheadings 842123100, 842129510 [M, BD].	Including sludge belt filter presses and belt thickeners [Ca, J, NZ, K, Au]. Parts for aforementioned goods/ex-outs ofheading 8421. [US]
847420	847420	847420	Crushing or grinding machines.[Ca, J, NZ, US, K, CT, Au, Ru] Crushing/grinding machines for earth/stone/ores/other mineral substance, in solid (incl. powder/paste) form [S] Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or moulding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines	excluding concrete or mortar mixers [M, Au]	Used for solid waste treatment or recycling. Waste compactor machines. Used for solid waste treatment or recycling. [S]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			for forming foundry moulds of sand. Crushing or grinding machines, mixing or kneading machines [M]		
	847982		Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines not elsewhere specified in Chapter 84. [Ca, J, NZ, K, CT, S] Mixing, kneading, crushing, grinding, screening, sifting, homogenizing, emulsifying or stirring machines. [US, Ru, BD] Waste sorting, screening, crushing, grinding, shredding, washing and compacting devices. Agitator for wastewater treatment; flash mixer and flocculator. [Au] Dosing and mixing equipment for water treatment (ex-84798200); Recycling equipment for waste plastics /rubber /broken tire (84798200) [Ch]	Waste sorting, screening, crushing, grinding, shredding, washing and compacting devices. Agitator for wastewater treatment; flash mixer and flocculator. [Ca, J, NZ, K, US, CT] Other machines and mechanical appliances: Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines. [Au] Waste compactor machines [BD]	Waste separator machines. Prepares waste for recycling; separating waste allows for more efficient treatment of each type; for example, separating organic waste allows for composting, which minimises the amount of waste going to landfill as well as recovering the valuable nutrient and energy content of the waste). [S] These equipments are used to release and mix medicament, which is an essentical step of putting flocculant in wastewater in water treatment industry. These equipments are designed for recycling waste tires. [Ch]
847989	847989	847989	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter: Other. [Ca, J, NZ, US, CT, Ru] Other machines & mechanical appliances, other than Machines & mechanical appliances for treating metal, incl. Industrial catalysers, electric wire coil-winders/ Mixing/ kneading/ crushing/ grinding/ screening/ sifting/ homogenising/ emulsifying/ stirring machines [S] Air Humidifiers Or Dehumidifiers (84798920); Machines For Squeezing Radioactive Waste (84798950); Suction Machine; Mud Scraper; Sand suction machine; Trash compactor;Vacuum extruder for making hollow brick with Gangue and fly ash; (Fan) muffler (ex- 84798999) [Ch]	Optional ex-outs may include; trash and other waste presses; shredders; dust collection and storage devices; water and wastewater collecting and sampling equipment; chlorine generators; equipment for solid/liquid separation; flocculation or thickening of sewage sludge; machinery and apparatus for landfill gas monitoring; anaerobic digesters for treatment of organic waste including production of biogas; machinery and apparatus for landfill leachate treatment; machinery, apparatus and vehicles for composting; soil sampling equipment; soil remediation equipment; machines and appliances for oil spill recovery; and aquatic weed harvesters. [US, CT] Excluding machines and mechanical appliances used as components in motor vehicles. [Au]	Machines and appliances designed for a wide range of areas of environmental management including waste, waste water, drinking water production and soil remediation. In-vessel composting systems can handle large amounts of waste and speed up decomposition. Trash compactors reduce the volume of solid waste, allowing more efficient transport and disposal. Very broadly, products under HS847989 are machines and appliances designed for a wide range of areas of environmental management, including waste, waste water, drinking water production and soil remediation. [S] Parts to ensure the balance of indoor humidity. Travelling suction dredgers are designed for sevage treatment plants and horizontal sedimentation tanks of waterworks. These machines can scrape and assemble the sludge to the mouths of their pumps and remove it from sewage tank whithout stop. [Ch]
847990	847990	847990	Parts of the mach. and mech. appls. of 84.79 [Ca, J, NZ, CT, US, Ru]	Parts for 847982x and 847989x. [US, CT]	See the environmental benefit under 847989 [Ca, J, NZ]
			Parts of Machines & mechanical appliances having individual functions, not specified/incld. elsewhere in this Ch. [S] Parts Of Air Humidifiers Or	Excluding machines and mechanical appliances used as components in motor vehicles. [Au]	Parts for aforementioned goods/ex-outs of heading 8479. [US] Parts thereof waste separator/ compactor machines. Parts used for the maintenance and repair of waste separators and compactor

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			Dehumidifiers (84799020) [Ch]		machines, with the attendant benefits, for example, membrane systems which can be assembled to recover resources from waste. [S]
					Parts to ensure the balance of indoor humidity [Ch]
850164	850164	850164	AC generators (alternator), of an output exceeding 750 kVA	To be used with turbines and generators in combination to produce electricity from renewable energy fuels [BD]	Used in conjunction with boiler and turbines (also listed under 840681 and 840682) to generate electricity in renewable energy plants. Must use these turbines and generators in combination to produce electricity from renewable fuels (e.g., biomass). Size is "exceeding 750 kVA." [Ca, J, NZ, K, Au, BD]
					Used in conjunction with boiler and turbines to generate electricity in renewable energy plants. Must use these turbines and generators in combination to produce electricity from renewable fuels (e.g., biomass). [US]
850231	850231	850231	Other electric generating sets: Wind- powered. [Ca, J, NZ, US, K, HK, Ru,	Amorphous Transformers [BD]	Electricity generation from a renewable resource (wind). [Ca, J, NZ, US, K, HK, BD]
			M] Wind-powered electric generating sets [S]		For wind turbines. Used to generate electricity from wind power - a form of renewable energy. [S]
			Wind-powered electric generating equipment [T]		Some heat exchanges are specifically designed for use in relation to renewable energy uses such as geothermal energy. Electricity
			Electric generating sets and rotary convertors: Wind-powered [BD]		generation from a renewable source (wind) [M] Used to produce electricity from wind energy.
			Wind-Powered Electric Generating Sets (85023100) [Ch]		[Ch]
850239		850239	Electric generating sets and rotary convertors: other. [Ca, J, NZ, K, Ru, BD] Generating sets, electric, nesoi. [US, Au] Biogas generator sets; Gas Generator (ex-85023900) [Ch]	Optional ex-outs may include: combined heat and power systems using biomass and/or biogas; Portable solar power generation equipment; solar power electric generating sets; Small hydro powered generating plant; Wave power generating plant; and Gas turbine sets for biomass plants [Ca, J, NZ, K]	Combined heat and power systems produce usable power (usually electricity) and heat at the same time. Micro combined heat and power systems are very efficient for domestic use, particularly in places where reticulated natural gas and hot water central heating are the norm. 'Distributed generation' also minimises transmission losses through national grids, reducing the need to increase centralised generating capacity and
				and for waste heat applications [Au] Small hydro, ocean, geothermal and biomass gas turbine	transmission networks. [Ca, J, NZ, K, Au, BD] Electricity generation from renewable resources. [US]
				generating sets. [US]	Used to produce electricity from methane. [Ch]
850200	850300	850200	Porto quitable for une cololy or	For heat recovery systems [BD]	Darte of the concretere and concreting acts
850300	00000	000000	Parts suitable for use solely or principally with the machines of heading 8501 or 8502. [Ca. J, NZ, CT, Au, Ru, Th, M, BD]	Parts for 850231 and optional ex-out may include : 850239x.[Ca, J, NZ, K, CT, Au] Parts for 850161, 850162,	Parts of the generators and generating sets listed under 848340 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind turbines. [Ca, J, NZ, K, M]
			Parts for 850231 and optional ex-out may include: 850239x. Parts suitable for use solely or principally	850163, 850164, 850211x, 850212x, 850213x, 850220x, 850231 and 850239x. [US]	See environmental benefit under 847989 [CT]
			with the machines of heading 85.01 or 85.02 Parts of the generators and generating sets listed under HS	Combined cycle generator parts [BD]	Parts for aforementioned goods/ex-outs of headings 8501 and 8502. [US]
			850231 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind turbines. [S]		Parts of the generators and generating sets listed under HS 850231 (for renewable energy systems). Relevant parts include for instance nacelles and blades for wind turbines. Renewable Energy [S]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			Parts of Wind-Powered Electric Generating Sets (85030030) [Ch]		Parts and accessories for electricity generation from renewable resource. [BD]
		850490	Parts for electrical transformers, static converters and inductors	Parts for 850440x Not magnetic ferrite memory [R]	Used to convert DC current from renewable energy generating sets into conventional AC electricity.
851410	851410	851410	Resistance heated furnaces and ovens Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss: resistance heated furnaces and ovens [M] Controlled Atmosphere Heat Treatment Furnace (85141010); Industrial / Lab Electric Resistance Heated Furnace (85141090) [Ch]	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, K, CT, Au]	These products are used to destroy solid and hazardous wastes. Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. These instruments are used to measure, record, analyse and assess environmental samples or environmental influences [Ch]
851420	851420	851420	Furnaces and ovens; functioning by induction or dielectric loss. Industry / Lab Electric Induction or Dielectric Fu (85142000) [Ch]	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, K, CT, Au]	These products are used to destroy solid and hazardous wastes. Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
851430	851430	851430	Other furnaces and ovens. [Ca, J, NZ, K, CT, Au, Ru, M] Industrial or laboratory electric furnaces and ovens, nesoi. [US] Industrial & Laboratory Electric Furnaces & Ovens (85143000) [Ch]	Optional ex-outs may include: waste incinerators and heat or catalytic incinerators. [Ca, J, NZ, US, K, CT, Au]	Catalytic incinerators are designed for the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. [Ca, J, NZ, K, CT, Au] These products are designed for the destruction of pollutants (such as VOCs) embedded in solid and hazardous wastes. Pollutants are destroyed by heating polluted air and oxidizing organic components. [US] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
851490	851490	851490	Parts of industrial or laboratory electric furnaces and ovens; other laboratory induction or dielectric heating equipment. [Ca, J, NZ, K, CT, M] Parts for industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); parts for other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss. [US, Au, Ru]	Optional ex outs include: Parts for 851410x, 851430x and 851430x. [Ca, J, NZ, K, CT, Au] Parts for 851410, 851420 and 851430. [US]	Parts for the equipment listed will facilitate the destruction of pollutants (such as VOC) by heating polluted air and oxidation of organic components. [Ca, J, NZ, K, CT, Au] Parts for aforementioned goods of heading 8514. [US]
854140	854140	854140	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes. [C, J, NZ, US, K, HK, CT, Au, Th, S, M, BD] Diodes, transistors and similar	Photovoltaic cells, modules and panels. [Ca, J, NZ, US, K, HK, CT, Au, BD] Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into	Solar photovoltaic cells generate electricity in an environmentally benign manner (with no emissions, noise or heat generated). They are particularly suited to electricity generation in locations remote from an electricity grid. [Ca, J, NZ, US, K, CT, Au, Th. M, BD] Generate electricity in an environmentally

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes; mounted piezo- electric crystals: Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes [M] Solar Cells (85414020) [Ch]	panels; light emitting diodes [M]	sound manner (with no emissions or noise generated). [S] Solar batteries are eco-friendly(emission- free,noiseless,non-hear generation)and are especially applicable for power supply in remote area. [Ch]
854390	854390	854390	Parts of the machines and apparatus of 85.43 [Ca, Ja, NZ, K, CT, Au, Ru, S] Parts of other machines / apparatus of heading 85.43 (85439090) [Ch]	Parts for 854389x. [Ca, Ja, NZ, K, CT, Au]	Water disinfection. Parts thereof UV disinfection ozonisers. Parts used in maintenance and repair of the UV disinfection instruments. UV light is extremely effective in killing and eliminating bacteria, yeasts, viruses, moulds and other harmful organisms. UV systems can be used in conjunction with sediment and carbon filters to create pure drinking water. Water disinfection Ozone (O3) can be used as an alternative to chlorine for water disinfection. [S] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
		901380 901390	Optical devices, appliances and instruments, nesoi parts and accessories for optical	Solar heliostats. Parts for solar heliostats	Heliostats orient mirrors in concentrated solar power systems to reflect sunlight on to a CSP receiver. Heliostats orient mirrors in concentrated solar
			devices, appliances and instruments, nesoi		power systems to reflect sunlight on to a CSP receiver.
901580		901580	Other surveying, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, not elsewhere specified in 90.15 [Ca, J, NZ, K, CT] Surveying instruments and appliances, hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances nesoi [US, Au]		Includes instrument and appliances necessary for measuring the ozone layer and to monitor, measure and assist planning for natural risks such as earthquakes, cyclones, tsunamis etc.
902610	902610	902610	Instruments for measuring or checking the flow, level, pressure or other variables of liquids or gases. [Ca, J, NZ, K] Instruments and apparatus for measuring or checking the flow or level of liquids. [US, CT, Au, BD] Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meter), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032. For measuring or checking the flow or level of liquids [M]	Air quality monitors; and dust emissions monitors. [Ca, J, NZ, K] Excluding gauges of a kind used as components in motor vehicles. [Au] Air quality monitoring; automated air quality monitoring [BD]	Monitors to measure air pollution; basis for possible correcting measures (notably in view of health effects). [Ca, J, NZ, K] Meters, which check and record the level and/or flow of liquids or gases, are routinely used during complex auditing and testing to ensure the efficient operation of environmental systems such as water and wastewater treatment plants, air pollution control systems, and hydroelectric facilities. [US, CT, Au, BD] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			Instruments / Apparatus For Measure / Checking Liq (90261000) [Ch]		
902620	902620	902620	Instruments and apparatus for measuring or checking pressure. [Ca, J, NZ, K, CT, Au] Instruments and apparatus for measuring or checking pressure of liquids or gases, nesoi. [US] For measuring and checking pressure [M] Other Instruments / Apparatus For Measuring / Chec (90262090) [Ch]	Excluding gauges of a kind used as components in motor vehicles. [Au]	Manometers (devices that measure pressure) are used in power plants, water delivery systems, and other applications such as monitoring indoor air. There are two principal types: digital manometers and tube manometers, both of which have important environmental applications. [Ca, J, NZ, US, K, CT, Au] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
902680	902680	902680	Other instruments and apparatus [Ca, J, NZ, K, CT, Au, M] Instruments and apparatus for measuring or checking other variables of liquids or gases, nesoi. [US]	Excluding gauges of a kind used as components in motor vehicles. [Au]	These instruments include heat meters that are used to monitor and measure the distribution of heat from geothermal or biomass district heating systems. [Ca, J, NZ, US, K, CT, Au]
	902690		Parts and accessories [M] for articles of subheading 9026. [Ca, J, NZ, CT, K] Parts and accessories for instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases, nesoi. [US] Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 90.14, 90.15, 90.28 or 90.32 [Au] Parts of liquid and gas measurement/ test instrument (90269000) [Ch]		These are parts for the instruments and devices in 9026.10, 9026.20, and 9026.80. [Ca, J, NZ, US, CT, Au, K] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
	902710		Gas or smoke analysis apparatus Automatic NOX and NO2 sampler and measuring apparatus; Automatic SO2 sampler and measuring apparatus (ex-90271000) [Ch]	Air pollution emission monitoring systems	 monitor single or multiple gas components, and such an instrument is used to analyse air emissions from automobiles. To be used for monitoring / analysing environmental pollution. ii. Gas analysers are designed to continuously monitor single or multiple gas components and such an instrument is used to analyse air/gas emissions. Equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact. iv. This Facility can take precautionary measures to control air pollution. [M] These instruments are used to measure, record, analyse and assess environmental samples or environmental samples or environmental and the measure. [Ch]
902720	902720	902720	Chromatographs and electrophoresis		Gas and liquid chromatographs use an analytical method where a physical separation

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			instruments		of the sample components occurs prior to detection. These instruments can be use to monitor and analyse air pollution emissions, ambient air quality, water quality, etc. Electrophoresis instruments can be used to monitory and analyse materials such as particulates emitted from incinerators or from diesel exhaust.
					DNA Sequencers, Polymerase Chain Reaction (PCR) Systems. Thermal cyclers serving multiple environmental purposes, for example: Environmental Monitoring, Waste Management, Water Treatment, Pollution Remediation, Renewable Energy, Natural Resources Protection, Endangered Species Protection, Genetically Modified Organisms (GMO) Detection [S]
902730	902730	902730	Spectrometers, spectrophotometers and spectrographs using optical radiations (ultraviolet, visible, infrared)		Spectrometers are used in a wide range of environmental applications, including to identify and characterise unknown chemicals and in environmental applications to detect toxins and identify trace contaminants. They are also used for qualitative and quantitative analysis inter alia in quality control departments, environmental control, water management, food processing, agriculture and weather monitoring.
					Used in a wide range of environmental applications, including identification of unknown chemicals, toxins and trace contaminants. Also used for qualitative and quantitative analysis in quality control departments, environmental control, water management, food processing, agriculture and weather monitoring. [S]
902750	902750	902750	Other instruments and apparatus using optical radiations (UV, visible, IR) [Ca, J, NZ, CT, Au, K, S] Instruments and apparatus for physical and chemical analysis using optical radiations (ultraviolet, visible, infrared), nesoi. [US] Automatic on-line monitor on UV absorption water quality; Automatic infrared oil content analyzer (ex- 90275000) [Ch]		These instruments can be used for chemical, thermal, or optical analysis of samples, including water quality photometers which are used to determine the concentration of a solution from its colour intensity. [Ca, J, NZ, CT, Au, K]
					These instruments can be used for chemical, thermal, or optical analysis of samples, including water quality photometers which are used to determine the concentration of a solution from its colour intensity. Exposure meters are used, inter alia, to control light sources and for measurements in agriculture, horticulture, and other natural resources applications. [US]
					These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch] DNA Sequencers, Polymerase Chain Reaction
					(PCR) Systems.
902780	902780	902780	NZ, CT, K]	Optional ex-out may include: For analysing noise, air, water and hydrocarbons and heavy metals in soil. [Ca, J, NZ, CT, Au, K]	These instruments include: magnetic resonance instruments which are used in biologic and geologic analysis; and mass spectrometers which are used to identify elements and compounds.
			Instruments and apparatus for physical and chemical analysis, nesoi. [US, Au]		These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
			Other Mass Spectrograph (90278019); PM10 automatic		

02790	902790	sampler and measuring apparatus; Automatic ammonia online monitor; Automatic TOD online monitor; Automatic TOD online monitor; Noise spectrum analyzer; Environmental noise monitor (ex- 90278099) [Ch] Microtomes; parts and accessories of instruments and appliances of 9027. [Ca, J, NZ, K, CT, Au, S] Microtomes; parts and accessories for instruments and apparatus for physical or chemical analysis . [US] Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for	Optional ex-outs may include: Parts for 902710 and 902780x. [Ca, J, NZ, K, CT, Au]	These instruments include microtomes which are devices that prepare slices of samples for analysis. Also included here are parts of the instruments classified in 9027 and described above. For use with Thermal Cyclers, DNA Sequencers, Polymerase Chain Reaction (PCR) Systems, etc. Thermal Cyclers, Serving multiple environmental purposes, for example:
02790	902790	of instruments and appliances of 9027. [Ca, J, NZ, K, CT, Au, S] Microtomes; parts and accessories for instruments and apparatus for physical or chemical analysis . [US] Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus);	Parts for 902710 and 902780x.	are devices that prepare slices of samples for analysis. Also included here are parts of the instruments classified in 9027 and described above. For use with Thermal Cyclers, DNA Sequencers, Polymerase Chain Reaction (PCR) Systems, etc. Thermal Cyclers, Serving
	903149	measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes: microtomes; parts and accessories [V] Microtomes; Parts & Access Of Instruments / Applia (90279000) [Ch] Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter:Other optical instruments, appliances and machines elsewhere specified for	Optional ex-outs include: Profile projectors; Vibrometers; Hand vibration meters. [US]	Environmental Monitoring - fast, cost-effective standard for pathogen detection from a broad range of sample types including water, soil, and food; detects pathogen contaminations of both food and environmental surface samples to minimize risks of food borne pathogens to public health; fundamental equipment for surveillance programs monitoring pathogens or viruses that can pose a significant risk to both human and animal health, including both naturally occurring viruses such as strains of influenza or organisms that have potential to be used in bio-terrorism activities, such as anthrax [S] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch] Equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact. [Ca, J, NZ, K, CT, Au]
		measuring or checking. [Ca, J, NZ, K, CT] Measuring or checking instruments, appliances and machines, nesoi. [US] Other optical instruments and appliances: Other [Au] Optical Grating Measuring Device (90314920); Other Optical Instruments & Appliances (90314990) [Ch]		engineering such as measuring and inspecting high precision, complex parts in many applications and industries. Equipment used in the measurement, recording, analysis and assessment of environmental samples or environmental impact. These products inc+F127lude inter alia, items such as vibrometers (that measure vibrations and assess structural and other effects of such vibrations) [US] These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
03180	903180	Other instruments, appliances and machines. Other instruments, appliances and machines, not elsewhere specified in heading 90.31 [Th]	oxygen in oxygen censer operating with catalytic convertor	These products include <i>inter alia</i> , items such as vibrometers (that measure vibrations and assess structural and other effects of such vibrations) and electron microscopes for laboratory and testing applications. [Ca, J, NZ, K, CT, Au] Air Pollution Control [Th]
03190	903190	Parts and accessories [M] of the instruments and appliances and machines of 9031. [Ca, J, NZ, K, CT, Au]	_	These are parts for the equipment classified in 9031 and described above. [Ca, J, NZ, K, CT, Au] Parts for 903110, 903120, 903149x. [US]
		903149 3180 903180 3190 903190	Instruments / Applia (90279000) [Ch] 903149 Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter:Other optical instruments, appliances and machines elsewhere specified for measuring or checking. [Ca, J, NZ, K, CT] Measuring or checking instruments, appliances and machines, nesoi. [US] Other optical instruments and appliances: Other [Au] Optical Grating Measuring Device (90314920); Other Optical Instruments & Appliances (90314990) [Ch] 3180 903180 Other instruments, appliances and machines. Other instruments, appliances and machines, not elsewhere specified in heading 90.31 [Th] 3190 903190 Parts and accessories [M] of the instruments and appliances and machines of 9031. [Ca, J, NZ, K, CT,	903149 Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter:Other optical instruments, appliances and machines elsewhere specified for measuring or checking. [Ca, J, NZ, K, CT] Optional ex-outs include: Profile projectors; Vibrometers; Hand vibration meters. [US] Measuring or checking. [Ca, J, NZ, K, CT] Measuring or checking instruments, appliances and machines, nesoi. [US] Other optical instruments and appliances: Other [Au] Optional ex-out may include: Vibrometers, hand vibration meters. [Ca, J, NZ, K, CT, Au] 3180 903180 Other instruments, appliances and machines. (90314990) [Ch] Optional ex-out may include: Vibrometers, hand vibration meters. [Ca, J, NZ, K, CT, Au] 3180 903180 Other instruments, appliances and machines. (903114990) [Ch] Optional ex-out may include: Vibrometers, hand vibration meters. [Ca, J, NZ, K, CT, Au] 3190 903190 Parts and accessories [M] of the instruments and appliances and machines of 9031. [Ca, J, NZ, K, CT, Au] Optional ex-out may include: Parts for 903180x. [Ca, J, NZ, WS, K, CT, Au]

HS (2002)	HS (2007)	HS (2012)	HS Code Description	EX-OUT / ADDITIONAL Product Specification	REMARKS / ENVIRONMENTAL BENEFIT
			or checking instruments, appliances and machines, nesoi; parts and accessories for profile projectors. [US] Other measuring and checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors: Parts and accessories [V] Parts & Accessories Of Instruments / Appl / Machin (90319000) [Ch]		These instruments are used to measure, record, analyse and assess environmental samples or environmental influences. [Ch]
903289	903289	903289	Automatic regulating or controlling instruments, other. [Ca, J, NZ, K, Au, Ru, BD] Automatic regulating or controlling instruments and apparatus (excluding thermostats, manostats and hydraulic types), nesoi. [US] Other: Electrically or electronically operated and other [M]	Optional ex-outs may include: Heliostats, temperature sensor for solar boiler/water heater; Differential temperature controller for solar boiler/water heater. [Ca, J, NZ, K, Au] Light sensor; Sensor (elevators, escalators, etc.) [BD]	These include other automatic voltage and current regulators which have renewable energy applications as well as other process control instruments and apparatus for temperature, pressure, flow and level, and humidity applications. [Ca, J, NZ, K, Au] Includes other automatic voltage and current regulators which have renewable energy and smart grid applications, process control instruments and apparatus for temperature, pressure, flow and level, and regulators for humidity applications that help increase energy efficiency. [US, BD]
903290	903290	903290	Parts and accessories [M] for nominated articles of subheading 9032. [Ca, J, NZ, K, CT] Parts and accessories of automatic regulating or controlling instruments and apparatus. [US, Au, Ru]		These are the parts for the automatic regulating and control instruments classified in 9032 and described. [Ca, J, NZ, K, CT, Au] Parts for aforementioned goods of headings 9032. [US]
903300	903300	903300	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90. [Ca, j, NZ, US, CT, Au, Ru, Th, S] For subheading 902140 and 902150 and other [M]	Parts of the CH 90 products above, not elsewhere specified. [US]	These are the parts and accessories for the products described above. [Ca, J, NZ, CT, Au, M] Parts of the CH 90 products above, not elsewhere specified [US] Parts used in maintenance and repair of the liquid, electricity, radiation and measurement instruments listed above with the attendant environmental benefits. [S]

20TH APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration

Annex D Promoting Cross-Border Education Cooperation

Education is the pre-eminent source of economic development in the 21st century, creating more and higher quality jobs and bolstering productivity growth. Education is also a fundamental component of economic activity. Cooperation in the education sectors of APEC economies fosters innovative growth as students, researchers and education providers build scientific, technological and linguistic communities.

All APEC economies stand to gain from enhancing collaboration on cross-border education. Many developing economies in the Asia-Pacific region are rapidly moving into higher value-added manufacturing and knowledge intensive industries driven by innovation. Access to a wide range of quality higher education services is critical for sustainable growth on this development pathway. The APEC region also contains some of the world's largest exporters and consumers of education services. Facilitating the flow of students, researchers and education providers, and reducing the transaction costs involved provides opportunities for a significant expansion of cross border education services to the benefit of all economies.

Increasing cross-border student flows will strengthen regional ties, build people to people exchanges, and promote economic development through knowledge and skills transfer. High quality cross-border education equips students with the 21st century competencies they need for their full participation in a globalized and knowledge based society.

Therefore, we, the APEC Leaders, agree that strengthening collaboration among APEC economies is crucial for facilitation of the work on specific policies, including those relating to quality assurance, accreditation, cross-border exchange and data collection. Such work will have a significant impact on the education sector in APEC economies. Important steps were made by economies in 2012 to enhance practical and sustainable educational cooperation, exploring a number of proposals for cross border education within the region as well as research, information, and knowledge sharing. We encourage further development, on a voluntary basis, consistent with individual economies' circumstances, of cross-border education cooperation and facilitation of exchange in education services within APEC in the following areas:

- a) Enhancing *the mobility of students*. This may be achieved, but not limited by the following:
 - identifying, comparing and implementing best practices among APEC economies for course accreditation and quality assurance systems, as well as targeted capacity building projects;
 - developing models to guide reform and implementation of good regulatory practices, drawing on case studies of domestic education providers;
 - exploring ways to increase the transparency of student visa requirements.
- b) Enhancing *the mobility of researchers*. This may be achieved, but not limited by the following:
 - developing existing academic exchanges and joint research activities between and among universities in APEC economies;
 - exploring ways to improve the mobility of the academic workforce.
- c) Enhancing *the mobility of education providers*. This may be achieved, but not limited by the following:
 - exploring ways to enhance transparency of regulation of foreign providers and to remove unnecessary barriers to market access;
 - mapping of existing regulations for the establishment of foreign providers;
 - benchmarking and identifying best practices in APEC on quality assurance systems.

- d) Enhancing *the existing network of bilateral agreements*. This may be achieved by, but is not limited by the following:
 - examining issues related to the flexible design and delivery of educational content (such as online courses) among APEC economies;
 - enhancing availability of data on educational programs in APEC economies.

We instruct Ministers and officials to take forward these priorities on cross-border student, researcher and education provider mobility to develop cross-border educational cooperation in the APEC region while taking into consideration the circumstances of individual economies.

20TH APEC ECONOMIC LEADERS' MEETING

Vladivostok, Russia 8–9 September 2012

Vladivostok Declaration

Annex E Fighting Corruption and Ensuring Transparency

We, the APEC Leaders, renew our commitment to fight corruption and to enhance transparency and accountability in our economies.

We recognize the direct link between vigorously fighting corruption and achieving progress in economic and social development. Corruption facilitates and is fueled by illicit trade as criminal entrepreneurs and illicit networks traffic, costing APEC economies jobs and vital tax revenue, corroding the integrity of legitimate supply chains, endangering the welfare, health and safety of our families and communities, and harming the economic interests of our businesses and markets. Corruption threatens our common goals of securing open markets, economic prosperity, and the rule of law.

Corruption can deter foreign and domestic investment, hamper and distort market competition, threaten consumer safety, and raise the cost of public services and infrastructure projects. It not only stifles economic growth and sustainable development but also fuels insecurity and instability by compromising public trust. Corruption of public officials undermines legal and judicial systems as well as public trust in government. The negative effect of corruption is felt by the poor in the most direct and disproportionate way.

We re-affirm the Santiago Commitment to Fight Corruption and Ensure Transparency and the APEC Course of Action on Fighting Corruption and Ensuring Transparency, which guide the APEC's work in this important area. In this regard we commend the efforts undertaken by the APEC Anti-Corruption and Transparency Experts' Working Group (ACTWG) to implement the measures outlined in these guidelines, including through the development of tools such as the APEC Principles for Financial/Asset Disclosure by Public Officials.

We underscore our commitment to investigate and prosecute corruption offences in accordance with domestic law and to prevent corrupt holders of public office from accessing the proceeds of their criminal activities in our financial systems.

We emphasize the importance of effective preventive anticorruption measures. Corruption thrives in nontransparent environments. Transparency and public integrity are effective principles for preventing corruption and promoting good governance and sound management of public resources.

We remain committed to the goals of the APEC High Level Policy Dialogue on Open Governance and Economic Growth. And we believe that economies and stakeholder communities – including representatives from business, academia, and non-governmental and labor organizations – can work to enhance public trust by committing to transparent, fair, and accountable governance. Open governance, technology, and innovation can help shed light on corruption and empower communities to monitor and voice their perspectives on government policies and the use of resources.

We are committed to increase public sector transparency and integrity in our economies and to reduce administrative burdens where appropriate and in accordance with domestic legal systems. We will work to enforce rigorously our anti-bribery laws and encourage strengthening procedures and controls to conduct enhanced due diligence on accounts of individuals who are, or have been, entrusted with prominent public functions including through enhanced financial and asset disclosure consistent with domestic legislation and administrative guidelines. We will also work to facilitate recovery of the proceeds of corruption consistent with domestic legislation. We will continue, in compliance with our respective international commitments and domestic legislation, to investigate and prosecute corrupt public officials and those who bribe them, including by vigorously enforcing our domestic bribery laws and our laws criminalizing the bribery of foreign public officials, ensuring that measures against both supply and demand of corruption are effectively implemented in accordance with domestic legislation. We urge APEC economies that do not criminalize foreign bribery to adopt such legislation.

We will continue to work with all stakeholders on international and domestic financial markets to deny safe haven to assets illicitly acquired by individuals engaged in corruption and prevent corrupt officials and those who corrupt them from being able to travel abroad with impunity by denying entry and safe haven in our jurisdictions. In this framework, we reiterate our commitment to take concrete steps to ensure that financial markets are protected from criminal abuse, including bribery and corruption. We will fight vigorously against money laundering, including by investigating and prosecuting money laundering offences and by implementing the revised recommendations of the Financial Action Task Force (FATF) consistent with domestic legislation.

We will work together and with international and regional development institutions to aggressively combat fraud, corruption, and the misuse of public resources. We will also support the efforts of respective member economies to build capacity to combat corruption by strengthening anti-corruption bodies, the rule of law, fiscal transparency and accountability; by reforming public procurement systems; by developing and promoting mechanisms that support effective return of recovered assets; and by encouraging the implementation of high standard codes of ethics.

We recognize the unparalleled value of the UNCAC as a universal mechanism against corruption and call upon the economies that have not yet ratified the UNCAC to do so at the earliest date possible. We encourage the APEC member economies, where appropriate, to take all necessary measures to fully implement the UNCAC's provisions, consistent with the fundamental principles of their legal systems.

We note that while globalization and technological innovation have been a positive force for development and prosperity, illicit networks and counterfeiters have taken advantage of our increasingly interconnected world to expand their illicit enterprises and undermine the safety of our regulatory processes. We are committed to strengthening anti-corruption and/or other law enforcement agencies and enforcement efforts, as well as to expediting economy-to-economy cooperation in order to respond to emerging challenges.

We welcome the recent contributions of the APEC Business Advisory Council (ABAC) and the ACT in these important areas and in fighting corruption and illicit trade. We encourage additional efforts to ensure the safety of medicines. We remain committed to combat illicit trade; attack the financial underpinnings of transnational criminal organizations and illicit networks; strip criminal entrepreneurs and corrupt officials of their illicit wealth; and sever their access to the global financial system.

We recognize the important role of business and public-private partnerships in promoting the elaboration of codes of conduct in the private sector and measures to fight corruption, especially measures that support the promotion of ethical business practices in interactions between government, business and other stakeholders. We welcome efforts by our SME Ministers, industries and academics to promote voluntary, industry-specific APEC principles that aid in this effort.

24th APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

- 1. We, the APEC Ministers, met in Vladivostok, Russia on September 5-6, 2012 under the Chairmanship of Sergey Lavrov, Minister of Foreign Affairs, and Andrey Belousov, Minister of Economic Development.
- 2. Under the APEC 2012 theme of "Integrate to Grow, Innovate to Prosper" we reviewed the current state of affairs in the Asia-Pacific region, assessed the progress APEC has made this year, and discussed the way forward for APEC.
- 3. Still facing uncertainty in the global economy, the Asia-Pacific region continues to serve as a major engine for the world economy and a key driver for international trade and investment through its firm commitment to the Bogor Goals and regional economic integration (REI) agenda, including a Free Trade Area of the Asia Pacific (FTAAP). We reiterate our strong commitment to implement 2010 and 2011 Leaders' instructions to achieve balanced, inclusive, sustainable, innovative and secure growth, and to build a seamless regional economy by strengthening regional economic integration, expanding trade, promoting green growth, and advancing regulatory coherence. With these goals in mind, we discussed a number of outlined below issues under the APEC priority areas for 2012.
- 4. We welcome the participation in the meeting of the APEC Business Advisory Council (ABAC), the Association of Southeast Asian Nations (ASEAN), the Pacific Economic Cooperation Council (PECC), the Pacific Islands Forum (PIF) and the APEC Secretariat, as well as Rufus Yerxa, Deputy Director-General of the World Trade Organization (WTO) and Viktor Khristenko, the Chairman of the Commission's Board of the Eurasian Economic Community.

Trade and Investment Liberalization, Regional Economic Integration

Strengthening the multilateral trading system

- 5. International trade makes a vital contribution to the creation of jobs and to strong, sustainable and balanced growth and development. All APEC economies now being members of the WTO underscores our confidence in the value of the rules-based system embodied in that organization. We remain strongly committed to supporting the WTO as essential for global economic growth and development. We reaffirm our commitment to strengthen this system. In line with the guidance from the WTO 8th Ministerial Conference and instructions from our Leaders in Honolulu, we direct our officials to continue employing different, fresh and credible negotiating approaches aimed at achieving a successful multilateral conclusion of Doha Round in accordance with its mandate. We are encouraged by the potential for nearer term outcomes including on trade facilitation and other development related issues.
- 6. With these commitments in mind it is important that we work to enhance the WTO' capabilities to combat protectionism, particularly the transparency and trade monitoring functions. We note with concern the IMF's downward projection for global economic growth for this and next year and the rise in protectionist instances around the world. These developments increase the urgency of further action to keep markets open. We reaffirm the commitment made by our leaders to extend to the end of 2015 their pledge to refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing WTO-inconsistent measures in all areas, including those that stimulate exports. We remain committed to rollback the trade-distorting or protectionist measures introduced since the outset of the crisis and to continue to exercise maximum restraint in

implementing measures that may be considered to be consistent with WTO provisions but have a significant protectionist effect and promptly rectify such measures, where implemented. We encourage the WTO to deepen its monitoring of protectionist measures.

7. We welcome the ongoing work of negotiations to expand the product coverage and membership of the WTO Information Technology Agreement (ITA). A successful expansion of the ITA would provide a much-needed boost to the global economy and contribute to APEC's core mission to open markets and facilitate regional trade. We, therefore, instruct our officials to work in earnest in order to swiftly achieve a good outcome of the negotiations. We also welcome new members that recently joined the ITA, and call on all APEC economies to join the agreement.

Advancing trade and investment liberalization

- 8. We welcome APEC's continued progress towards the Bogor Goals of free and open trade and investment in the Asia-Pacific region. Based on the Policy Support Unit work on the Bogor Goals Progress Report and Dashboard of indicators, we note that while APEC economies have made remarkable efforts to reduce barriers to trade and investment, more work needs to be done since progress has been uneven across areas and sectors. We remain committed to the achievement of the Bogor Goals. We support the capacity building programs in particular the implementation of the action plan framework on Capacity Building Needs Initiative (CBNI).
- 9. We endorse the 2012 Committee on Trade and Investment (CTI) Annual Report to Ministers, which provides an overview of APEC's work to advance APEC 2012 priorities related to its agenda on trade and investment liberalization and facilitation and strengthening REI.

Addressing next generation trade and investment issues

- 10. We welcome the work on transparency issues in trade agreements as the 2012 next generation trade and investment issue and endorse the updated APEC Model Chapter on Transparency for Regional Trade Agreements/Free Trade Agreements (see Annex A) to be used as a guide by APEC economies as a significant contribution to our goal to improve the trading environment for our companies and workers, address non-tariff barriers, and contribute to an FTAAP.
- 11. We continue to address the next generation trade and investment issues identified in 2011, including capacity-building and sharing of best practices on global supply chains, facilitating and enhancing participation of small and medium-sized enterprises (SMEs) in global production chains, and promoting effective, non-discriminatory, and market-driven innovation policy. We note the results of "APEC Conference on Innovation and Trade" held in Singapore for promoting cross-border innovation through a free and open environment for trade and investment. We instruct officials to advance this work by producing innovation and trade implementation practices to assist economies in better implementing Leaders' 2011 commitments in this area.
- 12. We instruct officials to further study in 2013 the impact of local content requirements on regional integration and economic growth, and to discuss possible ways through which economies can promote job creation and competitiveness goals in ways that enhance, rather than distort, trade.

Trade in services liberalization and facilitation

13. We underline the importance of services trade liberalization and facilitation to achievement of the Bogor Goals of free and open trade and investment, and support continued work in this area. To that end, we support the Action Plan on Statistics on Trade in Services, which provides an overarching framework for APEC's work to improve the collection and quality of services statistics in the region. We welcome the expansion of the APEC Services Trade Access Requirements (STAR) Database as a powerful, business-friendly tool to facilitate services trade in the APEC region. We also welcome the development

of other tools and indicators helping to assess the level of liberalization in the services sector, including voluntary liberalization.

Investment facilitation

14. We confirm the importance of improving the investment climate in the APEC region including through continued implementation of the APEC Investment Facilitation Action Plan (IFAP), and welcome the progress achieved in developing a framework for measuring IFAP progress. We reaffirm our commitment to increase the flow of investments within the region, in particular by ensuring transparency in the development of investment regulations. We instruct officials to explore further steps to enhance mechanisms for the prevention and prompt resolution of investment disputes. We welcome the Public-Private Dialogue on Investment and instruct officials to hold similar dialogues on a regular basis. We commit to promote broader work within the public-private partnership framework.

Regulatory coherence and cooperation

- 15. We welcome the work to prevent unnecessary technical barriers to trade by promoting regulatory coherence and good regulatory practices in the Asia-Pacific region and to that end, commit to consider the impact of trade when developing regulations, consistent with the key recommendations of APEC's 2012 study on Member's Support of the WTO TBT Agreement Using Good Regulatory Practices. We instruct officials to make the focus of the 2013 Conference on Good Regulatory Practices conformity assessment in regulation. We note economies progress towards implementing the 2011 APEC Leaders' commitment to strengthen implementation of good regulatory practices including by ensuring internal coordination of rule-making, assessing the impact of regulations, and conducting public consultations. We instruct officials to continue carrying out related capacity-building and information sharing activities, and note our earlier instruction to officials to conduct by SOM 3 2013 an assessment of economies' implementation of these actions by updating the "Baseline Study of Good Regulatory Practices in APEC Member Economies" summary report. We also note that economies are due to report back in 2013 on the implementation of good regulatory practices.
- 16. We welcome the work on regulatory approaches for smart grid investment and deployment, enhancing the performance of energy efficiency of green buildings, and support future work on solar technologies. We also welcome development and implementation of a roadmap to ensure the quality and integrity of the medical products supply chains and availability of safe and effective medical products to our citizens. We instruct officials to continue the work on implementation of the APEC Regulatory Cooperation Plan and to promote further cross-fora collaboration.
- 17. Taking into account that APEC economies are among the main producers and consumers of metals, we believe that recognition of metal characteristics in global and regional chemicals management must be considered in dialogues with economies inside and outside the region. We confirm that the development of legislation and regulation pertaining to metals and their alloys must be transparent, based on sound science, should be no more trade restrictive than necessary, and should take into account the consequences of such regulations. Failure to do so may have an unnecessarily negative impact on economic growth, living standards, the environment and the protection of human health and development. We welcome work to implement the Globally Harmonized System for Classification and Labeling of Chemicals, and instruct officials to continue work to promote regulatory cooperation and capacity, enhance transparency in regulatory processes while at the same time protecting business confidentiality, facilitate data exchange, and contribute to the international chemicals agenda.

Promoting information and communications technologies

18. We reaffirm the importance and need for confidence and trust in electronic environments to allow greater interaction among governments, businesses and consumers, as well as between individuals. We appreciate the promotion of trust and confidence in electronic environments globally by secure cross-border flows of information, including electronic documents. We support the APEC work to expand the

information and communications technology (ICT) literacy, including by fostering a dialogue with the ICT sector representatives. We also encourage the cooperation of member economies to improve disaster preparedness, response and recovery through the development of ICT and promotion of appropriate systems and technologies.

Implementing Cross-Border Privacy Rules

19. We welcome the APEC work to fulfill the 2011 APEC Leaders' commitment to implement the Cross Border Privacy Rules (CBPR) System in order to reduce barriers to information flows, enhance consumer privacy, and promote interoperability across regional data privacy regimes. We look forward to implementation of the CBPR, including through discussion on the issues of comparability and potential interoperability between the European Union Binding Corporate Rules and APEC CBPR System.

Promoting trade in environmental goods

20. This year, we made considerable progress towards implementing the 2011 Leaders' commitments to promote trade and investment in environmental goods and services, as a key part of our green growth and sustainable development agenda. We dedicated all available resources to fulfill our Leaders' instruction in 2011 to develop an APEC List of Environmental Goods that directly and positively contribute to our green growth and sustainable development objectives. We welcome and recommend our Leaders to endorse the list and reaffirm our resolve to reduce by the end of 2015 our applied tariff rates to five per cent or less on the goods included on this list, taking into account economies' economic circumstances without prejudice to APEC economies' positions in the WTO.

Promoting green growth

- 21. We are committed to strengthening regional cooperation on trade and environmental matters. We highlight the importance of further work to advance our shared green growth objectives and enhance mutual supportiveness between trade and environmental policies, including through the promotion of international standards, transparency and information exchange among economies on environmental measures and requirements which could have significant trade effects, as well as to consider trade and development objectives alongside environmental protection in the development of environmental measures. We welcome the outcome of the APEC Meeting of Ministers Responsible for Environment, in particular their anticipation for the future role of the Global Green Growth Institute in assisting APEC economies to achieve sustainable development through green growth.
- 22. We recognize the importance of improving energy efficiency. We welcome work on regulatory cooperation and convergence to facilitate the robust deployment of new automotive technologies, such as electric vehicles and vehicle to vehicle and vehicle to infrastructure communications. Given the importance of these new technologies to improving safety and reducing traffic congestion and emissions, we instruct officials to continue to share updates on their policy approaches to facilitate the diffusion of advanced technology and alternative-fueled motor vehicles. We welcome progress made by member economies to facilitate trade in remanufactured goods and urge officials to continue compiling economies' tariff and non-tariff measures concerning goods that are not newly manufactured. We look forward to the ongoing capacity-building workshops and to the further development of resource materials on remanufacturing, which will assist economies in joining the Pathfinder on Facilitating Trade in Remanufactured Goods.
- 23. We note the importance of conservation of biological diversity, sustainable use of natural resources, including land and water resources and trans-boundary watercourses, combating cross-border pollution and taking measures to mitigate and adapt to climate change, and increase renewable energy use all of which are essential to achieving our economic and environmental goals accounting economies' capabilities. We commend work to combat illicit trade and corruption associated with environmental protection and natural resources. We note the importance of forest conservation, promoting trade in

legally harvested forest products, sustainable forest management and rehabilitation, and commend work that has been done this year to combat illegal logging and associated trade. We are committed to combating illegal wildlife trafficking, illegal, unreported and unregulated (IUU) fishing and associated trade by strengthening international cooperation, capacity building, and enforcement efforts. We commit to take steps to curb illegal supply and demand for wildlife as well as to enhance sustainable management and conservation of wildlife populations.

Strengthening energy security

24. We commend the work of APEC in addressing our region's energy security challenges. Noting the APEC region's growing demand for energy, we confirm the importance of free and open energy trade markets and transparent investment regimes to advance regional energy security, economic growth and the prosperity of the APEC region. Broadening the region's energy mix will also make a major contribution to regional energy security. While recognizing the important role fossil fuels will continue to play in our region's energy mix, the increased production and trade in natural gas can advance our Green Growth Agenda in the transition to a lower carbon economy and sustainable growth objectives. The safe and secure use of nuclear energy by interested economies will also contribute to broadening the region's energy mix. At the same time we emphasize the necessity to rationalize and phase out inefficient fossil-fuel subsidies that encourage wasteful consumption. We also welcome the activities to improve the response to oil and gas emergency situations in the APEC region. We remain vigilant of the substantial risks posed by elevated oil prices and welcome appropriate action by the International Energy Agency to ensure that market is fully and timely supplied.

Improving financial literacy

25. We recognize the importance of financial literacy as an essential life skill for everyone in the 21st century and an important component of any economy's efforts that will effectively support economic and financial stability, inclusive development and individual and families wellbeing. We recognize the importance of the OECD/INFE High-level Principles on National Strategies for Financial Education endorsed by G20 Leaders and therefore welcome the development and implementation of economy-wide strategies by APEC economies, taking into account economy-wide, regional and local circumstances. As one of the key priorities, we recognize the importance of financial education for future generations, in particular, through the establishment of tailored and dedicated learning frameworks and programmes adapted to students' needs and assessing and expanding approaches proven effective. Toward this end we welcome the OECD/INFE Guidelines for Financial Education in Schools and encourage APEC economies to consider their use. We also encourage the APEC economies to consider the participation in the Financial Literacy Measurement Programme for International Students Assessments (PISA) in 2015.

Promoting structural reforms agenda

26. We welcome further progress on implementing the APEC New Strategy for Structural Reform (ANSSR) endorsed in 2010, including conducting a mid-term assessment in 2013 to track ANSSR implementation.

Strengthening Food Security

Implementing the Kazan Declaration on APEC Food Security

27. We reaffirm our commitment to ensure regional and global food security. We welcome the endorsement of the Kazan Declaration on APEC Food Security at the Second Ministerial Meeting on Food Security held in May 2012 in Kazan, Russia and reaffirm the APEC Ministers Responsible for Food Security's commitment to strengthen food security through promoting open and transparent markets, increasing sustainable agricultural production and productivity, considering the diversity of environmental conditions world-wide and positive externalities of agriculture, conducting joint research and

development, supporting agricultural technology dissemination, enhancing food safety and quality, facilitating market oriented trade and developing food markets and related infrastructure, reducing postharvest losses along the entire food supply chain, improving access to food for vulnerable groups of the population, including those facing an emergency due to natural and anthropogenic disasters, and working towards sustainable management of ocean and marine ecosystems and combating illegal, unreported and unregulated (IUU) fishing and associated trade. Recognizing that bans and other restrictions on the export of food may cause price volatility, especially for economies that rely on imports of staple products, we reconfirm the commitments against protectionism made by APEC Leaders. Bearing in mind the contribution of the World Food Program (WFP) in regard to situations of food security crisis, we also reaffirm our commitment to remove restrictions and extraordinary taxes on food purchased for non-commercial humanitarian purposes.

Sustainable agriculture

28. Given the complexity and cross-cutting nature of food security, we emphasize the need to achieve sustainable agricultural growth. In pursuing this goal, we will take concrete actions to boost investment in agriculture while actively adopting existing and innovative agricultural technologies. We commit to create an enabling environment that encourages increased public and private investment in agriculture, take note of the positive role of foreign direct investment on increasing agricultural production. In doing so, we appreciate the Principles for Responsible Agricultural Investment (PRAI) elaborated by the World Bank, FAO, IFAD and UNCTAD, support the ongoing extensive consultations on these principles, and welcomed the approval of the Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests (VG). We welcome the work being done under the Global Research Alliance on agriculture and climate change.

Policy Partnership on Food Security

29. We commend the joint efforts of the APEC economies and business communities to establish the APEC Policy Partnership on Food Security (PPFS), a high-level mechanism to ensure the policy and technical cooperation necessary to achieve food security in the region. We support the PPFS' long-term goal to succeed by 2020 in setting up a food system structure sufficient to provide lasting food security to the economies of the region. We welcome the PPFS as the primary consultative forum for consideration of food security policies involving relevant APEC working groups. We commend the adoption of PPFS Action Plan for 2012-2013 which envisages developing a road map to achieve the PPFS' long-term goal and setting up working groups to elaborate concrete recommendations towards its achievement.

Agricultural technical cooperation and capacity building

30. We recognize that agricultural technical cooperation continues to play a vital role in increasing food production, strengthening capacity-building in the field of agricultural technologies for the member economies and disseminating advanced agricultural technologies on a market-based and voluntary basis in the region. We support the technical cooperation and capacity building activities in education and training, promoting sustainable environmental and natural resource management and infrastructure development related to food security, enhancing agricultural information systems and analysis, and improving preparedness for natural and anthropogenic disasters and cross-border threats.

Strengthening food safety through capacity building and encouraging regulatory cooperation

31. We recognize that food safety capacity-building and regulatory cooperation play an important role in promoting public health, facilitating trade and increasing food security. We recognize the work of the Food Safety Cooperation Forum (FSCF) in building dialogue among food safety regulators and its Partnership Training Institute Network (PTIN), which builds on a public private partnership to deliver food safety capacity building, including preventive control measures and strengthening of laboratory capacity. We support the creation of the Multi-Donor Trust Fund of the Global Food Safety Partnership

administered by the World Bank which originated from these efforts and use the FSCF and PTIN as a model for expanding food safety capacity building globally.

Application of innovative biotechnologies for food security in APEC

32. We welcome work to promote transparent and functioning regulatory systems to ensure safety and to facilitate investment in and the development and application of innovative biotechnologies for food security in APEC. We reaffirm the important potential of biotechnology for contributing to food security and sustainability and the role of APEC in assisting economies in developing transparent regulatory systems that ensure safety, promote public confidence in those systems, and facilitate trade, including in situations of low-level presence of recombinant-DNA plant materials.

Study on Food Security policies in APEC

33. We note the findings of the Policy Support Unit study on food security policies across the APEC region, which highlighted the current food security needs and priorities as well as the policy environment in order to address regional food security issues more effectively. We also note the in-depth analysis of the food security situation in the APEC region is based on the four dimensional food security conceptual model of food availability, economic and physical access to food, and the utilization of food. We acknowledge the useful observations of the study on common food security concerns in all APEC economies, including growing population, climate change, natural resource constraints, decreasing investments in agriculture, natural disasters, rising cost of food, and lack of nutrition education. We particularly emphasize the findings that some food security policies implemented at the domestic level can compromise the food security objectives of other economies and undermine the regional food security situation.

Asia-Pacific Food Security Information Platform

34. We welcome the launch of the Asia-Pacific Food Security Information Platform (APIP) in March 2012 in Japan, which was designed as a web-based resource to share regional information on food security. We encourage APIP to go forward with the steps directed to establish links with the Agricultural Market Information System (AMIS) created in the framework of the G20 in June 2011 in Paris to strengthen cooperation between the two systems. We urge APEC economies to provide the APIP with the relevant data and information in order to increase information sharing and effectiveness of this important tool.

Supporting sustainable management of marine ecosystems, fisheries and aquaculture

35. We support work to ensure the implementation of initiatives on sustainable management of marine ecosystems, fisheries and aquaculture. We support the efforts on combating IUU fishing and associated trade, and on addressing sustainability of ocean and marine resources through a holistic approach. We recognize that fisheries and aquaculture are significant components of marine ecosystem that remains essential to the livelihood and economic well-being for many APEC economies and instruct officials to deepen the work in this sphere. We encourage efforts to mainstream ocean related issues in supporting regional economic integration in line with the Leaders` Growth Strategy.

Establishing Reliable Supply Chains

Implementing supply chain connectivity

36. Achieving an APEC-wide ten per cent improvement in supply chain performance by 2015, and ensuring reliable supply chains in the region continue to be significant priorities for APEC. To that end, we welcome the work undertaken this year to improve supply chain reliability and performance (see Annex B). We also welcome the work undertaken this year to promote the supply chain visibility, and enhance capacity building in Supply Chain Connectivity implementation, including e-commerce and the

logistical capacity of sub-providers, with a view to facilitating member economies engagement in supply chains.

Enhancing customs procedures

37. We welcome the work conducted by the relevant subfora within the Supply-Chain Connectivity Framework Action Plan, including progress in capacity building on de-minimis value, work on the development of Single Window Systems in each APEC economy and promote interoperability amongst economies' Single Window Systems, and the formation of the Virtual Customs Business Working Group to enhance collaboration with the private sector on customs-related issues. We welcome conducting the second voluntary Intellectual Property Rights (IPR) enforcement operation focusing on counterfeit electronics, as well as considering IPR border enforcement capacity building activities to support the APEC Guidelines for Customs Border Enforcement, Counterfeiting and Piracy. We also support continued work to build capacity for implementing Authorized Economic Operator programs throughout the APEC region in line with the WCO (World Customs Organization)/APEC SAFE Framework of Standards, which contribute to security and facilitation of customs procedures.

Improving supply chains reliability

38. We appreciate the outcomes of the discussion on strengthening supply chains and believe that the activities of the APEC Transportation Working Group in 2012 represent an important step towards the implementation of the instructions set forth in the 2010 Leaders' Declaration, which set the goal of achieving an APEC-wide target of a ten per cent improvement in supply-chain performance by 2015, in terms of reduction of time, cost, and uncertainty of moving goods and services through the Asia-Pacific region, taking into consideration individual economy's circumstances. We support the recommendations made at the Special Transportation Ministerial Meeting held in August 2012, in St. Petersburg, Russia to continue exploring opportunities together with industry and relevant stakeholders for diversifying and optimizing transportation and supply chain routes across all modes, improving supply chain connectivity, establishing a logistic information service network, equipping all elements of supply chains with smart technologies and expanding cooperation in the field of disaster prevention and management.

Securing cross-border trade and travel, strengthening disaster resilience

- 39. We welcome the first annual progress report of the APEC Consolidated Counter-Terrorism and Secure Trade Strategy and recognize the important accomplishments being made by APEC sub-fora to advance our Leaders' vision to make regional commerce and travel more secure, efficient, and resilient. We welcome the extension of the Counter-Terrorism Task Force's mandate and its contributions to enhancing the coordination and cooperation within APEC, the private sector, and other organizations, across the strategy's priority cross-cutting areas of secure supply chains, travel, finance, and infrastructure. We recognize the effort underway to continue to strengthen the effectiveness of the CTTF's capacity building activities.
- 40. We reaffirm the importance of further facilitation of business travel among APEC economies in order to enhance business activity in the region and ensure open and secure trade. In this regard, we commend cross-fora collaboration to advance the APEC Travel Facilitation Initiative, including efforts to enhance the APEC Business Travel Card scheme in order to provide more efficient, secure and expedited travel throughout the region. Regarding this we welcome the Khabarovsk Declaration on Tourism Facilitation for a Robust Economy of the Asia-Pacific.
- 41. We endorse the APEC Guidelines on Ensuring Tourist Safety which provide the member economies with useful references to share and adopt best practices, design and establish domestic measures to better protect tourists at home and abroad. We encourage APEC members to take practical and focused actions to implement the provisions of the Guidelines.

42. We recognize the vulnerabilities of the Asia Pacific region against natural disasters, and reaffirm the importance of enhancing emergency preparedness and disaster resiliency, including through cooperation aimed at easing search and rescue and the mobility of relief assistance in the aftermath of disaster which may minimize casualties such as the work on a comprehensive website for first responders in the event of a chemical emergency. We note the efforts and encourage further work on promoting business continuity plans to enhance the reliability of supply chains. We also recognize that integrated disaster risk financing policies are part of overall disaster response preparedness.

Intensive Cooperation to Foster Innovative Growth

Enhancing the innovation cooperation and the role of business

- 43. We support efforts to promote global networking among innovation actors involved in joint scientific research and in the technology inception, dissemination and commercialization cycle, with both its competitive commercial sectors and non-profit elements. We recognize the importance of cooperation among government, private sector, and academia as an essential factor in promoting innovation. We confirm the importance to extend the role of business in discussions on APEC's innovation agenda. We support the transformation of the Industrial Science and Technology Working Group (ISTWG) into the Policy Partnership on Science, Technology and Innovation (PPSTI) and its new terms of reference. PPSTI will strengthen collaboration and enhance member economies innovative capacity, develop science, research and technology cooperation, build human capacity, support infrastructure for innovation. We recognize the important role business should be playing in its work and call on ABAC to nominate private sector representatives to PPSTI and actively participate in its activities. In this regard we instruct the PPSTI, with ABAC support, to draft an action plan containing short- and long-term goals.
- 44. We note the finalized recommendations of the Innovation Technology Dialogue (ITD) on Nanotechnologies for Energy Efficiency held in May 2012 in Kazan, Russia (see Annex C) and encourage officials to implement them. Future ITDs as well as Innovation Policy Dialogues will be conducted within the framework of the newly formed PPSTI. We encourage conducting ITDs to discuss key emerging technology markets and related technologies and prospects for their application in terms of addressing current challenges facing Asia-Pacific economies.

Intellectual property

45. We encourage cooperation in intellectual property (IP) protection and enforcement through developing activities in promotion of IP education and training in order to improve the quality and effectiveness of these programs in APEC economies. We also encourage cooperation among the relevant authorities in APEC economies as a critical step towards achievement of goals to promote innovative growth.

Fostering innovative and export-oriented SMMEs

46. We recognize the importance of the development and adoption of innovative practices among small-, medium-, and micro-sized enterprises (SMMEs) in order to create a non-discriminatory and market-driven innovation environment in the Asia-Pacific region. We recognize the profound role of SMMEs in generating innovative ideas and instruct officials to undertake additional work to support innovative SMMEs. We reaffirm our commitment to make it easier for SMMEs to do business in the region; address trade and investment barriers that impact SMMEs; and promote trade, economic, information and technical exchanges, and cooperation; and enhance the international competitiveness among SMMEs in the region. We also welcome progress in the implementation of APEC principles for voluntary codes of business ethics and look forward to further APEC efforts to strengthen ethical business practices through capacity building activities.

Promoting educational cooperation, collaboration, and networking

47. We recognize the importance of increasing educational cooperation and promoting cross-border exchange in education services for the innovative growth of APEC economies. We applaud the results of the 5th APEC Education Ministerial Meeting held in May 2012 in Korea and efforts of Education Ministers in promoting educational cooperation. We instruct officials to take forward the priorities enhancing the mobility of students, researchers, and education providers across APEC economies (see Annex D). We confirm that by working collaboratively to increase transparency and undertaking capacity building, APEC economies can greatly improve the enabling environment for cross-border education and exchange in education services.

Supporting start-ups and young entrepreneurs

48. We recognize the importance of support for young researchers, innovators and entrepreneurs for innovative growth. We urge the continued recognition of young scientists collaborating in the region through the APEC Science Prize for Innovation, Research, and Education (ASPIRE). We support the implementation of the Young Entrepreneurs Network (YEN) and recognize the benefits of holding YEN meetings on a regular basis. We also welcome the APEC Start-up Accelerator Initiative (ASA) and encourage more collaboration among member economies on the YEN and ASA to assist and promote start-up development in the APEC region.

Promoting women's role and economic empowerment in the innovative economy

49. We recognize the crucial role that women play in innovative economic development, development of human capital and business expansion, and commit to the implementation of the APEC Women and the Economy Forum Statement. We recognize that many barriers limiting women's economic participation still exist and instruct officials to work on policies and concrete actions across all APEC fora to further women's economic participation and empowerment across the APEC region. We also encourage greater cross-collaboration between APEC sub fora and the Policy Partnership on Women and the Economy to achieve these outcomes.

Investing in human capital: promoting healthy lifestyles, maternal and child health

- 50. Recognizing that investments in health at all stages of life from pre-natal through aging are investments in the future, we welcome work to promote concrete steps to promote investment in human health including preventing and reducing the burden of non-communicable diseases and promoting health and healthy lifestyles in APEC economies (see Annex E).
- 51. We support improving health, especially maternal and child health, as a source of dynamic growth and basis for the future healthy adolescence and aging in APEC economies and acknowledge the importance of ongoing strengthening of health sectors and pandemic preparedness. We note that innovations in diagnoses prevention, treatment, and disease management to support health are a source of dynamic growth, and that investment in healthcare, especially maternal and child health, as the basis for the future healthy adolescence and aging in APEC economies. We also acknowledge the importance of ongoing strengthening of health systems and pandemic preparedness and response.
- 52. We instruct officials to work with stakeholders to identify high-impact investments along the life course that will yield commensurate economic and social returns and report findings to us in 2015. We also instruct officials to work with stakeholders to prioritize access by mothers and children to quality health care, including preventive interventions from pre-natal period and during their life. We welcome work to address the economic and public health burden of healthcare associated infections. We encourage officials to work with stakeholders to reduce the incidence of infections in healthcare settings.

Human Resources Development and Economic Growth

53. We emphasize the key role of social protection in achieving strong, sustainable and balanced economic growth and stability. We therefore affirm our commitment to improve employment policies and programs that allow workers to acquire the skills they need for access to employment opportunities that will allow them to share in the benefits of an increasingly globalized economy. We note that the improvement of employment and social protection policy measures can contribute to creating a favorable business climate and securing stable economic growth.

Economic and technical cooperation

54. We reiterate the importance of continued capacity building work in APEC's agenda that assist APEC economies in achieving the Bogor Goals in 2020, in accordance to the Osaka Action Agenda and the Manila Framework. We endorsed the 2012 SOM Report on ECOTECH and we welcome ongoing efforts to strengthen ECOTECH, by developing a more strategic, goal-oriented and cross-cutting approach which would create greater focus, coherence and impact in the growing number of capacity building programs in the economic and technical cooperation areas.

Strengthening APEC as an Institution

- 55. We welcome and stress the importance of increasing constructive involvement of the private sector in APEC processes and encourage further substantial collaboration with ABAC and other stakeholders.
- 56. We welcome officials' continued efforts to strengthen the operational and institutional capabilities of the APEC Secretariat. We welcome the contributions of Australia's Effectiveness Grant and US-APEC Technical Assistance and Training Facility (TATF) to the Secretariat's institutional strengthening. We also welcome APEC economies' contributions to the APEC Support Fund and its sub-funds.
- 57. We value the contributions by the Policy Support Unit (PSU) to advancing APEC's key initiatives such as the Ease of Doing Business, Bogor Goals and Supply Chain Connectivity, and to enhancing the quality of discussions among APEC's policymakers as well as promoting our achievements outside APEC. We agree with the Senior Officials' decision to extend the mandate of the PSU for an additional seven years from 2014 to 2020 with a mid-term review to examine its strategic direction.
- 58. We endorse the 2012 Senior Officials' Report on APEC's work program, including the recommendations contained therein, note the 2012 Annual Report of the APEC Secretariat Executive Director, and approve the 2013 APEC budget and member contributions.
- 59. We will continue to strengthen the operational and institutional capabilities of the APEC Secretariat. We welcome the successful selection and appointment of the Secretariat's second Executive Director for a fixed term.
- 60. We welcome preparations for APEC 2013 in Indonesia. We welcome the announcements by the People's Republic of China, the Philippines and Peru that they will host APEC in 2014, 2015 and 2016, respectively.

24TH APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

Annex A APEC Model Chapter on Transparency for RTAs/FTAs

This APEC Model Chapter is intended to build best practices for RTA/FTAs in the area of transparency standards. This Model Chapter is an APEC contribution to the promotion of high-quality and comprehensive free-trade agreements in the Asia-Pacific region and the realisation of the Bogor Goals. They are intended to encourage a coherent and consistent approach to the design and content of such agreements.

The text of this Model Chapter is based on the combination APEC members economies' existing FTA Chapters, Article X of GATT and Article III of GATS. It establishes WTO rules as the minimum standard for transparency provisions and adds to that certain standard elements that reflect the practices of APEC Members.

The provisions provided for in this model Chapter reflect the general APEC principle of non-binding agreements. They are neither mandatory nor exhaustive, nor do they indicate that economies will include all of the elements here in all of their RTAs/FTAs. They are not written in legal language that is mandatory to be used in an agreement. These provisions are indicative examples to provide members with useful references in negotiating RTA/FTA chapters. They are a guide to the kind of provisions that might be included in a free trade agreement. They will not prejudice the positions of APEC Members in any of their current or future trade negotiations.

General considerations relevant to this Chapter

- The purpose of a transparency chapter in a free trade agreement is to promote transparency and due process in policy-making, as well as to facilitate the administration and exchange of information between the Parties, in particular, through designating contact points in each of the parties to the agreement to facilitate communication on matters arising under the FTA;
- These elements may be supplemented by or may be stipulated in other more specific provisions in individual chapters;
- The provisions contained in this Chapter are not intended to preclude or prejudice the establishment of sector-specific obligations that may be set forth elsewhere in the agreement and to the extent of any inconsistency would prevail over these more general provisions. This Chapter, similar to other chapters of a general or institutional nature, must be read in light of the whole agreement, given that other provisions (e.g., general or chapter-specific exceptions) may take precedence over the specific provisions of this chapter.

Article 1: Definitions

This Article is designed to provide the scope of application of this Chapter by defining the term of "measure of general application" that would be used throughout the text of the Chapter, unless provided otherwise. For the deeper clarification of the particular definition of the term "measure of general application" it appears necessary to include such a definition particularly in Model transparency chapter in order to underline such a meaning of this particular term used throughout the chapter.

The term "measure of general application" includes, as it is provided for in the relevant Articles of WTO Agreements (in particular Article X of GATT, Articles III and XXVIII of GATS), judicial decisions of general

application. There is no intention to include judicial decisions that are not of general application and that regulate relations between specific parties in a dispute, i.e. those decisions that have no direct impact on non-parties to the proceedings.

For the purposes of this Chapter:

"Measures of general application" means laws, regulations, decision, judicial decisions and administrative rulings of general application pertaining to or affecting the matters covered by this Agreement. Judicial decisions if they do not have a direct impact on persons that were not involved in the respective judicial proceedings are not of general application and are not covered by this definition. "Interested persons" means persons of the other Party that are directly affected by a measure of general application or administrative rule or proceeding covered by this Chapter.

Article 2: Publication of Measures of General Application

This Article is intended to reflect the WTO standard for the publication of measures of general application of the Parties to the FTA. Due to the specificity of the judicial systems and the procedures for the judicial decisions to be taken it is not feasible for paragraph 2 to cover judicial decisions. In many legal systems such decisions are taken without any prior publication and they enter into force on the date of their announcement.

In the case of international agreements, such practice is already required to a certain extent by the WTO Agreements (in particular Article X of GATT, Articles III and XXVIII of GATS).

This Article is not intended to detract from any WTO obligations regarding the notification and publication of domestic measures.

- 1. Each Party shall promptly publish, at the latest when the measure becomes effective, or otherwise make publicly available its measures of general application in such a manner as to enable the other Party and its interested persons to become acquainted with them. Agreements pertaining to or affecting matters covered by this Agreement in which the Party participates shall also be published, subject to the mutual agreement of the Parties to the first mentioned Agreement.
- 2. To the extent practicable, a Party shall provide a reasonable period of time between the date of publication of a measure of general application and its entry into force. Except in emergency situations, a Party shall not enforce a measure of general application before such measure has been officially published. This paragraph does not require a Party to ensure the prior publication of judicial decisions of general application if that is contrary to the domestic laws and procedures of that Party.
- 3. To the extent practicable, a Party shall include in the publication an explanation of the purpose of and rationale for the adopted measure.

Article 3: Public Consultations

This Article is intended to establish rules related to the prior publication of the draft measures of general application and to provide interested persons with opportunities to comment on such measures. Though there is no requirement to conform a measure according to the submitted comments, this Article still establishes a certain level of predictability for interested parties with respect to the process for promulgating measures. Nevertheless the commitments of this Article are not unlimited and they are balanced by the fourth paragraph that enables a Party to introduce measures without any prior publication under certain emergency circumstances.

For the reasons described above, judicial decisions are exempted from the rules of this Article.

1. Each Party shall endeavor to make publicly available proposed measures of general application prior to their adoption and provide a reasonable period of normally not less than 30 days for the

other Party and its interested persons to comment to the authority responsible for the development of the proposed measure.

- 2. The comments received during the period for consultations under paragraph 1 of this Article shall be considered by the authority responsible for development of the proposed measure.
- 3. This Article does not require a Party to ensure the prior publication for commenting or taking into account any views of the other Party or its interested persons on judicial decisions of general application of the Party if that is contrary to the domestic laws of that Party.
- 4. Each Party shall ensure the timely publication as referred to in paragraph 1 of this Article, except in emergency situations involving economy's (internal) security, specific measures regarding monetary and fiscal policy or measures the publication of which would impede law enforcement, or otherwise be contrary to the public interest, public health, or prejudice the legitimate commercial interest of particular enterprises, public or private.
- 5. To the extent practicable, a Party shall include in the publication an explanation of the purpose of and rationale for the proposed measure.

Article 4: Publication Resources

This Article provides for an indication as to where the covered measures might be published.

The obligations to publish proposed and final measures contained Articles 2 and 3 of this Chapter may be satisfied by publication in an official journal for public circulation, be it physical or online and the Party should encourage their distribution through additional outlets, including an official website.

Article 5: Disclosure of Confidential Information

This Article reiterates the relevant provisions in the WTO Agreements (in particular Article X of GATT, Article III bis of GATS) and is intended to provide for special treatment of confidential information.

Nothing in this Chapter shall require any Party to provide confidential information, the disclosure of which would impede law enforcement, or otherwise be contrary to the public interest, or which would prejudice the legitimate commercial interests of particular enterprises, public or private.

Article 6: Contact Points

This Article provides for basic rules on contact points.

- 1. Each Party shall provide to the other Party the details of the contact points established or maintained in accordance with this Agreement, including those that provide assistance to the other Party and its interested persons.
- 2. The relevant contact point, upon the request of a Party or its interested persons shall assist in finding and obtaining copies, on a timely basis, of published measures of general application. Such measures shall be made available to the interested persons, while they are in effect and for a reasonable period after they are no longer in effect and for a reasonable period after they are no longer in effect.
- 3. The Parties shall notify each other promptly of any changes regarding how to contact their respective contact points.
- 4. Each Party shall ensure that its contact points are able to coordinate and facilitate a response on the matters covered by this Agreement, including any enquiries referred to in Article Notification and Provision of Information.

Article 7: Notification and Provision of Information

This Article is intended to establish additional commitments related to responses by the Parties, and includes guidance stating that a reasonable amount of time to respond is 30 days. That does not preclude a Party from responding within a shorter period of time, or extending it in case the situation or matter in question so requires.

- 1. The Party shall respond to the written enquiries of the other Party on matters pertaining to implementation of this Agreement within a reasonable period of time. Enquiries may be addressed through enquiry or contact points established under this Agreement or any other mechanism as appropriate.
- 2. The reasonable period of time provided for in paragraph 1 of this Article shall not normally exceed 30 days from the date of the receipt of the written request.
- 3. Any notification, information or response provided under this Agreement shall be without prejudice as to whether the measure is consistent with this Agreement.

Article 8: Administrative Proceedings

This Article defines the conditions required for prompt review and correction of final administrative actions.

- 1. With a view to administering in a consistent, impartial and reasonable manner its measures of general application, each Party shall ensure, in its administrative proceedings, that:
 - a. wherever possible, persons of the other Party that are directly affected by a proceeding are given reasonable notice, in accordance with the procedures provided for in its domestic laws and procedures, when a proceeding is initiated, including a description of the nature of the proceeding, the legal basis in accordance with which the proceeding is initiated, and a general description of any relevant issues;
 - b. persons of the other Party that are directly affected by a proceeding are afforded a reasonable opportunity to present facts and arguments in support of their positions prior to any final administrative action, when time, the nature of the proceeding, and the public interest permit;
 - c. its procedures are in accordance with the domestic law.

Article 9: Review and Appeal

This Article is based on the relevant WTO standards (in particular Article X of GATT, Article VI of GATS). It should be noted that the second and third sentences of paragraph 1 of this Article are intended to cover two different situations – independence of the tribunals and independence of procedures. Due to the complexity and specificity of services regulation it seems to be relevant to reiterate the respective provision of Article VI of GATS.

- Each Party shall establish or maintain judicial, arbitral or administrative tribunals or procedures, for the purpose of the prompt review and, where warranted, correction of administrative actions regarding matters covered by this Agreement. Such tribunals shall be impartial and independent of the office or authority entrusted with administrative enforcement and shall not have any substantial interest in the outcome of the matter. Where such procedures are not independent from the agency entrusted with the administrative decision concerned, the Party shall ensure that the procedures in fact provide for an objective and impartial review.
- 2. Each Party shall ensure that in any such tribunals or procedures the parties to the proceedings are provided with:
 - a. a reasonable opportunity to advocate for their respective positions; and
 - b. a decision based on the evidence.
- 3. Subject to appeal or further review procedures as provided for in its domestic law, each Party shall ensure such decisions shall be implemented by, and shall govern the practice, of the offices or authorities with respect to the administrative action at issue.

Article 10. Specific Provisions

This Article intends to prevent conflicts between this Chapter and provisions of other Chapters that might contain transparency standards in specific areas of cooperation, such as SPS or TBT.

In case of conflict between this Chapter and the specific provisions of other Chapters in respect of issues covered by this Chapter, such specific provisions shall prevail.

24TH APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

Annex B Towards Reliable Supply Chains

Reliable supply chains are crucial for maintaining sustainable development while contributing to economic, energy, food and environmental security in the region and in the world as a whole. In this regard, we reaffirm the importance of implementing the APEC Supply-Chain Connectivity Framework and the 2010 Yokohama Leaders' Declaration goals to achieve an APEC-wide ten percent improvement in supply-chain performance by 2015, in terms of reducing time, cost, and uncertainty of moving goods and services through the Asia-Pacific region, taking into consideration individual economy's circumstances.

We reaffirm the need to take a more systematic approach to improve supply chain performance by identifying the policies to address each chokepoint, develop diagnostic reports to determine if economies have these policies in place, undertake capacity-building activities to provide targeted assistance to economies to implement these policies. We instruct officials to begin implementation of the systematic approach in 2012 based on developing the supply chain inventories and producing the diagnostic reports, so that targeted capacity-building can be undertaken in 2014.

We appreciate the work of the Policy Support Unit to develop the APEC Supply Chain Connectivity Self-Assessment Survey 2012 as part of the mid-term assessment for measuring APEC economies' progress towards the 10 percent targeted improvement in supply chain performance. We welcome the capacity-building initiative to increase economies' understanding of the benefits of commercially useful de minimis values to facilitate trade in low-value shipments and to expand the APEC Pathfinder to Enhance Supply Chain Connectivity by Establishing a Baseline De Minimis Value. We note the important work dedicated to implementation of Electronic Certificates of Origin (ECO) in cross border trade in the APEC region.

Global economic challenges along with natural and anthropogenic disasters underscore our vulnerability and the importance of supply chain connectivity and APEC economies' efforts to build reliable supply chains. Thus we appreciate the discussion on establishing reliable supply chains in 2012 and welcome the results of the APEC Special Transportation Ministerial Meeting held in August 2012 in St. Petersburg, Russia together with the 7th APEC Transportation Ministerial Meeting held in September 2011 in San Francisco, USA, which made a significant contribution to the discussion of existing issues and future areas of development of the transportation dialogue among the economies of the region.

To improve supply chain connectivity, protect the interests of the business community and consumers, enhance the speed and quality of delivery of goods, as well as to guarantee transparency and opportunities for control over bulk cargoes, increase the ability to track dangerous goods and hazardous materials, supply chains should be considered as a single modern network equipped with smart technologies, including Intelligent Transportation Systems (ITS), Global Navigation Satellite Systems (GNSS)-based monitoring systems, radio frequency identification (RFID)-based automated cargo identification systems, and automated transport management logistic services.

In this regard, it is important to hold consultations with all stakeholders on possible ways of improving the technological aspects of supply chains, which include finding ways of wider implementation of next-generation technologies into supply chains, equipping major transportation hubs, intermodal systems, logistics channels in the Asia-Pacific with ITS and GNSS systems, increasing interaction between space agencies of participating economies in order to intensify the information exchange, mainly with the data

obtained from different types of satellite systems, for supply chains security and safety; improving coordination of efforts in transport flows management and logistic information service networks and ITS implementation including through harmonizing container and cargo identifications systems; and developing common approaches in early warning technologies in the case of emergencies in cross-border transportation of dangerous cargoes. We also emphasize the need to design capacity building programs for member economies in improving and implementing advanced technologies for the supply chain reliability.

With the aim of supporting the growing trade of APEC economies and the substantial economic benefits from lowering transportation and trade transaction costs, as well as enhancing supply chain efficiency and security, and creating better business environment, we will together with industry and relevant stakeholders analyze possibilities for diversification of transportation and supply chain routes across all modes. Building an optimal structure for supply chain routes could become a key factor in strengthening regional economic integration and supporting higher rates of economic growth in the region.

We also support the efforts towards coordination of early warning systems in case of emergencies related to cross-border transportation. Recognizing the vulnerabilities of our economies to natural and anthropogenic disasters, we should take steps towards enhancing emergency preparedness, disaster resiliency, and fostering scientific and technical cooperation among the APEC economies, communities and businesses. In this regard, we support greater coordination and better connectivity in disaster management, identifying best practices for emergency early warning systems in cross-border transportation and developing cooperation among crisis management centers in the APEC economies.

We recognize the collective efforts from the APEC Small Medium Enterprises Working Group (SMEWG) and Emergency Preparedness Working Group (EPWG) with the proposed guidelines on promoting business continuity plans to strengthen the reliability of supply chains. The work to improve emergency preparedness and natural disaster resilience of SMEs is essential for establishing reliable supply chains and continuing to advance the initiatives on promoting disaster preemptive/responsive mechanisms to strengthen the reliability of supply chains in the APEC region.

24TH APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

Annex C Recommendations of the Innovation Technology Dialogue on Nanotechnologies for Energy Efficiency

We, the participants of the Innovation Technology Dialogue (ITD) on Nanotechnologies for Energy Efficiency, a pilot ITD mechanism to be further implemented within PPSTI if effective, have agreed on these recommendations in order to offer guidance to APEC economies with regard to development of nanotechnologies to increase energy efficiency as a means of addressing a number of challenges in our region.

A. Role of nanotechnologies in increasing energy efficiency

- 1. We believe that accelerating the development and application of key emerging technologies will produce efficient solutions to many problems facing APEC economies. We recognize the importance of expanding our cooperation in certain key technology areas. Technological innovation does not only strengthen the economy but also offers positive social implications and environmental protection benefits.
- 2. Nanotechnologies are likely among the main sources of innovative solutions for the APEC economies and will have a significant impact on all areas of material usage. One of the most important applications of these solutions is found in the energy sector, where nanotechnologies will help to address the high level of energy consumption in APEC economies.
- 3. The 2010 "APEC Growth Strategy" and the 2011 Leaders' Declaration set the goal of promoting energy-efficiency and low-carbon policies to achieve sustainable and green growth. The first ITD could bring us closer to the above goal and promote green growth in the APEC economies.
- 4. The continuing increase in the world's energy consumption and resulting problems (e.g. natural energy resources depletion, greenhouse gas emissions leading to climate change, energy security issues, etc.) call for efficient use of energy as a cornerstone of energy policies are important for all economies. Improved energy efficiency can enhance energy security by helping to offset increased energy demand. According to the International Energy Agency, enhanced energy efficiency in buildings, industrial processes and transportation could reduce the world's energy needs in 2050 by one third and help control global greenhouse gas emissions.
- 5. Nanotechnologies have significant potential to assist economies in meeting their energy efficiency goals, enabling adoption of new approaches, techniques and materials with a wide range of applications, from efficient usage of traditional energy sources to development and implementation of new generation technologies based on renewable sources. The nanotechnology impact is especially important for renewable energy, which together with energy efficiency are pillars of sustainable energy policy.
- 6. Nanotechnologies are becoming more widely used for composite materials and allow us to make lighter, more durable and stronger materials using the same resources as before, proportionally decreasing the energy consumption related to their use and transportation. A lot of materials currently in use are characterized by their low effectiveness and high energy consumption. Using nanotechnologies for the production of new materials can significantly raise the strength of construction in every field and lower

the impact on the environment due to the lower-weight materials. Certain nanotechnologies are also important for ensuring energy efficiency at all stages of energy delivery to the consumer (generation, storage, transportation, consumption).

7. We recognize that development of nanotechnologies meets the priorities of the APEC agenda, for example, with regard to supply chains, environment, innovation, trade and investment. In order to increase the efficiency of supply chains, it is possible to make vehicles lighter, which means less fuel-consumption and lower transportation costs owing to introduction of nanotechnologies. In the field of environmental protection, we can use emerging nanotechnologies for creation of environmentally friendly goods and production methods, which will ensure lower energy consumption and, as a result, lower emissions.

B. Recommendations for framing economic policies

We agree on the following recommendations with regard to development of nanotechnologies to advance the energy efficiency.

General recommendations

- APEC economies should cooperate to address the energy efficiency challenges. It would be beneficial to
 have a broad range of WTO-consistent incentives for businesses involved in development and
 implementation of the energy efficient technologies and business solutions, as well as introduce
 measures to support replacement of older technologies and stimulate gradual transformation of
 businesses and households as they adopt energy efficient solutions instead of energy-intensive
 applications.
- 2. Developing scientific and technological cooperation, building relevant production capacities in energy efficiency related areas and considering best practices should be among the priorities of the APEC members in their aspiration to promote energy efficiency.
- 3. International cooperation in these areas may help to boost development, which may sustain and even strengthen the economic development of the region. A well-elaborated and coordinated approach may result in synergy in this field.

Policy steps

1. Establishment of long-term science and technology policies

Formulating domestic science and technology policies involves intensive work on the part of various government agencies and non-governmental organizations; therefore, elaboration of policies in the field of nanotechnologies requires effective interagency coordination and close cooperation with business and academia.

It could be effectively realized through adoption of long-term science and technology strategies outlining the roles for government agencies, business, academia and other stakeholders. Such instruments would enable long-term planning and, therefore, demonstrate positive market trends to the investors, as well as the options for long-term investment.

Policy directions

Emphasis should be put on long-term thinking but also include short- and medium-term demonstrations that direct policy decisions. There is an obvious need for the governments to support promising research in the long term, while they should avoid "picking winners", and instead support the market-driven development of innovative technologies. In order to facilitate commercialization of new materials, economies may support

policies encouraging change in the technological generation, fostering broader innovation and resulting in more efficient application of the existing research outcomes.

It is necessary to anticipate, to the extent possible the consequences of the development of nanotechnologies and create the required related markets. Economies, therefore, need to promote safe recycling and proper utilization of nano-enabled materials. Adaptation of the existing technologies to new materials and processes would help to develop and implement new business models and best business practices. Organizational innovation would thus contribute to development of product innovation.

2. Science and education policies

Education and science generate ideas for the innovation system, being the starting point for the innovation process. Thus, it is important to develop education and put emphasis on science not only in universities but also in schools. It is important to note that over the last decades research has become more complex, and modern scientific discoveries are made by scientific groups, not by individual ()scientists. At the discipline level multi-disciplinary teams are generally more efficient. Thus, we need to introduce measures to facilitate the development of the scientific potential of individual scientists and research groups by promoting interaction and cooperation among them, facilitating access to adequate funding and necessary competencies. That will reduce the risks and complexities associated with the creation of new technologies.

Policy directions

Due to the growing internationalization of science and research, it is crucial to scope out and reduce barriers for easy movement of scientists across borders. Possible steps in this direction could include promoting a more open system for scientific exchanges among the APEC economies, thus fostering availability of expertise.

Complexity of the research and necessity to support only broad areas to avoid stifling innovation means that individual economies should consider encouraging more flexible systems for research grant management that would maintain freedom of choice with regard to scientific research concentration.

Broader public involvement in and awareness of the nanotechnology research in the long-term supports markets, contributes to the demand for relevant goods as well as creates a steady inflow of researchers. It gives governments more freedom in investing in science. In this regard, substantial benefits could be obtained through promoting education of the public on new emerging nano-enabled materials in order to stimulate their use in the energy sector, including through launching nanotechnology public awareness programs for the younger generation.

Since many scientists are disconnected from the commercialization process and markets in general, it is important to develop policies that take into account motivations of scientists and foster technological entrepreneurship. This is also important to generate the greatest impact, especially from an environmental perspective, since environmental results are generally not observed at any significant scale until there is an adequate uptake of cleaner products and technologies.

3. Access to necessary equipment and expertise

Nanotechnology could be considered one of the most advanced areas of science; therefore, in order to make research in nanotechnology areas effective, scientists need special high-precision equipment, which some APEC economies lack or may not have the resources to maintain these specialized tools. Moreover, working with such equipment requires specialized knowledge and skills, which again not every APEC economy might have.

At the same time, some economies lack raw materials to produce nano-enabled components for their products. It also hinders the development of nanotechnologies.

Due to the fact that nanotechnology research requires access both to advanced equipment and expertise, promoting cooperation in this field would allow the APEC economies to produce breakthrough research increasing the potential of individual economies.

Policy directions

Facilitation of access to the necessary equipment and expertise could be achieved through enhancing cooperation among scientific institutions and research centers, taking shape of joint projects and academic publications, developing special rent schemes for equipment and infrastructure. Efforts should be made to promote trade in scientific research equipment and components through reducing the existing barriers to trade.

4. Entrepreneurial policy

Commercializing new technologies is often rather expensive and requires substantial funding. Private capital provides funding when it believes that the technology has potential for good returns on the investments made. Private business, therefore, better evaluates risks, analyzes consumer preferences and expectations, thus testing the technologies for potential commercial success. New technological solutions mostly focus on the market needs; therefore, effective entrepreneurship is key for small and medium-sized technology businesses to succeed on the market. In this regard, such entrepreneurship with the inclusion of start-ups and young entrepreneurs in economic activities, will certainly facilitate scientific development.

Policy directions

Governments should promote an environment that is conductive for funding from the private sector, which can ease the transfer of technologies from universities and scientific institutions to industries. As business is interested in particular results of research and development and is ready to invest in promising technologies, governments should create an environment conducive to such interactions.

APEC economies should cooperate in sharing expertise and encouraging venture capitalists to invest in nanotechnology projects. This could be achieved through the effective use of various existing mechanisms, such as stimulating dialogue between venture capitalists and inventors, promoting entrepreneurial education, stimulating technology transfer from universities and scientific institutions to businesses, creating business incubators in universities, encouraging business involvement to nurture nanotechnology research and speeding up the commercialization of new technologies.

In this regard APEC economies should collaborate to advance the Young Entrepreneurs Network (YEN) and the APEC Start-up Accelerator Initiative (ASA) proposed by SMEWG as to promote entrepreneurship, strengthen their access to financing, and enhance their capacity to internationalize.

5. Incentives

The nanotechnology sector is characterized by the need for high investments at the initial stage. Many nanotechnologies are also characterized by a rather long payback period. Businesses, however, often look for a quick return of their investment and are not eager to support projects with a lengthy commercialization cycle.

Thus, the desire of businesses to invest in innovative technologies is often dependent on external incentives encouraging them to invest in potentially successful products that could be commercialized in a mid-term or long-term period.

As governments have strategic vision and are concerned about the mid-term or long-term perspective with regard to development of technologies, they could provide such incentives.

Policy directions

Consistent with their international obligations, governments could make full use of the existing mechanisms, including subsidies and tax incentives, to incentivize development of innovative technologies and old technologies replacement, partnership of industrial companies with R&D centers or universities. The support program could provide long-term funding and should not be concentrated on a single set of technologies but rather support the broader technology trends, stimulating multilateral cooperation preferably on the precompetitive stage, thus allowing the market to choose the specific technologies.

Special incentives could be given to those industrial companies that partner with R&D centers or universities to bring nanotechnology to the market.

6. Safety policy for protection of human health and the environment

Emergence of new technologies can present environmental challenges, due to a lack of information on their effects on human health. Joint efforts are, therefore, needed to share information and exchange experience in managing environmental and health impacts to support the development of efficient safety policy.

Policy directions

Individual economies should encourage efforts to implement effective environmental, health, and safety policies and enhance development of the study of nanotoxicology to reduce possible harmful effects of nanotechnologies on the environment and health.

Safety policy for protection of human health and the environment are expected to provide consistent and predictable requirements for environmental impact of new products and manufacturing processes, which would facilitate the ability of industry to understand and follow regulations and ensure product safety for human health and the environment.

Safety regulations should play an important role in the development of nano-enabled materials and nanotechnologies, while making efforts for ensuring that they do not stifle innovation nor restrict access to technologies nor create unnecessary trade barriers.

7. Intellectual property awareness policy

Inventors often lack specialized knowledge on how to ensure protection and enforcement of their intellectual property rights that may result from their work. Governments should protect and enforce intellectual property rights to ensure that commercialization is fair and secure for inventors, and enchance the motivation of companies to innovate.

Policy directions

Enhancing public knowledge of intellectual property rights and policies could be done by carrying out efforts to raise awareness on tools available for successful intellectual property rights management, protection and enforcement.

Individual economies should also consider enhancing their cooperation in exchange of best practices in intellectual property protection and enforcement and how to develop necessary legal frameworks to accomplish this goal.

8. Household demand

Propensity to innovate largely depends on the level of demand. Use of energy efficient solutions should be an obvious advantage for households, creating demand for nanotechnology businesses, which, in its turn, would be an incentive for further development of energy efficient technologies and contribute to solution of the energy efficiency problem.

Policy directions

Governments should encourage households to use energy saving devices, which could be achieved by holding relevant campaigns and giving certain incentives. Diversification of energy sources, including the increase in the share of green energy should be also encouraged by the governments in order to stimulate research and development followed by commercialization of the energy efficient technologies.

9. Information exchange

Innovation often implies new unique combinations of the resources available. In order to create such unique combinations quickly and to stimulate economic growth in all economies, there is a need to coordinate resources of all the stakeholders. Information exchange is, therefore, an essential element for developing cooperation, combining efforts and resources to accelerate innovative growth in the field of nanotechnology.

Policy directions

Governments should promote education programs and cooperation among the APEC economies, especially postgraduate trainings since cooperation at these early stages would create a strong basis for future cooperation. Efforts should be made by the governments to educate more people and promote public awareness, in particular, train more young talents in the nanotechnology R&D.

Economies should foster cooperation among R&D centers, sharing best practices and promoting S&T networking, including through joint development and research.

Information exchange should be encouraged through active participation in the networking activities involving all the relevant stakeholders in order to bring the industry closer to innovators.

Policies on information exchange at the same time should appreciate matters of confidentiality both from a business perspective, as well as from the perspective of scientific researchers who wish to publish unique findings.

Innovation activities, including those in the area of nanotechnology, should be popularized at the economywide, regional and local levels of the government.

24TH APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

ANNEX D Outcomes of the APEC International Education Conference "Shaping Education within APEC"

Senior education and trade officials, academics, and private sector representatives from a number of APEC economies, met in Vladivostok, Russia, on 9-10 July 2012, to discuss ways to enhance education cooperation within APEC.

Conference participants recalled the outcomes from the 5th APEC Education Ministerial Meeting (AEMM), held in Korea, where Ministers noted the critical role education plays in facilitating regional economic integration and enhancing prosperity among the APEC economies. Ministers acknowledged the need to continue developing strategies for collaborating among people, sharing resources, and building networks between institutions in APEC member economies, and noted the work of officials in exploring a number of proposals for research, information, capacity building and knowledge sharing in the field of education services.

Participants further noted the statement of the APEC Ministers Responsible for Trade (MRT) meeting in June 2012, which recognized the importance of cross-border trade in education services and deeper educational cooperation in the Asia-Pacific. Ministers encouraged officials to examine ways to better facilitate mobility of students, researchers and education providers in the region, while taking into consideration the circumstances of individual economies, and to report progress at the APEC Ministers Meeting (AMM) in September 2012.

The benefits of open and efficient education systems

Education is the pre-eminent source of economic development in the 21st century, creating more and higher quality jobs, bolstering economic growth. Education as a fundamentally important component of economic activity accounts for almost 7 percent of GDP in APEC economies. Cooperation in the education sector fosters innovative growth as regional networks of students, researchers and education providers build scientific, technological and linguistic communities.

All APEC economies stand to gain from enhancing collaboration and trade in education. Many developing economies in the Asia-Pacific region are rapidly moving into higher value-added manufacturing and knowledge intensive industries driven by innovation. Access to a wide range of quality education services will be critical to sustainable growth on this development pathway. The APEC region also contains some of the world's largest exporters and consumers of education services. Opportunities exist for a significant expansion of trade in education services to the benefit of all economies if we can facilitate the flow of students and researchers, reduce the transaction costs involved.

Increasing cross-border student flows will also strengthen regional ties and promote economic development through knowledge and skill transfers. In particular promoting the movement of the younger generation between economies will promote cultural understanding and build regional networks. High quality cross-border education will equip students with the 21st century competencies they need for their full participation in a globalized and knowledge based society.

Work on specific policies, including those relating to quality assurance, accreditation, cross-border exchange and data collection, can have a significant impact on the education sector in APEC economies. By undertaking research, sharing best practices, working collaboratively to increase transparency and undertaking capacity building, APEC economies can greatly improve the enabling environment for trade in education services within the region.

Priorities for future work to enhance APEC education cooperation

APEC has a strong track-record of work on international education. Participants recalled prior projects implemented and reports prepared by the APEC Human Resource Development Working Group (HRDWG) including: "APEC 21st Mathematics and Science Education for All"; "Strategic Action Plan for English and Other Languages"; "Capacity Building for Policies and Monitoring of Cross-Border Education"; "Mapping Qualifications Frameworks across APEC Economies"; "Measures Affecting Cross Border Exchange and Investment in Higher Education in the APEC Region"; and "APEC and International Education".

Participants also acknowledged the development and progress made by the HRDWG and the Education Network (EDNET) in expanding and extending the education knowledge-base for the APEC region. This includes the work carried out by EDNET in building and sharing knowledge through the APEC Human Resource Development (HRD) Knowledge Bank Wiki and the APEC Learning Community Builders (ALCoB) networks in developing the 2008 education priority areas: mathematics and science education; career and technical education (CTE)/technical and vocational education and training (TVET); learning each other's languages; information and communication technology (ICT); and systemic reform. The important achievements of the Association of Pacific Rim Universities, University Mobility in the Asia Pacific, and the ASEAN University Network in creating bilateral and multi-lateral partnerships and fostering student and researcher exchange was also recognized. Profound steps were made by economies in 2012 to enhance practical and sustainable educational cooperation exploring a number of proposals for research, information, and knowledge sharing in the field of education services including the proposed initiative by the Russian Federation for the development of higher education cooperation and Korea's initiative on cooperation.

More work, however, remains to be done in response to the 2012 AEMM and MRT statements. We have discussed a range of issues affecting higher education cooperation within APEC and examined ways to better facilitate the mobility of students, researchers and education providers. We have identified the following priority areas for future joint work and capacity building to enhance higher education cooperation within APEC. We have also acknowledged that while the focus of this conference was on higher education, the identified priority areas apply equally to TVET.

These priorities will be presented to the APEC Ministers and Leaders at the AMM and AELM for consideration, after which they could be taken forward by economies on a voluntary basis through the HRDWG, the Group on Services, and other relevant APEC working groups.

1. Enhancing the mobility of students

The mobility of students could be enhanced through closer cooperation on specific policies. This could include identification of best practices for APEC economy course accreditation, and quality assurance systems, as well as targeted capacity building projects. This work could also include the development of models to guide reform and transparency, and where possible, drawing on case studies. APEC economies could also explore ways to increase the transparency of student visa regulations.

2. Enhancing the mobility of researchers

The mobility of researchers could be enhanced by building on existing academic exchanges and joint research activities among education providers in APEC economies. APEC economies could also explore ways to improve the mobility of the academic and TVET workforce.

3. Enhancing the mobility of education providers

The mobility of education providers could be enhanced with the exchange of best practices for market access, capacity building, understanding of existing regulations for the establishment of foreign providers,

exploration, identification and comparison of best practices in APEC on quality assurance system. The APEC Services Trade Access Requirements (STAR) Database, which by the end of 2012 will include information on requirements for the supply of higher education services through commercial presence, would be a useful tool for understanding existing regulations.

4. Increasing the interaction between higher education institutions

This could include enlarging the existing network of bilateral agreements between universities into an APEC-wide voluntary mechanism; examining policies related to the flexible design and delivery of educational content (such as online courses) between APEC economies; and exploring the possibility of an APEC database of educational programs.

5. Increasing data collection on trade in education services

APEC economies could share best practices and utilize capacity building to enhance data collection on cross-border student and provider mobility in the APEC region, including estimates of the economic impacts and benefits of student and provider mobility. Such work could eventually facilitate the collection of cross-border education data and deeper regional economic integration through identification of patterns of supply and demand in education and new opportunities for investment and innovative learning and teaching practices in APEC economies.

24TH APEC MINISTERIAL MEETING

Vladivostok, Russia 5–6 September 2012

Joint Statement

ANNEX E Investing in Human Capital

The APEC region continues to grow strongly despite the global financial crisis. An innovative economy requires greater innovations in the field of human capital, more complex production processes and more efficient management methods. Regulators should play the role of supporting the development of human health, knowledge and skills and the creating proper environment for needed investments in human capital and improved institutional performance and infrastructure. The scale and structure of investment in human capital is the key for continuing long-term economic growth in APEC.

To address the issues related to human capital development in the APEC region, coordinated efforts should focus on the following areas:

- Education

Increased human capital flow and growing access to information and knowledge urge all APEC economies to enhance collaboration and exchange in education services. Work on specific policies, including those related to quality assurance, accreditation, mobility of students, researchers, and education providers cross-border exchange and data collection will have a significant impact on the education sector in the APEC economies and will strengthen regional ties and promote economic development through knowledge and skills transfer.

- Health

Healthy human capital is critical for further economic development and innovative growth in the APEC region. To promote healthy populations it is crucial to support and invest in health and healthy lifestyles throughout the life course starting from maternal, infant and child health which is the foundation for future health and healthy ageing. Prevention of the early onset and progression of non-communicable diseases (NCDs) can be efficiently attained through-access to quality care combined with preventive interventions. Investments in economically cost-effective measures which address health and healthy lifestyles both with early detection, prevention, early intervention, and management of NCDs from maternity and prenatal care through old age provide powerful economic and social benefits and greatly contribute to sustainable economic growth.

- Employment and improving social safety nets

It is crucial to invest adequately in social safety nets that are important shock absorbers in the economic crisis in order to create a favorable business climate and secure stable economic growth. The quality of employment is an indicator of the maturity of labor relationships linking them with post retirement relationships and providing the expanded reproduction of labor resources in all their diversity - from child care and preparing children for professional life till care of the seniors and disabled. Public-Private Partnerships are important for providing quality employment and strengthening social safety nets.

- Equal inclusion

It is important to stimulate demand for human capital formation in all population groups, to provide secondchance learning opportunities and to facilitate the movement of educated labor to where it can be used most productively. Equality is important for both public and private sectors since it enables policies and regulations to simultaneously address the financial, economic, and social needs of the whole population, and enables business to understand and provide products and services that meet the demands of the entire market and to optimize financial returns. Barriers faced by different population groups in accessing capital and assets, markets and networks, skills and capacity building, information and role models, training and technology should be minimized. Promotion of equality in accessing resources to start and develop micro, small and medium enterprises is vital for enhancing job opportunities and economic growth in the APEC region.

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

19th APEC FINANCE MINISTERS' MEETING

Moscow, Russia 30 August 2012

Joint Ministerial Statement

- 1. We, the finance ministers of the APEC economies, convened our 19th annual meeting in Moscow, Russian Federation, on August 30, 2012 under the Chairmanship of Mr. Anton Siluanov, Minister of Finance of the Russian Federation. The meeting was also attended by the President of the Asian Development Bank (ADB), the Managing Director of the World Bank Group, the Deputy Managing Director of the International Monetary Fund, the Deputy Secretary General of the Organization of Economic Cooperation and Development (OECD), Pacific Economic Cooperation Council (PECC) and the APEC Business Advisory Council (ABAC).
- 2. We gathered at a time of high uncertainty and significant downside risks for the global economy. Financial markets continue to be fragile, while some advanced economies globally face challenges associated with high public deficits and debts. The events in Europe are adversely affecting growth in the region. Economic activity in a number of advanced economies has weakened and there are clear signs of slowing growth in the emerging economies that remain heavily dependent on external demand. In such circumstances, we reaffirm our strong commitment to support growth and foster financial stability. Specifically, we are committed to strengthening domestic demand where appropriate and restoring confidence, facilitating job creation, reducing high public deficits and debts, and implementing structural reforms to boost growth and reduce external imbalances. We welcome recent policy measures that support demand and are generating some positive outcome.
- 3. APEC members remain vigilant of the substantial risks posed by elevated oil prices and welcome appropriate action by the International Energy Agency to ensure that the market is fully and timely supplied. We will also remain vigilant of other commodity prices, highlighting the need to avoid export bans, and other restrictions that are inconsistent with WTO rules in response to rapid increases in agricultural commodity prices.
- 4. We support the conclusions of the recent G-20 Leaders Summit in Los Cabos on 18-19 June 2012 and will act together to strengthen the global recovery and ensure strong, sustainable and balanced growth. We welcome European Leaders' commitment to take all necessary measures to safeguard the integrity and stability of the Euro area. We agree to intensify our efforts to implement reforms to bolster financial sector stability. We remain committed to reducing imbalances by strengthening deficit economies' public finances with sound and sustainable policies that take into account evolving economic conditions and, in economies with large current account surpluses, by strengthening domestic demand and moving toward greater exchange rate flexibility. We reaffirm our commitment to move more rapidly toward market-determined exchange rate systems and enhance exchange rate flexibility to reflect underlying fundamentals, avoid persistent exchange rate misalignments, and refrain from competitive devaluation of currencies. While capital flows can be beneficial to recipient economies, we reiterate that excess volatility of financial flows and disorderly movements in exchange rates have adverse implications for economic and financial stability. We are firmly adhered to open trade and investment, expanding markets and resisting protectionism in all its forms.
- 5. Fiscal sustainability remains an important element of sustained economic growth. Good governance in public finance enhances the credibility of budgetary policy and promotes economic recovery. Recent financial crises resulted in a substantial deterioration of fiscal accounts in many of the world's economies. Under these difficult circumstances, we remain committed to ensuring the long-term fiscal sustainability of our economies while recognizing that short-term fiscal stimuli may be warranted to support growth and job creation in economies with available fiscal space. Advanced APEC economies

will ensure that the pace of fiscal consolidation is appropriate to support the recovery in their economies while also addressing concerns about medium term fiscal sustainability. APEC emerging market economies with sufficient fiscal space stand ready to implement discretionary fiscal actions to support domestic demand, as appropriate.

- 6. We recognize the importance of closely monitoring vulnerabilities stemming from the build-up of excessive private debt. During crises, the liabilities of the private sector, including distressed financial institutions, may turn into increased liabilities of the public sector, increasing risks to fiscal sustainability. Expenditures related to population aging should also be taken into account in fiscal projections.
- 7. APEC remains a valuable forum for discussion of practical measures to advance issues of mutual concern to member economies. Our discussions this year have increased our understanding of three important topics: financial inclusion, in particular financial literacy, financial policy measures to address the impact of natural disasters, and treasury systems.
- 8. We recognize the importance of financial literacy as a critical life skill in the 21st century that can contribute to individual and families' wellbeing as well as to financial stability in our economies. Financial education is also an essential complement to consumer protection and financial inclusion in any economies' efforts to support economic growth. Taking these factors into account we adopt today the Policy Statement on Financial Literacy and Education (Annex). We welcome the endorsement of the OECD/INFE High-level Principles on National Strategies for Financial Education by G20 Leaders at their Summit in Los Cabos and welcome the OECD/INFE, the World Bank and ADB's cooperation with the Global Partnership for Financial Inclusion (GPFI). We also welcome the development of members' policies that integrate financial literacy, consumer protection and financial inclusion objectives. We support the development and implementation of member economies strategies for financial education and encourage them to take into consideration the methodologies and tools developed by the World Bank and the OECD/INFE.
- 9. We especially recognize the importance of financial education for the young and welcome the OECD/INFE Guidelines for Financial Education in Schools. We encourage their implementation in APEC economies, taking into account economy-wide, regional and local circumstances. We also encourage the APEC economies to consider the participation in the financial literacy measurement in the Programme for International Student Assessment (PISA).
- 10. We note the APEC-sponsored workshop organized in May by the Philippines and the United-States in Manila on incorporating financial inclusion objectives in electronic government-to-persons payments.
- 11. In view of high economic costs incurred by many APEC economies due to natural catastrophes in recent years, we reiterate the importance of strengthening our resilience against disasters. The development and adoption of coordinated disaster risk management (DRM) strategies are important in this regard. We look forward to the "Sendai Dialogue", a special event on mainstreaming DRM for sustainable growth, to be co-hosted by Japan and the World Bank in October. We recognize that integrated disaster risk financing policies are part of overall disaster response preparedness. In developing these policies, attention should be given to advance planning and preparation by financial authorities, including the maintenance of effective and resilient payment systems and, where appropriate, the introduction or expansion of risk sharing and risk transfer market products.
- 12. We note innovations introduced in disaster response policies and practices over the last years. In this regard we support the exchange of knowledge and best practices about such practices within the international financial institutions (IFIs) and look forward to the presentation next year of guidelines for financial authorities' responses to natural disasters developed in collaboration with the World Bank, the OECD, the ADB and other bodies, which will complement the work undertaken by the G20. We consider that such syntheses of best practices will assist our economies in designing and implementing

both comprehensive DRM strategies and specific policy measures tailored to specific country circumstances.

- 13. Treasury systems are an indispensable element of public financial management and we welcome the exchange of experience on this topic by our finance and treasury officials. Treasury systems' broad modernization is of high practical importance, and collaboration on this issue necessitates new levels of cooperation. We welcome voluntary bilateral and multilateral exchanges or co-operation on technical issues between finance and treasury authorities of APEC economies. These exchanges engender a constructive dialogue to identify common principles and effective mechanisms for treasury systems development and modernization.
- 14. We welcome intensive public-private collaboration in developing our region's financial systems. We support ABAC's proposal to explore the creation of an Asia-Pacific Financial Forum through a symposium in early 2013 and welcome the Australian Government's commitment to hold the event.
- 15. We encourage the public and private sectors to work closely together to further expand the Asia-Pacific Infrastructure Partnership Dialogues in 2013. We took note of the results of this year's Asia-Pacific Financial Inclusion Forum and welcome ABAC's continued work on APEC's financial inclusion agenda.
- 16. We note the technical work that is underway to gradually progress the development of an Asia Region Funds Passport (ARFP). Taking into account this progress and the different regulatory, economic and market conditions of economies in the region, as well as efforts by ASEAN to better integrate capital markets, we look forward to further development of the proposed model, governing arrangements and policies for a pilot ARFP.
- 17. We thank the Russian Federation for its 2012 Presidency and for hosting the successful Moscow meeting. We will meet again for our 20th meeting in Nusa Dua Bali, Indonesia, on September 20, 2013.

19th APEC FINANCE MINISTERS' MEETING

Moscow, Russia 30 August 2012

Policy Statement – APEC Ministers of Finance Financial Literacy and Education

We, the Finance Ministers of the APEC economies, recognise financial literacy to be an essential skill for everyone in the 21st century and an important component of any economy's efforts that will effectively support economic and financial stability, inclusive development and individual and families wellbeing. We thank the Russian APEC Presidency for raising this issues on APEC agenda and for promoting them globally through the Russian Financial Literacy and Education Trust Fund.

We recognize that ongoing social, economic and financial system developments and the growing complexity of financial products require enhancing financial literacy as they involve increased engagement of consumers with financial products and services and greater transfer of financial risks and responsibilities to individuals. These have resulted in an increased number of households that have difficulty in understanding the risks and obligations they assume and managing their financial arrangements. Important developments in financial systems that have a significant influence on people's behaviour include:

- Greater use of consumer credit, investment and insurance products that offer new opportunities but also lead to potentially higher risks.
- Reforms to ensure the sustainability of pension systems as the result of an aging population. These reforms require an increase in the responsibility of the members of the social insurance systems and greater financial literacy to understand their implications and how to best manage these changes.
- Increasing diversity and complexity of financial products with a growing access to them use of technologies such as the internet and mobile phone that allow a new and growing segment of consumers to access and potentially benefit from financial services and tools that could help them make better financial decisions. These products, however, may not be fully covered by existing financial consumer protection framework, making consumers with no prior experience in dealing with financial issues more likely to make mistakes and more vulnerable to potential abuse.

Most financial literacy surveys conducted worldwide and particularly in APEC economies, show that large segments of the population have insufficient knowledge to understand even basic financial products, underestimate their risks, and plan for the future and often do not make optimal decisions on managing their finances.

We are of the view that financial education supported by effective consumer protection cannot, by itself, prevent possible future problems, but it can lessen the risk of crises occurring by enabling individuals to effectively use financial products and services and to make sound choices to protect themselves and fruitfully participate in financial and economic activities. Such steps can also help in promopting recovery and economic growth in the wake of financial challenges, at the individual, local and economy-wide levels. Financial literacy has therefore become a life skill that is essential for every economy to foster safe and sound, efficient, transparent and inclusive financial systems.

For financial education initiatives to be effective and sustainable, they need to be appropriately integrated in a comprehensive economy-wide strategy. This will avoid duplication of efforts and ensure efficient use of resources. We also recognise that financial education efforts should be tailored to each economy's circumstances, priorities and needs.

We therefore welcome the development of such economy-wide strategies among APEC economies. We also recognize the importance of the OECD/INFE High-level Principles on National Strategies for Financial Education endorsed by G-20 Leaders at their Summit in Los Cabos, which can serve as a benchmark for these strategies.

In particular, we acknowledge the importance of evidence-based economy-wide strategies for financial education and support measures that would involve:

- the measurement of financial literacy at an economy-wide level to determine needs and gaps with respect to financial knowledge and capability in order to identify priority areas and target groups for the strategy to address;
- the mapping and evaluation of existing initiatives to establish what works;
- a clearly articulated financial education mandate for a leading public authority or body of authorities, and the involvement and co-operation of key stakeholders;
- a targeted and flexible roadmap that includes an overall vision with realistic, measurable and timebound objectives and action plans, the definition of relevant target audiences and policy priorities and; the roadmap will chart priority areas and also include an overall impact assessment and identify appropriate resources; and
- the design of efficient delivery mechanisms based on identified good practices and ongoing research that involves rigorous monitoring and evaluation of programmes.

We encourage the implementation of economy-wide strategies for financial education by APEC economies and the monitoring of related developments. We encourage that in the course of the implementation of economy-wide strategies and when assessing financial literacy and evaluating financial education programmes, APEC economies consider using the methodologies and tools developed by the World Bank and the OECD/INFE. We also encourage APEC economies to continue working with international financial institutions, as appropriate, in implementing financial education, financial inclusion and consumer rights protection programmes.

As one of the first priorities, we encourage the development of appropriate programmes to enhance the financial knowledge and skills of future generations through financial education in schools. We recognize that in the future young people will increasingly bear the burden of financial decisions and will require more financial skills than prior generations to cope with the complex financial environment in which they will live.

In this light, APEC Finance Ministers, recognize financial education in schools as a critically important part of education in the 21st century. We welcome the OECD/INFE Guidelines for Financial Education in Schools and encourage their use in APEC economies, taking into account economy-wide, regional and local circumstances. In particular, we recognize the importance of financial education for the young through the establishment of tailored and dedicated learning frameworks adapted to their needs and assessing and expanding approaches proven effective. Towards this end, we encourage the APEC economies to consider the participation in the Financial Literacy Measurement Programme for International Students Assessments (PISA) in 2015.

We recognize the importance of harnessing private sector resources and expertise in promoting economical, effective and sustainable delivery of financial education, to keep pace with the continuing evolution of financial services. We welcome ABAC's inputs on public-private sector collaboration to develop innovative models of financial education based on new modes of access, as well as effective policy frameworks and guidelines for voluntary, fair, transparent and unbiased private sector engagement in financial education.

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

APEC TELECOMMUNICATIONS AND INFORMATION MINISTERIAL MEETING

Saint Petersburg, Russia 8 August 2012

Saint Petersburg Declaration Building Confidence and Security in the Use of ICT to Promote Economic Growth and Prosperity

- 1. We, APEC Ministers responsible for the Telecommunications and Information Industry, gathered in St. Petersburg, Russia, from 7-8 August 2012 for a meeting with the theme "Building Confidence and Security in the Use of ICT to Promote Economic Growth and prosperity".
- 2. We welcome the 2011 APEC Economic Leaders' Declaration "Toward a Seamless Regional Economy", where the APEC Leaders affirmed that our region is now the vanguard for global growth, a status that we have achieved through steady commitment to the APEC mission of regional economic integration and to the Bogor Goals of free and open trade and investment.
- 3. We note that further liberalization of trade and investment activities in the Asia Pacific region and the strengthening of regional economic integration remain the key common goals of APEC towards achieving regional prosperity, stability and sustainable growth.
- 4. We welcome the APEC Economic Leaders' commitment to implement the APEC Cross Border Privacy Rules to reduce barriers to information flows and enhance consumer privacy, and promote interoperability across regional data privacy regimes. All stakeholders in the APEC region should cooperate to promote network integrity and resilience; consider existing and potential threats to information and communication technologies (ICT); and take measures to improve ICT security.
- 5. We reaffirm that widespread access and use of modern ICT, such as broadband infrastructure and applications, remain the crucial driver for further integration in the APEC region and are closely related to bridging the digital divide and the provision of broadband, which are imperative steps for businesses and consumers to establish relationships. This will lead to greater potential in commercial and economic activities as well as establishing reliable and efficient supply chains.
- 6. We appreciate the important progress made by the Telecommunications and Information Working Group (TEL) towards achieving the above-mentioned goals and objectives through its activities, including the sharing of regulatory frameworks and best practices, improving awareness and education on cyber security and cyber safety, submarine cable protection, security of the mobile environment and international mobile roaming issues. We encourage TEL's efforts to continue its work on emerging cyber security and safety issues.
- 7. We acknowledge that the development of the ubiquitous network society built on advances in ICT will provide social and economic benefits to the Asia-Pacific region. Concerted efforts from all stakeholders will contribute to the continued development of this society.
- 8. We acknowledge the importance of the continuing development of the Asia-Pacific Information Society (APIS) to facilitate the implementation of internationally harmonized goals in the field of social and economic development.
- 9. We reaffirm the necessity of multi-stakeholder cooperation to expand and strengthen the Asia-Pacific Information Infrastructure (APII) and to build confidence and security in the use of ICT. This confidence will help to encourage greater uptake of ICT, which will promote economic growth and prosperity in the region. We will facilitate further interaction among academic institutions, research centers and such companies, including cooperation in the field of enhancing human potential for the benefit of people in the APEC region.
- 10. We note the importance of the work of other relevant international fora and regional bodies, including the International Telecommunication Union (ITU), Asia-Pacific Telecommunity (APT) and Organisation for Economic Cooperation and Development (OECD) to the work of TEL. We also note

the need for TEL to consider the synergies and linkages of the work of these bodies with that of TEL. In this context we encourage member economies to recognize the importance and significance of the upcoming overall review of World Summit on the Information Society (WSIS) outcomes (WSIS+10), which will seek to identify emerging trends and a vision beyond 2015.

- 11. We acknowledge the increased contribution of the ICT industry toward ensuring human safety, food and energy security, as well as providing practical solutions for a broad spectrum of global challenges related to green growth and emergency situations, which are of special significance to our region.
- 12. We welcome the APEC TEL Chair's Report and commend TEL's efforts in implementing the APEC TEL Strategic Action Plan 2010-2015. Moving forward, we urge TEL to advance its work, focusing on the following areas:

Developing ICT to Promote New Growth

- 13. We acknowledge the efforts made by member economies to develop ICT infrastructure. We reaffirm the goal of achieving universal access to broadband by 2015, as stated in the Bangkok Declaration, 2008. We encourage member economies to work towards achieving affordable access to quality broadband in the APEC region by 2015.
- 14. We call upon TEL to continue its activities towards achieving access to the next generation of highspeed broadband networks and services by 2020, as stated in the 2010 Okinawa Declaration, to further enhance the growth of knowledge-based economies in the APEC region.
- 15. We note that the rapid introduction of broadband to unserved and underserved areas will be a key factor for bridging the digital divide, and in order to meet the goal in the region, greater efforts are essential to develop and use both fixed and mobile broadband infrastructure as well as its technologies.
- 16. Given the rapid growth of both fixed and mobile communication devices requiring unique Internet addresses in all member economies, we welcome TEL's continuous efforts to progress transition to IPv6, as expressed in the TEL IPv6 Guidelines. We encourage TEL to cooperate with all stakeholders to achieve this goal.
- 17. We acknowledge the efforts to promote and enhance cooperation in the field of ICT with a view to further enhancing the development and adoption of ICT in the APEC region. We recognize that increase of the access to e-Government, as well as other ICT applications, needs to be a priority.
- 18. We also recognize that ICT skills and training provide the foundation for human resource development and sustainable growth in ICT in the APEC region, and encourage new initiatives to improve ICT skills and to provide training programs.

Enhancing Socio-Economic Activities through the Use of ICT

- 19. We recognize the significance of ensuring full participation in the digital economy for people with special needs, and we encourage TEL to continue implementing and developing the strategies to make ICT more accessible to all.
- 20. We call on TEL to encourage economies to share best practices in ICT, including e-Government, e-Business, e-Health and other ICT applications, to help address economic, social, technical and other problems as we progress towards achieving the APEC goals. We encourage openness as well as new initiatives and projects in promoting ICT applications, with contributions of all stakeholders.
- 21. Recalling the Leaders' Declaration of 2007 on global environmental challenges, we note the importance of ICT for addressing global issues, including the scarcity of energy and other resources, and environmental degradation. We acknowledge the potential of ICT in improving energy efficiency and recommend that TEL continue its efforts to share ICT best practices to achieve a better environment.
- 22. We acknowledge that frequent natural disasters, such as typhoons, earthquakes and tsunamis, cause severe damage to member economies. ICT plays a vital role in early warning, relief, rescue and disaster mitigation as well as reconstruction efforts. We encourage the cooperation of member economies to improve disaster response and recovery through the development of ICT and promotion

of appropriate systems and technologies, including cloud computing and sensor networks. We welcome the initial steps taken by TEL to discuss a new paradigm for people rescue in cases of any disasters and emergencies. We support the goal of increasing human safety through the use of ICT.

Promoting Safe and Trusted ICT Environment

- 23. We promote the efforts of member economies to expand ICT literacy and help ensure that everyone has the skills, ability and access to benefit fully from the information economy.
- 24. We are aware of the growing dependence of our society on ICT, as well as possible serious social and economic consequences following the use of ICT for criminal and other malicious purposes. For economies to continue to enjoy the benefits of ICT use, practical cooperation is needed to ensure a safe and secure ICT environment, sharing best practices, information sharing, technical cooperation, training and education. Increasing users' trust in information and communication services will allow ICT to further contribute to sustainable growth in the APEC region.
- 25. We encourage member economies to recognize our shared responsibility in addressing ICT security issues and combating cybercrime. We reinforce the need for economies to continue to work together towards ensuring a trusted, secure and sustainable online environment in partnership with multiple stakeholders, including international organizations and the private sector. We support the TEL's efforts to increase cyber security collaboration and capacity building. We commend the work of TEL to build capacity to address cybercrime, foster cooperation among cyber-incident response teams, and effectively share information between member economies. We affirm the TEL's efforts to raise cyber security awareness and seek to strengthen these efforts through cooperative activities like APEC Cyber Security Awareness Day.
- 26. We believe it possible and necessary to be more active in promoting trusted electronic environments globally by encouraging secure cross-border flows of information, including electronic documents. This would provide for member economies to experience greater economic growth and prosperity. We also encourage TEL to explore future initiatives and projects that may assist member economies to meet these goals.
- 27. We reaffirm the importance of a trusted environment to allow greater interaction among governments, businesses and consumers, as well as between individuals.
- 28. We emphasize the need to protect consumers and therefore call upon all member economies to enhance mutual cooperation to increase protection of ICT and infrastructure services.
- 29. We acknowledge that vulnerable groups, especially children and young people are particularly susceptible to threats in an online environment. Therefore, we call upon each economy to implement, as a matter of priority, strategies to counteract these threats, including the promotion of cyber safety and cyber security education and awareness for children, young people and their parents with a view to encouraging appropriate online behavior. We also recommend that economies continue to cooperate to protect children online and that TEL collaborate with other relevant international organizations, particularly the OECD and acknowledge the efforts of the ITU and others in this area.

Promoting Regional Economic Integration

- 30. We acknowledge that, in line with the Bogor Goals, TEL continues to support open and free trade and investment in ICT. We support TEL's efforts in enhancing cooperation in the region through the exchange of information on policies to facilitate the development of free and open trade and investment in the APEC region. We encourage member economies to actively exchange knowledge and experience to promote competition and investments in the market.
- 31. We support continued efforts of member economies towards reducing international mobile roaming costs, which will provide benefits to consumers and businesses, as well as promote economic integration across the region.
- 32. We note that the implementation of the Mutual Recognition Arrangement for Conformity Assessment of Telecommunication Equipment (MRA-CA) and the Mutual Recognition Arrangement for Equivalence of Technical Requirements (MRA-ETR), amongst others, will contribute to increased trade in telecommunications equipment within the APEC region. We encourage member economies,

where feasible within their regulatory and policy framework, to implement both the MRA-CA and MRA-ETR.

33. We encourage economies to continue sharing experiences and best practices, in particular those relating to the use of ICT to improve regional economic cooperation in areas like healthcare, education, energy, environment, the control of emergency situations and government service delivery.

Strengthening Cooperation in the ICT Sector

- 34. We recognize that the digital divide in the APEC region remains a challenge for the society to reap the full benefits arising from ICT. We therefore encourage TEL to give priority to ensuring access to information through the development of infrastructure and promoting citizens capabilities for improved ICT usage.
- 35. We recommend that TEL continue its close cooperation with other APEC fora and increase coordination of activities relating to ICT. We also recommend that TEL collaborate with other international fora, such as the ITU, APT and OECD, as well as the technical and administrative bodies linked to the Internet, to take advantage of synergies and eliminate duplication of effort.

Moving Forward

- 36. We agree to present this Declaration to the 20th APEC Economic Leaders' Meeting and the 24th APEC Ministerial Meeting in Vladivostok, Russia, September 2012.
- 37. We request TEL to report on the implementation of this Declaration at the next APEC TELMIN.

SPECIAL TRANSPORTATION MINISTERIAL MEETING

Saint Petersburg, Russia 3 August 2012

St. Petersburg Ministerial Declaration Development of Integrated Supply Chains for Innovative Growth in the Asia-Pacific Region

- We, the Ministers Responsible for Transportation, met in St. Petersburg, Russian Federation, on August 3, 2012 to discuss steps to ensure the sustainability and efficiency of supply chain systems in the Asia-Pacific region.
- 2. We recognize that reliable supply chains are crucial for maintaining sustainable development and providing economic, energy, food and environmental security in the region and in the world.
- 3. We appreciate the decision of the Russian Federation to emphasize the issue of establishing reliable supply chains during its Chairmanship of APEC in 2012 and to hold a Special Meeting of APEC Transportation Ministers to discuss current challenges and potential areas of supply chain development.
- 4. We affirm the importance of high-level discussion to further liberalize transport services and to work toward simplified and transparent regulations between APEC members in an effort to support the efficient movement of cargo and passengers.
- 5. We acknowledge the ongoing activities of the APEC Transportation Working Group (TPTWG) to study and enhance supply chains, and its role in the implementation of the Supply Chain Connectivity Action Plan.
- 6. We reaffirm our commitment to support our Leaders' 2010 Declaration, which sets out a goal of a 10 percent increase in regional supply chain performance by 2015.
- 7. In this regard, in order to support trade volume growth in our region, we agree to jointly explore, with industry and relevant stakeholders, opportunities for the diversification of supply chain routes across all modes, the improvement of supply chain connectivity, and the establishment of a logistics information service network in order to yield significant economic benefits in terms of cutting transportation and transaction costs, increasing supply chain efficiency and security, creating, thus, better transit environment for global trade
- 8. We instruct the TPTWG to undertake a comparison study of major existing and potential alternative transportation supply chain routes in order to support both public and private sector in finding, developing and using the most efficient supply chains in order to make transportation faster, securer and greener.
- 9. We support further work on the simplification and harmonization of trade-related procedures between APEC economies in cooperation with relevant sub-fora, notably the Sub-Committee on Customs Procedures (SCCP), which will help to enhance the productivity of supply chains.
- 10. We share a common understanding that in order to ensure connectivity and visibility, supply chains should be considered as a single modern network that is equipped with intelligent technologies such as Intelligent Transportation Systems (ITS), Global Navigation Satellite Systems (GNSS)-based monitoring systems and automated transport management logistic services that protect the interests of both producers and consumers; enhance the quality and speed of delivery; and increase transparency and the ability to better control and track the movement of dangerous goods and hazardous materials.

- 11. We instruct the TPTWG to hold consultations with industry and other stakeholders on the issue of the technological modernization of supply chains, primarily of their weakest links, thus strengthening coordination among supply chain stakeholders in order to use existing infrastructure safer and more effectively.
- 12. We support the creation of a framework to define the important properties of a resilient supply chain, which will improve our understanding of the processes and help strengthen transportation infrastructure. In this regard, we reaffirm our support for TPTWG work to operationalize the APEC Trade Recovery Program by, *inter alia*, developing an effective communications mechanism for information critical to governments and the private sector during periods when transport systems are constrained.
- 13. We support the idea of identifying best practices for early warning of emergencies to increase the safety of cross-border transportation.

We reaffirm our previous commitments undertaken during the 7th Transportation Ministerial Meeting in San Francisco, California, USA, and agree to meet again in 2013 to discuss the outcomes of our work.

APEC SMALL AND MEDIUM ENTERPRISES MINISTERIAL MEETING

Saint-Petersburg, Russia 3 August 2012

Joint Ministerial Statement Promoting SME Cooperation for Innovative Growth in the APEC Region

Introduction

- 1. We, the APEC Ministers and representatives responsible for Small and Medium Enterprises (SMEs), met in Saint-Petersburg, Russia on August 3, 2012 under the Chairmanship of Mr. Vladimir Simonenko, Deputy Minister, Ministry for Economic Development of the Russian Federation. The Russian Senior Official for APEC, the Executive Director of the APEC Secretariat, the APEC Business Advisory Council (ABAC) also attended.
- 2. We appreciate the active participation of SMEs and especially young entrepreneurs from across the APEC region at the meetings held from 1-2 August 2012 in advance of our Ministerial Plenary Session. We agree that incorporating the views of small business owners, managers and young entrepreneurs enriched our discussion of the main theme and sub-themes for the SME Ministerial meeting and are reflected in this Ministerial Statement.
- 3. We agree that advancing SME cooperation for innovative growth can be enhanced through promoting start-ups, considering it is the most important stage of entrepreneurship. The development of start-ups in the APEC region facilitates job creation and has the potential to increase international trade that benefits APEC member economies.

New SMEWG Strategic Plan

- 4. We recognize member economies' contribution and dedication towards implementing the SMEWG Strategic Plan 2009-2012. We endorse the new four-year SMEWG Strategic Plan 2013-2016 which will provide a roadmap to address critical issues and concerns pertaining to the growth of SMEs and micro enterprises (MEs) in the APEC region.
- 5. We endorse the following priority areas to guide the work of the SMEWG for 2013-2016:
 - i. Building Management Capability, Entrepreneurship and Innovation;
 - ii. Financing; and
 - iii. Business Environment, Market Access and Internationalization.
- 6. We agree that SMEWG projects should be linked to advancing at least one of the priorities identified in the Strategic Plan.
- 7. We recognize the specific challenges faced by youth, women and minority-led SMEs and MEs and fully support their inclusion as the cross-cutting theme within the priorities of the Strategic Plan.

Assisting SMEs and MEs in Internationalization and Supporting Export-Oriented SMEs and MEs

- 8. We recognize that internationalization is an integral part of sustainable growth of SMEs and MEs. The development of trade relations between SMEs in the Asia-Pacific region is a driving force towards a common goal of integration and development of the economic potential of APEC. Furthermore we acknowledge that with the interconnectedness of the Asia-Pacific region there is a need to foster disaster risk reduction and resilience to protect SMEs from shocks and to preserve economic growth.
- 9. We reaffirm the importance of addressing trade and investment barriers and improving the business environment for SMEs, including youth, women entrepreneurs, and MEs in the APEC region, and

endorse the results and efforts made by SMEWG on financing, open and transparent business environment and high transportation and related costs, recognizing the importance of addressing trade barriers identified in Big Sky, Montana at the 18th Ministerial Meeting. We instructed officials to continue efforts to reduce such barriers and to improve business environment, and also instructed officials to continue working, in conjunction with the APEC Committee on Trade and Investment (CTI), in the field of the development of global supply chains, preparing SMEs and MEs for export readiness taking to account the undeniable importance of this topic for all APEC economies and to pay a special attention to young entrepreneurs, women entrepreneurs and minority-owned SMEs and MEs in the APEC region.

- 10. We recognize the importance of the Russian initiative to the creation of a common information resource for SMEs which will promote companies' inclusion in global supply chains and will ultimately foster innovation development in the APEC region.
- 11. We agree that enhancing SMEs' resilience to natural disasters is essential to establishing reliable supply chains in the APEC region. We support Chinese Taipei's multi-year project in collaboration with EPWG and other non-APEC stakeholders on promoting Business Continuity Plans for SMEs.
- 12. We endorse the adoption of the "Guideline on Promoting SME Business Continuity Plans to Strengthen Reliability of Supply Chains", which was formulated by an Expert Group in Chinese Taipei. We urge APEC fora and governments to cooperate on assisting SMEs to develop disaster preemptive mechanisms in accordance with the Guideline.
- 13. We recognize the importance of cross-fora collaboration between the SMEWG and the other APEC Forums, Groups and Committees on cross-cutting issues. We encourage member economies to promote and develop more cross-fora standards and multi-year projects. The two multi-year projects of the SMEWG currently being undertaken by the United States on business ethics and Chinese Taipei on disaster resilience should continue to work closely with other APEC fora, including ACT, HWG, LSIF, EPWG, as well as ABAC and other non-APEC stakeholders.
- 14. We agree that corruption imposes a significant market access barrier and high costs for SMEs. To address this challenge, we endorsed principles for voluntary codes of business ethics for the medical device, biopharmaceutical, and construction/engineering sectors. We recognize the importance of working to raise awareness of these principles. We welcome progress in implementing these principles, through the development of codes of ethics by industry associations and companies and capacity building efforts. We call on other relevant stakeholders, such as professional organizations, to implement voluntary codes consistent with these principles. We urge industry regulators, anti-corruption enforcement authorities, and the relevant entities to encourage, advance, and facilitate acceptance of voluntary industry codes and ethical collaborations consistent with these codes.
- 15. We agree that effective protection of intellectual property rights (IPRs) and simultaneous reduction of trade and investment barriers in this field are among the key issues for further SMEs development in the APEC region. We welcome Russia's proposal to organize a joint meeting of IPEG and SMEWG so as to facilitate further collaboration between the fora and to work further on the cross-cutting issues, including the formation of an accessible system of receipt of protection documents for the intellectual property items for SMEs, and call for a further increase in the number of inter-group events, basied on the successful experience of CTI, ABAC and other fora.
- 16. Noting women's involvement in SMEs, we reaffirm our support for collaboration between SMEWG and PPWE. We fully support the outcomes of the APEC Women and the Economy Forum (APEC WEF) held on June 28-30 in Saint-Petersburg and the adoption of the APEC WEF Statement aimed at the enhancement of the role of women in innovative economies, facilitation of their business opportunities and promotion of investment in human capital.

Fostering Innovative SMEs and MEs

- 17. Recognizing the intensification of innovation-based economic cooperation as one of the leading factors of economic growth and prosperity of our economies, we highlight the importance of expanding both SMEs' and MEs' adoption and development of innovative practices in order to promote effective, non-discriminatory and market-driven innovation environment. We encourage member economies to consider taking the following steps as appropriate to promote innovative SMEs and facilitate the involvement of SMEs and MEs in innovative economies:
 - reduce uncertainty and risks associated with financing innovative SMEs;
 - reduce the asymmetry of information between entrepreneurs and providers of finance through by increasing the managerial and technical expertise of intermediaries whose role is to assist innovative SMEs;
 - promote closer proximity between suppliers of funds and those who require finance, particularly for small-scale investment by means of regional and local equity programmes, business angel networks and business incubators;
 - promote availability of risk capital to innovative SMEs, for example by using public sector funds to leverage private sector financing in order to reduce the financing gap;
 - review regulations with a view to reducing, easing or eliminating restrictions and barriers to investment in risk capital;
 - facilitate cross-border transfer of institutional infrastructure and expertise and ease barriers to flows of foreign venture capital funds;
 - encourage, in conjunction with business and accounting bodies, small business to recognize, measure, and report intangible assets (ICT skills, organization, software and networks, intellectual property rights) so that new and small firm assets can be managed more effectively and more reliably valued by capital markets and investors.
- 18. We welcome work that promotes the exchange of best practices for instruments that support innovative SMEs and MEs and instruct officials to develop capacity-building activities to deliver effective economic and technical cooperation. We support the 2011-2012 APEC Small & Medium Enterprises Technology Conference Chinese multi-year project as an ideal platform to establish international images, publicize product and technical information, to promote trade, economic, information and technical exchanges and cooperation, to improve and optimize industrial structures and to enhance innovative ability and international competitiveness among SMEs in APEC.
- 19. We are also encouraged by the performance of the Green Initiative aimed at promoting SME innovation in green growth sectors by APEC economies sharing best practices and policies of SME green innovations and look forward to participation and support of APEC member economies.
- 20. We reaffirm the crucial role of SMEs and MEs as an integral part of economic growth and as a source of forward-thinking ideas. We instruct officials to pay special attention to innovative SMEs and MEs in the work of SMEWG in the near future (2013-2016).

Supporting Start-Ups and Young Entrepreneurs

- 21. We recognize the importance of the inclusion of young entrepreneurs in economic activities and, in this regard, support the implementation of the Young Entrepreneurs Network (YEN) and welcome the first YEN meeting that was held on August 2, 2012 in St. Petersburg, Russia. We welcome the inputs and sharing best practices on promoting start-ups and young entrepreneurship from Korea; Chinese Taipei; Hong Kong, China; Mexico; Russia; and Indonesia. These enriched the development of young entrepreneurs in the APEC region.
- 22. We endorse the results of the first meeting of the YEN and agree with the format of this event on an ongoing basis as a part of the SME Working Group.

- 23. We endorse the main goals of YEN, which were announced:
 - Providing young entrepreneurs with increased access to knowledge, technology, networking, and efficient instruments for the realization of their business projects;
 - Creating of an open site for interaction and experience exchange between representatives of young entrepreneurs, public authorities of APEC economies and successful business structures; and
 - Promoting of the arrangement of conditions for continuous growth and development of young entrepreneurs' businesses, development of a broad understanding of business instruments and formation of a positive and modern business world-view.
- 24. We welcome events that provide opportunities to exchange experiences in business development as they are essential to the growth of new businesses and SMEs including the APEC Global "One Village One Product" Seminar (Japan), the APEC Start-up Conference (Korea and the USA), as well as the Summit of Young Entrepreneurs (China). We endorse the APEC Start-up Accelerator Initiative to assist and promote start-up development in the APEC region, and encourage further collaboration between member economies to implement the initiative.

APEC 2013 SME Meetings

- 25. We thank Indonesia for hosting the 20th APEC SME Ministerial and related meetings in Bali on 7 September 2013 with the main theme of "Enhancing SME Global Competitiveness" and the three sub-themes:
 - i. Entrepreneurship Development for SMEs;
 - ii. Increasing Access to Finance for SMEs; and
 - iii. Empowering SMEs to Expand to International Market.

Toward APEC Russia 2012 Economic Leaders' Meeting in Vladivostok

26. We agree to present this Joint Ministerial Statement as the contribution to the APEC Economic Leaders' Meeting in September 2012 in Vladivostok, Russia.

Khabarovsk, Russia 24 July 2012

Khabarovsk Declaration Tourism Facilitation for a Robust Economy of the Asia-Pacific

- We, the APEC Tourism Ministers and our senior representatives from Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; Papua New Guinea, Peru; Republic of the Philippines; Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America, and Viet Nam, met in our 7th APEC Tourism Ministerial Meeting (TMM) in Khabarovsk, Russian Federation on 24 July 2012. The meeting was chaired by H.E. Mr. Alexander Radkov, Head of the Federal Agency for Tourism, Ministry of Culture of the Russian Federation.¹
- 2. We gather under the theme of APEC Russia 2012 "Integrate to Grow, Innovate to Prosper", which encouraged members to take concrete measures to boost trade and investment in the Asia-Pacific, and to inclusively and comprehensively respond to global economic and financial challenges.
- 3. We built our deliberations on the TMM theme of "Tourism Facilitation for a Robust Economy of the Asia-Pacific", to strengthen stakeholder understanding of the economic benefits of facilitating and securing cross-border tourist flows. Tourism provides direct and indirect channels for sourcing economic growth through cross-border trade and investment, and supports supply chains in services and related employment. In this regard, we seek the consideration of our Leaders to include in their Declaration of Vladivostok, a statement on the importance of travel and tourism as a vehicle for job creation, economic growth, and development. And we commit to work to facilitate travel in order to increase tourism flows.²
- 4. We commend the Tourism Working Group (TWG) efforts to develop and adopt an APEC Tourism Strategic Plan (ATSP) as the operational framework for our future work in 2012-2015. We note that the TWG actively engages member economies in the implementation of the ATSP through sharing experiences and "lessons learnt" along four major goals: (1) promote better understanding and recognition of tourism as an engine for growth and prosperity in the APEC region; (2) ensure inclusive growth in the travel and tourism sector by encouraging socially and culturally responsible tourism; (3) promote and enhance sustainability of businesses and destinations by providing an enabling environment based on sound principles of sustainable tourism; and (4) promote efficiency and regional economic integration through policy alignment and structural reform. We encourage members to further implement the ATSP with the view to generating relevant policy advice that will enhance domestic tourism policies and programmes.
- 5. We note with concern the implementation of aviation-related taxes and ask the TWG to work urgently with the Transport Working Group to assess the implications for travel and tourism of these new aviation-related taxes.
- 6. We recognize that safety is a part of the tourist product and signifies a higher quality of tourist service. The tourism potential of a destination may be fully realized by providing a safe environment where threats to tourists' life, health or personal integrity are effectively addressed. However, foreign tourists may be particularly vulnerable due to barriers to communications, lack of accurate information, and lack of knowledge of local customs and laws. In providing member economies with best-practice

¹ List of Attendance appear as Annex A

² Suggested paragraph wording appears as Annex B

information, useful in designing measures to better protect tourists home and abroad, we endorsed the APEC Guidelines on Ensuring Tourist Safety. We encourage members to consider practical and focused action to implement the provisions of the Guidelines³.

- 7. We welcomed the launch of the APEC Travel Facilitation Initiative (TFI) in which tourism officials and the private sector are direct stakeholders. The TFI, with the objective of expediting the movement of travellers across the Asia-Pacific region, enabling more efficient, more secure, and less stressful travel, is expected to provide a valuable contribution to establishing the free flow of tourists within the APEC region. We instruct the TWG to support the implementation of the TFI, and to increase its participation in TFI components.
- 8. We recognize the role and benefits of air transport and reaffirm the importance of assessing air connectivity in the Asia-Pacific, the liberalisation of air transport services and the measurement of its subsequent impact on tourist flows in the region. Building on the outcome of the Destination APEC 2020: A Conference on Enhancing Tourism and Air Transport Connectivity in the Asia-Pacific Region, held in the Philippines, February 2012, we encourage the TWG to share best practices and provide tools to assist Member economies implement their international air transport policies with a view of supporting the development of their respective tourism sectors. We expect further studies on the competition policies to promote sustainable air connectivity across APEC economies, and the entry of more local and foreign airlines. To this end, we endorse a closer engagement of the TWG with TPTWG and IATA.
- 9. We recognize the work done by the Tourism Ministers of the countries of the G20, led by Mexico, and encourage the APEC economies to implement travel facilitation processes as a conduit for job creation and economic growth. We instruct the Tourism Working Group to further work to promote transparent and effective travel and visa facilitation in order to increase travel and tourism and work on preparing a study of the impact of visa facilitation on job creation for the APEC region.
- 10. We recognize the role of the tourism officials and international organizations led by the Republic of Korea in lobbying for the recognition of tourism as a significant contributor to the economic, social and environmental dimensions of sustainable development in the official outcome of Rio+20 (the UN Conference on Sustainable Development) on 20-22 June 2012, Rio de Janeiro, Brazil. We therefore encourage APEC economies to further implement sustainable tourism activities and promote investment in sustainable tourism including eco-tourism and cultural tourism and relevant capacity-building on environmental awareness, while establishing appropriate guidelines and regulations for supporting sustainable tourism.
- 11. We acknowledge the report of the TWG Lead Shepherd on the TWG activities since the last TMM in 2010. We commend TWG's efforts to step up cooperation and learning among APEC members, increase awareness of tourism and its role as an economic driver within the APEC region, and to provide guidance to policy developers and decision makers in APEC on issues relating to and impacting on tourism. We support the initiatives that provide greater exposure of TWG to APEC officials and the general public, including through social media channels.
- 12. We recognize the importance of APEC tourism projects developed and implemented by member economies, which encourage the sustainable economic growth of tourism in the Asia-Pacific region, and build the capacity of the developing member economies. We encourage a greater number of APEC member economies to participate in the formulation, presentation, and implementation of new projects following ASTP.

³ APEC Guidelines on Ensuring Tourist Safety appears as Annex C

- 13. We encourage TWG to step up cooperation with other international fora to create synergies in pursuing the interests of the tourism industry. We therefore welcome the proposed OECD APEC TWG forum on tourism to be organized in the Republic of Korea in September 2012.
- 14. We look forward to the next Ministerial Meeting to be held in 2014.
- 15. We express our appreciation for the participation of UNWTO, IATA, WTTC, PATA, AICST and OECD as guests to the 7th TMM and stress the importance of pursuing closer collaboration with them in the future. We also deeply appreciate the effort and contribution of the APEC Secretariat and the Lead Shepherd for the success of the meeting. We heartily thank the Russian Federation as the host economy for the fruitful and productive Working Group and Ministerial Meetings.

Khabarovsk, Russia 24 July 2012

Annex A List of Attendance

1.	Chair of the 7 th TMM	Mr. Alexander Radkov Head of the Federal Agency of Tourism, Russian Federation
2.	Khabarovsk Government	Mr. Viacheslav Shport Governor of Khabarovsk Region
3.	Russian APEC Senior Official	Mr. Gennady Ovechko Ambassador-at-Large, Ministry of Foreign Affairs
4.	Australia	Ms. Janet Madden Head of Tourism Division, Department of Resources, Energy and Tourism
5.	Brunei Darussalam	Mr. Hj Haini Hj Hashim Ambassador Extra Ordinary and Plenipotentiary to the Russian Federation
6.	Canada	Mr. Andeas Weichert Minister Counselor for Commercial and Economic Affairs, Canadian Embassy in Moscow
7.	Chile	Mr. Daniel Pardo National Tourism Service Director
8.	China	Mr. Qiwei Shao Chairman of China National Tourism Administration
9.	Hong Kong, China	Mr. Wai Hung Yung Commissioner for Tourism
10.	Indonesia	Mr. Sapta Nirwandar Vice Minister for Tourism and Creative Economy
11.	Japan	Mr. Tadashi Shimura Vice Commissioner
12.	Korea	Mr. Youngjin Kwak Vice Minister for Culture, Sport, and Tourism
13.	Malaysia	Dato' Sri Dr. Ng Yen YenMinister of Tourism, Malaysia
14.	Mexico	Ms. Gloria Guevara Manzo Minister for Tourism
15.	Papua New Guinea	Mr. Christopher Mero Ambassador, Embassy of the Papua New Guinea in Beijing
16.	Peru	Ms. Jessica Soto National Director for Tourism Development
17.	The Philippines	Mr. Daniel Garcia CorpuzUndersecretary, Tourism Planning and Promotions Department of Tourism
18.	Russia	Mr. Valery Korovkin Head of International Department
19.	Singapore	Mr. Siew Keong Soo Regional Director (North Asia), Singapore Tourism Board

20.	Chinese Taipei	Mr. Chi Kuo Mao Minister
21.	Thailand	Mr. Chumpol Silapa-archa Deputy Prime Minister Minister fo Tourism and Sports
22.	United States	Ms. Sylvia Curran Consul-General, Vladivostok
23.	Viet Nam	Mr. Anh Tuan Ho Deputy Minister for Culture
24.	APEC Secretariat	Mr. Muhammad Noor Yacob Executive Director
	Invited Guests	
25.	United Nations World Tourism Organization	Mr. Zoltan Somogyi Executive Director
26.	OECD	Mr. Alain Duperays Head of Tourism Committee
27.	International Air Transport Association	Mr. Vinoop Goel Assistant Director
28.	Pacific Asia Travel Association (PATA)	Mr. John Mariam Koldowski Special Advisor Strategic Intelligence Center
29.	APEC International Centre for Sustainable Tourism	Mr. Ian Kean Executive Director

Khabarovsk, Russia 24 July 2012

Annex B Input to the APEC 2012 Economic Leaders' Declaration from APEC Tourism Ministers

We recognize the significance of travel and tourism as a vehicle for job creation, economic growth and development in the Asia-Pacific. Tourism represents a special case of cross border supply chains where a variety of services are supplied to meet the requirements of increasing international tourist flows. Supported by adequate infrastructure, this leads to creating new growth and employment opportunities throughout the whole supply chain. We therefore commend the efforts by APEC Tourism and Transport Ministers to encourage facilitation of international travel, to assess the liberalization of air transportation services and to improve safety and security of tourist products.

Khabarovsk, Russia 24 July 2012

Annex C APEC Guidelines on Ensuring Tourist Safety

Introduction & Rationale

Tourism is an important economic activity that provides sustained contribution to the economic growth in the APEC region. According to the World Travel & Tourism Council, the direct contribution of travel and tourism to the combined GDP of APEC members amounted to 2.7 percent in 2011 while the total contribution was estimated at 8.3 percent, if the indirect and induced impacts are factored into the calculations. The industry directly supported 43.7 million jobs (3.1 percent of total employment) in 2011, but accounting for the jobs indirectly supported will yield the estimate of the total employment generation of 120.3 million jobs (8.4 percent of total employment).

Tourism provides direct and indirect channels for sourcing economic growth through cross-border trade and investment. In this sense, the industry is an important driver towards the Bogor goals, APEC core mission of integrating Asia Pacific economies. Tourism in the APEC region accounts for a quarter of all international travel and a third of the total international travel-related expenditure. Three quarters of outbound travel in APEC are intra-regional. The key component of the direct contribution of tourism to the economic output is visitor exports, which generated 4.3 percent of total exports from APEC economies in 2011.

Retaining the role of tourism as a major engine to economic growth and integration requires a variety of enabling measures for the infrastructure development, increased private sector investment, new education and employment opportunities, coupled with removing barriers to tourist flows. Not less importantly, ensuring that the tourism potential is fully tapped requires establishing a safe environment for all tourists on a non-discriminating basis. Away from their home economies and exposed to increased threats to their life, health, or personal integrity, foreign tourists may be a particularly vulnerable group as a result of disrupted communications and lack of knowledge of local customs and laws.

Safety is an essential property of the tourist product and, in this sense, is intertwined with the quality of tourist service. Ensured safety signifies higher quality of tourist service, but it is the commitment to the high quality standards at each point of the complex tourism service supply chain that may ultimately guarantee the intended safety.

APEC region and the tourism industry in particular continue to be prone to emergencies caused by natural, man-made, or other hazards. These challenges need to be managed adequately, with national emergency structures and processes designed with clear understanding of the special needs and concerns of the travel and tourism sector. The following Guidelines are offered to the tourist administrations and other relevant authorities of APEC member economies to stress the importance of safety and risk management, assist in identifying best practices and encourage closer cooperation. The Guidelines are indicative references that may be useful to members in sharing or adopting the best practices and design their domestic measures to better protect tourists at home and abroad.

Context

APEC members are cognizant of the existing international instruments pursuing safety and respect of tourists' interest and rights. Subject to their individual circumstances, the tourist administrations of member economies should continue to work with the respective tourist associations and tour operators to enhance

their understanding of these instruments, in particular, the UNWTO Global Code of Ethics for Tourism (Articles 1, 6, and 8).

Subject to their multilateral commitments, APEC members should also contribute to the ongoing drafting of a UNWTO Convention on the protection of tourists and tourism service providers with a view of producing an internationally recognised document containing robust provisions and recommendations.

APEC Tourism Working Group should continue to explore the utility of engagement with other APEC fora, including Counter-Terrorism Task Force, Emergency Preparedness Working Group, and Health Working Group, on issues pertaining to safety of tourists. Member economies may wish to take into consideration the existing security/safety frameworks developed by those APEC sub-fora, e.g., APEC Guidelines on Functioning Economies in Times of Pandemic (2007) or APEC Consolidated Counter-Terrorism and Secure Trade Strategy (2011).

While a number of strategies and frameworks to ensure safe travel and tourism were devised at the multilateral level and within APEC, there is room for more targeted action by APEC economies as they strive to establish an economically integrated, robust, and secure community in the Asia Pacific.

Action items for the APEC economies

1. Pre-travel arrangements

A variety of risk management systems are in place in APEC economies which may have proved their efficiency in providing assistance to tourists in time of emergencies.

- Member economies should encourage risk assessment and management by the private sector before the travel commences through comprehensive insurance schemes and financial guarantees of the travel organisers. In the event of emergency or non-performance of a tourist service provider (including travel organiser insolvency), the travel organiser, in cooperation with the relevant authorities of the tourists' economy of origin and the host economy, chould be therefore able to provide assistance which will cover essential transportation and repatriation services, accommodation and meals, medical treatment, legal services, and rescue operations in case of terrorist attacks or natural disasters.
- National tourist administrations should compile and exchange best practices of establishing appropriate regulations ensuring comprehensive protection of tourists .through which may include insurance schemes with the minimised impact on the price competitiveness of tourist product.

2. Travel advisories

Providing timely and verified information on risks and security threats to tourists is essential to building a systemic approach towards tourists safety. Travel advisories typically offer information about safety and security issues, and practical tips on health, local laws, local customs, as well as entry and exit requirements.

- APEC members are encouraged to maintain a transparent and balanced mechanism for generating travel advisories which to the highest extent possible should conform to the UNWTO Guidelines in Travel Advisories (2005) and Recommendations on the Use of Georeferences, Date and Time in Travel Advice and Event Information (2011).
- Travel advisories should be accurate and avoid ambiguous language, bias, political, and commercial considerations. Information contained in travel advisories should be published on a central, easy-to-use, and widely known website, where these would be regularly updated. Travelers should be encouraged to consult the advisories prior to their departure.
- Public announcements of threats and risks in travel advisories should, whenever possible, be specific about the geographical location of the problems and include maps and indications of distance. Online mapping of all travel risks and threats allowing for feedback from tourists is particularly useful.
- It is a good practice to grade travel advisories across various clearly defined levels. A reasonable grading scheme could include concise wording which contains clear advice, e.g., "Exercise normal safety precautions," "Exercise a high degree of caution," "Reconsider your need to travel," or "Do not travel".

• Member economies should consider making the travel advisories a part of a larger system of interagency coordination and communication with the tourism business community.

3. Identifying and locating tourists in times of emergency

Ability to identify and locate tourists in times of emergency is critical to providing them with the necessary assistance in a timely fashion.

- In order to facilitate the identification of tourists in emergency areas, relevant authorities in APEC economies should consider putting in place administrative arrangements to be able to get quick access to the data on tourists from the tour operators, without compromising the data privacy.
- More importantly, with the advantage of increased information technology sophistication and access to Internet, social media, and various means of communication, APEC members should consider developing online travel registration tools for collecting data on outbound tourists (Smart Traveller programs). Travel registration should be voluntary and available on a widely known and well positioned website preferably linked to the travel advisories service. Relevant authorities should ensure the privacy of the data which could be used to contact and locate the registered tourist in case of emergency.
- APEC economies are encouraged to take practical steps to exchange best practices/models for establishing online registered travel services.

4. Government communications and interagency coordination

Tourist product involves a complex chain of service providers, where each provider should be responsible for safety/quality. But a key, coordinating role in ensuring safety can be performed by the governments (relevant agencies) and tourism industry associations.

- APEC members should work towards maintaining efficient communication at various levels:
 - (a) interagency coordination within economy, involving ministries of foreign affairs and tourism, enforcement and emergency management agencies, tourism business associations;
 - (b) coordination of relevant agencies between APEC economies; and
 - (c) communication of relevant agencies or local jurisdictions with the tourists in emergencies.
- APEC economies should explore closer cooperation among their relevant agencies to enhance the information exchange on security issues pertaining to tourism.

5. Regulation of service providers

Transport services

- Relevant regulatory authorities should exercise oversight of transportation service providers so their operation is properly licensed and vehicles and services meet essential safety standards. An indicative list of these standards may comprise:
 - (a) compulsory use of seat belts;
 - (b) availability of space navigation equipment (GPS or other);
 - (c) driving instructions with strong language on speed and driving time limitations;
 - (d) compulsory requirement for a second driver in case of long distance journeys;
 - (e) restriction on travel at night time, etc.

Leisure/recreational services

• Relevant regulatory authorities should pay particular attention to ensuring compliance of service providers with the safety requirements at swimming, diving, water skiing, and similar facilities. Such recreational facilities where tourists may be exposed to higher-than-average hazard should be fully prepared to provide for the safety of tourists. Tourist guide certification authorities or relevant industry associations should apply strict criteria for professional training and skills of guides if the travel takes place in the areas of heightened risk to life and health of tourists.

6. Insolvencies and dispute settlement

Member economies should work with tourist industry players through reviewing regulations, enforcement or strengthened commitments of the tourist business associations to ensure that in case of insolvency of the travel organizer the tourists are not subject to penalties, threat to personal integrity or integrity of their

belongings or victimised in any way. All disputes arising from insolvency of the travel organizer should be settled between businesses engaged in providing tourist product with the mediation of the relevant government agencies where appropriate

7. Enforcement

- In case of threat or damage to health or personal integrity, foreign tourists must be able to seek protection from the host economy's enforcement agencies or indemnity through the host economy's courts.
- Given the significant economic contribution of tourism, APEC economies should consider establishing special units within their enforcement agencies to deal with crimes against tourists at the most popular tourist destinations.
- Host economy's enforcement agency should be open to sharing the necessary information with the enforcement agency of the tourists' economy of origin.

Note on implementing the Guidelines

Russia suggests APEC economies consider practical and focused action to implement various provisions of the Guidelines. For initial discussion, Russia has the following considerations:

- 1. To implement Guideline 3, "Identifying and locating tourists in time of emergencies," Russia suggests the exchange of best practices/models for establishing online registered travel services (Smart Traveller Programs) may take the form of an APEC capacity building project. Members where voluntary travel registration services are operational may wish to share their experiences with other APEC economies. The outcome of the project may facilitate the uptake of this best practice by other economies.
- 2. To implement Guideline 4, "Government communications and inter-agency coordination," Russia urges the members to explore the feasibility of establishing an APEC network of emergency contacts for tourism. This will probably require designating national contact points in the national tourism administrations who may be responsible for:
 - verifying and circulating early warning information on any kind of emergencies which may affect both inbound and outbound tourists;
 - ensuring the accuracy and timeliness of travel advisories;
 - maintaining online communication channel in case of emergencies and assisting intra- and interagency communications;
 - address any other issues pertaining to information on tourist safety and security.

The contact points within this network may be expected to maintain close coordination with the respective tourist business associations.

APEC MEETING OF MINISTERS RESPONSIBLE FOR THE ENVIRONMENT

Khabarovsk, Russia 16-18 July 2012

Statement

We, the APEC Ministers and senior officials responsible for the environment, meeting in Khabarovsk, the Russian Federation, on July 16-18, 2012, shared the conviction that environmental protection and the conservation and sustainable use of natural resources, ecosystems and biodiversity are essential foundations for achieving sustainable economic and social results for the APEC region.

We welcome the participation in the meeting of the representative of the United Nations Environment Programme (UNEP).

The efforts of the international communities on the global environmental issues have been helpful in highlighting the need to step up efforts to cooperate and collaborate with each other at both the regional and global levels.

However, the environmental situation has not significantly improved over the last decades; with the extinction of many plant and animal species, deforestation and forest degradation, depletion of natural resources, pollution of the oceans and the atmosphere, mainly due to expansion of human activities and unsustainable consumption and production patterns. Additionally there are new environmental challenges which need to be addressed.

We in the APEC region recognize the importance of preserving the natural ecosystems that help protect us from natural disasters and the attendant human suffering and economic loss.

We underline that further efforts are needed to conserve nature, sustainably use natural resources and protect the environment, as one of the pillars for sustainable development.

We welcome the outcome of the United Nations Conference on Sustainable Development (Rio+20), held in Rio de Janeiro, Brazil on 20-22 June, 2012, and we resolve to act on the commitments made at Rio, in our respective economies and through our cooperation in the framework of APEC.

Recognizing the complex nature of sustainable development in the region, we emphasize the importance of an inter-disciplinary approach to addressing this task, and therefore, we express our appreciation for the environmentally-oriented work carried out by other APEC fora and ministerial meetings.

We have focused our efforts and expressed a variety of views on the following five areas:

1. Conservation of biological diversity

Serious efforts by individual economies, as well as at regional and international levels, are being made to conserve and sustainably use the biological diversity of the planet. However, we recognize the loss of biodiversity and degradation of ecosystems, which highlights the need for urgent and decisive measures to conserve biodiversity and build ecosystem resilience.

Realizing the importance of biodiversity, we express our support for the objectives of the Convention on Biological Diversity (CBD), and implementation of the Strategic Plan for Biodiversity 2011-2020 adopted in 2010 and achievement of the Aichi Biodiversity Targets.

We resolve to strengthen protected areas systems in the APEC region, working within our own economies and, as appropriate and mutually agreed, through trans-boundary arrangements.

Studying the conditions of implementation of cross-border cooperation projects aimed at conserving endangered species is important. We encourage APEC economies to establish cross-border protected areas as well as develop programs and projects in the region aimed at better understanding and conserving biological and landscape diversity, protecting natural heritage, developing environmental awareness programs, and promoting eco-tourism.

More collaboration is suggested on cross-border programs and projects for wildlife rescue and rehabilitation, ecosystem risk management for contaminated site remediation, and networking to enhance communication on regional biodiversity matters.

We recognize the economic, social, security and environmental impacts of illicit trafficking of wildlife, where firm and strengthened action is needed to combat illegal trafficking of endangered and protected wildlife and related corruption. In this regard, we emphasize the importance of cooperative training and effective international cooperation among relevant multilateral environmental agreements and international organizations.

We recognize the efforts made by APEC members, in cooperation with international, non-governmental organizations and other groups, including academic and business circles, to elaborate domestic strategies, policies and measures for the conservation and sustainable use of biological diversity.

2. Sustainable use of natural resources

We recognize that efficient and sustainable use of natural resources is fundamental to economic growth. When they are well managed, renewable resources such as forests and fisheries – and non-renewable resource sectors such as mining – can make significant and sustainable contributions to growth and prosperity in the APEC region. Ecosystem services provided by well-functioning ecosystems – such as soil formation and retention, pollination, and the regulation of hydrological functions – are indispensable foundations for food and water security. Natural ecosystems and biodiversity also provide the basis for an eco-tourism industry that creates jobs and improves welfare for millions of our citizens.

We welcome the Joint Statement of the 2012 APEC Meeting of Ministers Responsible for Mining, held in Saint Petersburg, the Russian Federation on 27-28 June 2012, and note its findings that the Asia-Pacific region is the biggest producer and consumer of mineral resources, that the sector is of major economic and social importance for the APEC economies, and that there is a need to adopt domestic environmental regulations which encourage resource development while at the same time protecting human health and the environment.

We recognize that circulation of resources, including by recycling, is one of the ways to implement the concept of sustainable development.

Conservation and sustainable use of forest resources are among the most important challenges of the modern world. We note that APEC economies account for more than 50% of the global forest areas, 60% of the global wood products and 80% of the global trade in forest products.

We recognize the importance of conserving rich forest resources and increasing sustainable forest management capacities in the region. We further recognize that illegal logging and associated trade have negative economic, social and environmental impacts. Therefore, we welcome the Declaration adopted by the APEC Leaders in Sydney in 2007 and the establishment of the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet) with the aspiration to increase forest area in the APEC region by at least 20 million hectares by 2020.

We welcome the establishment of the Experts Group on Illegal Logging and Associated Trade (EGILAT) in 2011 and note with appreciation the two successful EGILAT meetings held in the Russian Federation during the first half of 2012.

We support the statement adopted at the First APEC Meeting of Ministers Responsible for Forestry held in Beijing in 2011.

We note the importance of sustainable management of coastal and marine ecosystems, including the fight against illegal, unreported and unregulated fishing and associated trade, enshrined in the Seoul Oceans Declaration (2002), the Bali Plan of Action (2005) and the Paracas Declaration (2010). We reaffirm that APEC economies will work together to implement sustainable management of coastal and marine ecosystems.

We recognize that overexploitation of several types of marine bioresources has adverse impacts on marine ecosystems and biodiversity and eventually impacts the socio-economic status of populations in coastal regions. Therefore, we recognize the contribution of the APEC Ocean and Fisheries Working Group. In this regard, we welcome the adoption of the Kazan Declaration on APEC Food Security adopted in May 2012 which further promotes sustainable management of ecosystems, fisheries and aquaculture.

3. Sustainable water management and trans-boundary watercourses

We recognize that water is at the core of sustainable development and highlight its link to economic growth, poverty reduction, food security, a better sanitary state of the environment and ecosystems protection. Freshwater resources are increasingly stressed in many parts of the planet. In this regard, we note the importance of regional and global partnership efforts to achieving comprehensive and sustainable approaches to the management of water resources.

We note that intensive industrial and agricultural developments, expansion of human settlements, population growth, and increasing per capita consumption all have a significant impact on the hydrological cycle and water resources. We stress the importance of integrated water resource management.

We welcome the efforts made by the APEC Business Advisory Council (ABAC) for ensuring water resources security and underline the importance of the aims of the Water security roadmap for 2012 to promote water resources security. We note the importance of cooperation in the APEC region in the field of sustainable management of water and trans-boundary watercourses.

We encourage cooperation among APEC economies to conduct research on water and water pollution management that can inform cooperative activities and management approaches.

4. Addressing trans-boundary air pollution and climate change

Since climate change impacts many aspects of human life, it is one of the most important sustainable development issues.

To reduce the adverse effects from climate change on sustainable development, we underline the need for effective policies and programs in APEC economies, including related to climate change adaptation.

We note the need for actions to reduce greenhouse gas emissions, including through increasing energy efficiency, developing low-carbon technologies and alternative and renewable energy sources, promoting sustainable transport and urban infrastructure development and addressing deforestation and forest degradation.

We reiterate our support to work together towards the success of the UNFCCC COP 18 in Doha, based on the results achieved at COP 17, including the establishment of the Durban Platform.

We welcome specific measures to support climate science taken in individual APEC economies and stress the need for closer cooperation concerning research on weather and climate.

In addition, we underline the scientific findings on trans-boundary air pollution and note usefulness of providing such information to policy-makers.

5. Support for green growth

We recognize green growth as one of the important pathways to the achievement of sustainable development and note the important contributions of the UN Conference on Sustainable Development (Rio+20) in support of green growth.

To make the transition to green growth, it is necessary to take concrete steps to fulfill APEC Leaders' Honolulu commitments and we reaffirm those commitments to advance our shared green growth objectives.

We commit to counter the environmental challenges facing the region. We support the work being done in APEC with respect to environmental goods and services, including the efforts of APEC Ministers Responsible for Trade announced in Kazan, as well as reduction of aggregate energy intensity of our economies.

We anticipate the future role of the Global Green Growth Institute established during the UN Conference on Sustainable Development (Rio+20) in assisting APEC economies to achieve sustainable development through green growth.

We note contributions of many APEC fora to green growth. In this regard, we support the "Action Agenda To Move APEC Toward An Energy Efficient, Sustainable, Low-Carbon Transport Future" adopted at the APEC Joint Transportation and Energy Ministerial Conference in September 2011, and we support the Energy Ministers' St. Petersburg 2012 Declaration "Energy Security: Challenges and Strategic Choices."

Finally, we deeply appreciate the tremendous efforts put in by the host economy, the Russian Federation, in organizing this Ministerial meeting.

2012 APEC WOMEN AND THE ECONOMY FORUM

Saint Petersburg, Russia 28–30 Jun 2012

Statement

We, APEC ministers and senior government officials, representatives of non-governmental organizations and private sector leaders met in St. Petersburg, Russia, on June 30, 2012, for the High Level Policy Dialogue on Women and the Economy, under the Chairpersonship of Valentina Matvienko, Chairperson of the Council of Federation of the Federal Assembly of the Russian Federation.

The greater inclusion of women in the economy is high on the agenda of APEC, and the broader global stage. In 2008, in Lima, Peru, APEC Leaders recognized that gender discrimination continues to have an adverse impact on the domestic and regional economy. To address the gender gap, in 2009, APEC Leaders pledged efforts to focus on increasing women's access to education, training, financing, technology, and infrastructure, in order to maximize their economic participation, reaffirming that increasing women's economic engagement can profoundly affect productivity and sustainable growth.

In 2010, recognizing the economic empowerment of women as one of the key growth strategies for the APEC region, APEC Leaders confirmed the importance of creating new economic opportunities for women, as the potential of women to fully contribute to the regional economy remains untapped. The APEC Ministers emphasized that the APEC region cannot realize maximum economic growth and prosperity without the full partnership of the private and public sectors to further the participation of women in the region. Therefore, the Policy Partnership on Women and the Economy (PPWE) was formed to create better collaboration between the public and private sectors, and to better mainstream gender across APEC economic growth strategies.

In 2011, the importance of women's economic empowerment was recognized by the United Nations when the Commission on the Status of Women adopted agreed conclusions on the priority theme of access and participation of women and girls in education, training, science and technology, including the promotion of women's equal access to full employment and decent work.

Gender equality is smart economics, as it enhances an economy's productivity, improves development outcomes for the next generation, and makes institutions more representative. The Women and the Economy Summit in San Francisco, USA, in September 2011, and the adoption of the San Francisco Declaration were significant milestones in convening the public and private sector to discuss the significance of women's economic potential; identifying key barriers which limit women's economic participation, access to capital, access to markets, skills and capacity building and women's leadership, and calling on APEC economies to take concrete actions to reduce these barriers.

The APEC Leadership Forum on Women: Powerhouse for Economic Growth which convened in Yokohama, Japan, in March 2012, was the first initiative to begin implementing actions called for in the San Francisco Declaration, focusing on women's leadership. Delegates acknowledged that women's leadership had become one of the most promising powerhouses for economic growth and is required to set up an inclusive environment, which enables women to rise to leadership roles. Delegates also reaffirmed the significance that collective actions can have on addressing barriers to opportunities for women's leadership that create a "virtuous circle" where the four elements of women's leadership: individual mindsets; institutional mindsets; organizational obstacles; and work-life balance challenges, positively reinforce one another. Such actions should include the recognition of women's contributions, distribution of the positive impact that women's leadership may have on economic prosperity and business competitiveness, and the promotion of multi-layered international networks among public and private sector, non-profit organizations, individuals, and international counterparts.

We have gathered here in St. Petersburg to support the crucial role of women in achieving economic prosperity and inclusive growth, and to continue to increase women's inclusion in the economy. The San Francisco Declaration emphasizes that the "...increased participation of women will generate faster and more equitable income growth, create greater business opportunities, and enhance competitiveness for firms and economies by facilitating innovative thinking and fuller use of a significant resource. Moreover, higher incomes for women have proven to have significant positive impact on health and education outcomes for households, improving overall welfare and bolstering future gains in productivity and inclusive growth." Building on the achievements of the San Francisco Declaration, we had in-depth dialogues on public and private sector policies, actions, and recommendations that will enable economies to increase women's contributions to innovation; increase women's leadership; build women's skills and capacity in the areas of entrepreneurship, innovation, and STEM, especially technology; and underscore the importance of strengthening investments in human capital and health systems, especially in the areas of maternal and child health to achieve long term economic growth. Today, sustained economic development in the APEC region is unattainable without the direct contribution of women. It is especially important during this period of global economic volatility. Innovation development provides a foundation for economic growth, which includes women's empowerment in the innovative economy, especially as applied to decreasing barriers that impact women.

The Forum provided a useful platform for sharing public and private sector experiences across the region, and allowed participants to discuss addressing barriers, taking concrete actions, and working with APEC sub fora to further women's economic empowerment, paying more attention to the value, intensity and quality of women's participation in the economy.

We encourage APEC economies to assess the role of women and their contribution to the economy, as well as current programs and policies that exist to further women's economic participation, both of which could include gender disaggregated data, an analysis of women's participation in innovation, business, and social aspects of the economy. Such an approach is relevant to APEC economies, as it allows for the identification of the main growth drivers for equitable economic enhancement and methods for progressively balanced development in the region.

Innovative Economy

A noteworthy characteristic of today's economic growth is the increasing engagement of women in business, and innovation, a trend observed in virtually all APEC economies. Yet, despite advances in several APEC economies, there continue to remain barriers to women's full participation in entrepreneurial activities, and in more technical and scientific streams. These can include stereotypes, cultural norms and gender inequality, but also access to financial resources, specialized education and training, information and networks. Entering innovative industries is challenging for women due to prevalent gender disparities in access to education and marked gender differences in the fields of study and career choice. This is exacerbated by biases against women in sciences and engineering, fewer opportunities for women to patent their inventions and limited access to financing. APEC economies should be encouraged to continue to develop policies which support equality of access to the tools women need to be innovators and business leaders in their societies.

Vocational education and training, as well as higher education can be a driving force behind innovation in ideas and technology, and can promote human resources development for enabling infrastructure. To ensure that women and girls across all spectrums of society have equal opportunity to benefit from technological and scientific advancements in the innovative economy, it is important to promote equal access to technology, including mobile phones and internet, especially in rural and indigenous regions.

We believe that it is important to thoroughly discuss effective measures and best practices that could contribute to harnessing the business and innovation potential of women and girls, including the following:

• promoting gender-balanced representation in universities and research centers (in particular science and technology research centers), and women's participation in research and innovation activities;

- providing vocational training/retraining and capacity-building programs, and mentoring services for young female entrepreneurs;
- promoting promising practices in encouraging girls and women in mathematics and science education;
- elevating and acknowledging the achievements of regional women innovators. This could include creating a female inventors innovative ideas "database";
- promoting and taking concrete steps to provide equal access to technology such as mobile phones and internet, especially for rural and indigenous populations;
- holding regular conferences and online business working groups to establish easily accessible business contacts and provide conditions for partnerships and business opportunities in the field of innovation;
- sharing information and promoting successful projects implemented by young female entrepreneurs, scientists and engineers;
- increasing access to information on intellectual property rights and promoting the patenting ability for women-owned businesses;
- creating digital training opportunities and innovative programs for women in rural areas and indigenous communities;
- encouraging female entrepreneurs, engineers and scientists' participation in the different stages of disaster management;
- encouraging women's participation in the sphere of innovative green technology to achieve a sustainable economy;
- providing accessible online business enterprise skills and business mentors for women at all growth phases of business encouraging innovation and creativity;
- providing scholarships for women to undertake vocational and higher education and training in science, research and business innovation; and
- establishing return to work programs for women who have been out of paid employment for a period of time

Business Opportunities

Recently, business environments have experienced profound transformations, including technological advancements, intensifying competition for talent, and changing industrial geography of the APEC region. Business establishments are greeted with new opportunities, as well as challenges. These changes require a new approach to business management and operation to increase competitiveness of firms and economies.

According to many studies, the operating profit of companies with greater gender diversity in senior management and on boards is higher than of their rivals. Studies show that having women on corporate boards improves profitability, ensuring the widest talent is accessible and leading companies to being more responsive to the markets they operate in; improves communication and other non-financial performance measures, such as employee and customer satisfaction, diversity and corporate social responsibility; increases participation of male board members and holds CEOs accountable, as well as introduces more equity based compensation and transparency. Gender equality in leadership is important in both the public and private sectors to ensure that policies and regulations simultaneously address the financial, economic, and social needs of the whole population, and that business understands and provides products and services which meet the demands of the entire market and optimizes financial returns.

Furthering gender equality in accessing resources to start and grow micro, small and medium enterprises is vital in increasing job opportunities and economic growth in the APEC region. Therefore, we call on APEC ministers to support equal rights for women and to decrease barriers in accessing: capital and assets; markets and networks; skills and capacity building; information and role models; and technology to further encourage women's participation in SMEs.

To holistically assess and analyze gender dynamics in business opportunities in APEC economies, and to promote women's leadership, greater job and entrepreneurship opportunities, and women's overall economic participation, we urge APEC economies to promote open discussions and to take steps towards:

- developing greater information sharing on women's participation in the Asia-Pacific region and programs APEC economies have taken to further women's economic participation;
- informing the general public of the importance of equal rights and opportunities;
- promoting disclosure of gender diversity in individual companies within individual economies;
- supporting the UN Women and United Nations Global Compact Women's Empowerment Principles;
- supporting women's full financial inclusion, which includes access to financial services, savings accounts and loans through cooperative efforts made by public-private partnerships and cross-fora/cross-field events in the APEC region;
- promoting women's leadership, succession planning, and target setting in both the public and private sectors, including promoting women's representation on public and private sector boards;
- developing resources to support the ability of women entrepreneurs to start and grow SMEs including: networks, information, training, technology, and inclusive procurement practices;
- supporting women-owned SMEs and micro-enterprises to overcome barriers to accessing domestic and international markets by encouraging corporate and government supplier diversity and inclusion policies and practices for women;
- advocating for gender equality in pay in all professions;
- holding annual conferences for creating a multi-layered international network among public and private sectors, non-profit organizations, individuals, and international counterparts;
- accumulating research and case studies, which illustrate the positive impact that women's leadership has on economic prosperity and business competitiveness. Share results and best practices of furthering women's leadership among APEC economies

Human Capital

Each APEC economy has its own history and unique social and cultural context that needs to be taken into account when discussing women's role in the economy and society. Due to different traditions, historical developments and current economic conditions, APEC economies have different experiences with women's participation in the economy and the problem of discrimination. We recognize that such differences requires a diversity of responses.

However, there are certain issues that are typical for all APEC economies and are essential in discussing women's contributions to economic growth, such as investing in women as valuable human capital. Growth accounting illustrates that key investments in human capital will increase productivity and overall economic growth. In addition to capacity and skills building discussed earlier, two key areas that greatly enable economies to increase human capital productivity are work-life balance and improved health policies.

One of the most important issues for the public and private sectors to invest in are policies and initiatives to promote work-life balance. According to recent studies, one of the main reasons women are underrepresented in the workforce, especially in management, is due to issues of maintaining work-life balance. Policies that support the realities of work-life balance for women and men are critical to APEC economies. Studies also show that companies that promote workplace flexibility policies often see a return on their bottom line through increased worker productivity, reduced absenteeism and reduced turnover. And such policies are not only critical for women, but for the families that depend on them. Promoting work-life balance, improving women's working conditions, including the ability to retain employment while caring for families, is essential for a strong, healthy economy. These changes, coupled with the demands of work and personal life, including family care-giving, require that employers adapt to the changing needs of their workers. Promoting a dialogue within APEC economies on the need for work-life balance, and the sharing of best practices within and among economies, and especially with our private sector partners, can promote acceptance within economies of the need for and benefits of policies that promote work-life balance.

Secondly, the health and safety of workers and their families greatly affects their productivity. Therefore, promoting healthy lifestyles, health education, the prevention of non-communicable diseases, and reducing the incidence of domestic violence, are essential for enhancing women's economic participation, retaining talented women in workforce and ensuring the health and well-being of future generations. Investing in human capital – especially through investing in better maternal and child health – is imperative for a healthy and productive economy.

Public and private sector policies can support women's full and active participation in the labor market and increase productivity by promoting:

- implementation of workplace and community mechanisms required to increase women's participation in the labor force, across all major sectors, including paid parental leave and access to flexible work practices;
- opportunities for flexible work arrangements such as: home-based or part-time jobs; flexible work hours and family leave policies for both mothers and fathers;
- women in technology jobs, which are well-suited for work-life balance due to flexible hours and location;
- knowledge of skill requirements for certain jobs and access to education and skills training;
- access to labor market information;
- the importance of shared household responsibilities and family care to achieve better work-life balance for men and women;
- the launching of a comprehensive campaign geared towards the public and private sectors on the importance of investing in measures to further healthy lifestyles and prevention of non-communicable diseases for both women and men for the individual and collective health and welfare of the region;
- improved access and affordability of women's health care services, which includes maternal, reproductive, and child healthcare needs;
- the education of policymakers about the importance of women's health;
- the identification of best practices of a family-friendly workplace and gender diversity in the workplace, in both SMEs and large enterprises, through establishing annual awards;
- awareness of the issue of domestic violence and its impact on women's economic and social wellbeing;
- the elimination of all forms of violence and discrimination in the workplace, while also establishing workplace supports for survivors of gender based violence.

We urge government officials and business leaders to advance policies and concrete actions to further women's economic participation across the APEC region and recognize the crucial role that women play in innovative economic development and business expansion. In order to increase the momentum and advance the discussions held at the Forum, we follow the San Francisco Declaration and encourage the hosting of similar high-level women and the economy dialogues, as well as cross collaboration between the PPWE and other APEC sub fora.

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

4th APEC MINISTERS RESPONSIBLE FOR MINING

Saint Petersburg, Russia 28 June 2012

Joint Statement

The fourth meeting of APEC Ministers responsible for Mining (MRM4) was held in Saint-Petersburg, Russia, on 27-28 June 2012.

At the meeting, chaired by the Minister of Industry and Trade of the Russian Federation, Mr D. Manturov, drawing on the joint resolutions from the previous APEC Mining Ministerial meetings, taking into account the 10 APEC Mining Policy Principles, as well as the results of the just-concluded meeting, the Mining Ministers of the APEC economies resolved the following:

We recognize the significance of sustainable development in mining. We believe this can be achieved through regional integration, fostering investment, increasing social responsibility, innovation and environmental advances in mining and metallurgy.

1. Regional integration, industry and social responsibility

1.1. As the biggest producer and consumer of mineral resources, the Asia-Pacific region is a key driver of global economic growth, and the APEC mining and metallurgy industries have a tremendous impact on the world's markets for raw materials.

1.2. For the majority of the region's economies, the mining and metallurgy industries are significant contributors to APEC economies and are of major social importance.

1.3. Fostering investment, expanding mutual trade, and increasing transparency and openness all play crucial roles in advancing trade in mining industry products as well as prosperity throughout the APEC region.

2. Investments in mining

2.1. The need to meet continued demand for mineral resources requires great activity by the APEC economies to attract and stimulate investment in the spheres of resource exploration, development, and extraction.

2.2. It is necessary to pay special attention to further development of approaches in the sphere of subsoil use in the APEC economies. These approaches should serve to promote, rather than block, investment activities in the mining sectors of the APEC economies.

2.3. In this respect, special attention should be paid to the priorities expressed by the business community, and to apply best practices for the attraction of investment in the APEC economies.

3. Innovations and environmental issues in mining and metallurgy

3.1. One of the most important tasks of the APEC economies' authorities responsible for mining industry and metallurgy is to stimulate prospective scientific research in the exploration, development, and extraction of natural resources.

3.2. Promotion of innovation in policy (e.g. community engagement and worker health and safety) and technologies (e.g. the efficient use of natural resources, implementation of up-to-date energy-saving technologies and equipment, and sound waste management and processing practices), is crucially important for the sector's growth.

3.3 Taking into account that the APEC economies are among the main producers and consumers of metals, we believe that recognition of metal characteristics in global and regional chemicals management must be considered in dialogues with economies inside and outside the region. Regulation firmly based on scientific evidence and data is an important prerequisite for responsible and sustainable innovation. Development of legislation and regulation pertaining to metals and their alloys must be transparent, based on sound science, should be no more trade restrictive than necessary and should take into account the consequences of such regulations. Failure to do so may have an unnecessarily negative impact on economic growth, living standards, the environment and the protection of human health and development.

4. The activities of MTF during the last years and in the future

4.1. We have approved the main results of MTF activities in the mining and metallurgy industries during the period from 2008 to 2012, which was established according to the resolutions of Ministers in 2007.

4.2. During the past period a large commitment to the activities of the MTF was done by its Chairs, Russia and China, and its co-Chairs, Peru, Malaysia, Russia, jointly with other economies, achieved significant progress in increasing the efficiency and practical activities of the MTF in implementing the 10 APEC mining policy principles.

4.3. These MTF activities have demonstrated the importance of coordinating information about policies and developments in the mining and metallurgy sectors, as well as interacting with other international bodies on these matters.

4.4. We recognize the importance of the Mining Task Force's report on sustainable development in the APEC mining and metallurgy industries which was submitted to the United Nations. This report, "Sustainable Development in the Mining Sector in APEC", addresses important topics such as sustainable development, corporate social responsibility, environmental protection, and the effects of European Union regulations governing nickel-containing substances.

4.5. Taking into account the long-term planning of MTF activities and the implementation of projects based on the above, we believe that, consistent with the 10 APEC Mining Policy Principles the following directions for MTF activities are important:

- a. The promotion of open, transparent, and well-operating markets, as well as best practices relating to sustainable development, corporate social responsibility, clean energy, green growth, and lowering barriers to investment.
- b. The promotion of best-management practices, and governance for the economic, environmental, and social aspects of sustainable development in mining, including implementation of life-of-mine monitoring, and the adoption of environmental regulations which encourage resource development while at the same time protecting human health and the environment.
- c. The development of new technologies and approaches in the sphere of environmental protection, mining work safety, energy efficiency, and the processing of wastes.
- d. Continuing and deepening of dialogue among the APEC economies and with other bodies, such as the United Nations and the European Union on mining issues, including the development of sound regulation of metals and their alloys firmly based on transparent and objective evidence.
- e. The development of opportunities to influence the broader APEC agenda through the increasing importance of mining to the advancement and prosperity of the region.

4.6 We agree that developing activities based on these directions will help to demonstrate the value of a permanent and independent role for mining in the broader APEC agenda.

APEC ENERGY MINISTERIAL MEETING IN 2012

Saint Petersburg, Russia 24-25 June 2012

St. Petersburg Declaration Energy Security: Challenges and Strategic Choices

- 1. We, the Energy Ministers of member economies of the Asia-Pacific Economic Cooperation (APEC) forum, met in St. Petersburg, the Russian Federation, on 24-25 June 2012 to discuss the energy security challenges and strategic choices we face.
- 2. We share the common understanding that global financial challenges, political developments in the Middle East and North Africa, and increased carbon emissions from fossil fuel consumption will influence the structure of the world economy and will pose new challenges and opportunities to the secure and sustainable growth of global and regional energy markets. In particular, considering recent oil market situations, the need to cope with these new challenges is growing.
- 3. Enhancing energy security requires concerted action in many areas. We continue our efforts to improve the sustainability, efficiency, predictability, and transparency of traditional energy markets. We are working to enhance and balance the share of natural gas in the energy mix, develop renewable energy sources, ensure the safe and secure use of nuclear energy in interested economies, and boost energy end-use efficiency. These steps will serve to increase our energy security, contribute to our economic development, and reduce emissions of carbon dioxide and other pollutants into the atmosphere. In this context, we emphasize the importance of the Energy Security Initiative (ESI), adopted by APEC Leaders in 2001, and charge the Energy Working Group (EWG) to strengthen its position and to take measures to further implementation of the ESI, while taking into account the particular challenges of our time.
- 4. Open markets and transparent investment regimes are of great importance to the development of both traditional and new forms of energy. As APEC Leaders confirmed in their 2011 Declaration, trade and investment continue to be important for promoting regional energy security and greater economic prosperity for our people.
- 5. While the role of new and innovative sources of energy expands, fossil fuels will continue to play a key role in the APEC energy market. Expanded production and trade of natural gas, which has widespread reserves throughout the globe, can ease the transition to a lower carbon economy. Natural gas emits only half as much carbon dioxide as coal per unit of electricity generated, and is the cleanest burning fossil fuel used in energy production. Therefore it is important to evaluate the production, trade potential and environmental impact of shale gas and other unconventional natural gas resources, as well as to promote steady investment in natural gas infrastructure, including liquefaction facilities, for increasing energy security and economic growth in the APEC region.
- 6. A cleaner energy supply continues to be a priority to boost both sustainable development and energy security while adjusting to climate change. Technology development and deployment should be promoted for low-emission energy supply options including carbon capture and storage, renewable energy sources and bioenergy from sustainable biomass sources.
- 7. Improved energy efficiency is one of the fastest, the most environmentally sound and cost-effective ways to address energy security, economic growth, and climate change. More energy-efficient transport, industry, buildings and power grids, combined in more energy-efficient communities, can reduce both the direct use of fossil fuels and the demand for electricity which continues to be generated in large quantities from natural gas and coal. More efficient management of gas, oil and coal production and use

can also reduce emissions of methane, a clean energy resource yet a potent short-lived greenhouse gas. Therefore, measures to improve energy efficiency can cut the APEC region's dependence on oil and gas as well as reduce greenhouse gas emissions from fossil fuels. In this context, we commend progress on the Energy Smart Communities Initiative with its pillars of smart transport, buildings, power grids and jobs and education to share best practices that economies can use to improve energy efficiency. We also underline the successful progress of the APEC Low-Carbon Model Town (LCMT) Project.

- 8. We affirm our commitment to the Action Agenda to Move APEC toward an Energy Efficient, Sustainable, Low-carbon Transport Future adopted at the first joint Transportation and Energy Ministerial Conference in San Francisco, United States, in 2011. Herewith we note the importance of energy efficient and sustainable transport systems development, including municipal and railway transportation as well as electronic drive and more fuel-efficient conventional vehicles, on the path to reduced oil dependency and emissions from transport.
- 9. The APEC region recognizes the importance of the safe and secure uses of peaceful nuclear energy, and its potential in diversifying our energy mix, meeting the growing energy demand, and in reducing greenhouse gas emissions in the region despite the tragic accident at the Fukushima Daiichi Nuclear Power Station in March 2011. To ensure the safety of peaceful nuclear energy, we welcome economies which have nuclear power programs, to share expertise, knowledge and best practices at the request of economies interested in developing nuclear power programs. These economies confirm their full acceptance of commitments to other economies for safety, security and non-proliferation related to, and as the fundamental elements of the peaceful uses of nuclear energy. Particular attention should be given to strengthen cooperation between the interested member economies of APEC and the relevant international organizations, notably the International Atomic Energy Agency (IAEA) through its Action Plan on Nuclear Safety. Such cooperation includes sharing knowledge and experience on nuclear technologies and safety at nuclear power stations and related facilities to improve nuclear safety standards, and coordinate emergency response and preparedness mechanisms. In this context, we expect that Japan should contribute to the international approach by sharing its knowledge and experience, including information on the Fukushima-Daiichi accident, and recognize the progress made by the Japanese Government to bring the station to a stable condition.
- 10. We reaffirm our commitment to the Green Growth goals set by APEC Leaders in Honolulu, United States in 2011. To address the economic and ecological challenges facing the APEC region we will promote a lower-carbon economy that strengthens energy security and generates new sources of economic growth, and helps achieve the aspirational goal to reduce aggregate energy intensity of APEC economies by 45 percent from 2005 levels by 2035. We also reaffirm the commitment of APEC Leaders to rationalize and phase out inefficient fossil-fuel subsidies that encourage wasteful consumption, while recognizing the importance of providing those in need with essential energy services and look forward to voluntary reports from economies on their efforts in this direction. We note that as we continue efforts to expand energy access for poor and rural populations, the reduction of subsidies will encourage more energy efficient consumption, leading to a positive impact on international energy prices and energy security, and will make renewable energy and technologies more competitive.

INSTRUCTIONS OF THE APEC ENERGY MINISTERS

1. We instruct the Energy Working Group (EWG), with the support of the Asia Pacific Energy Research Centre (APERC), the Expert Group on Clean Fossil Energy (EGCFE) and the Expert Group on Energy Data and Analysis (EGEDA), to review the current state and prospects of the energy markets of the APEC region, with emphasis on the role of natural gas in the total energy balance. The review should emphasize a detailed examination of trade and consumption of natural gas, including LNG in APEC economies, in order to identify the constraints and prospects for cooperation. Pursuant to results of the study, we instruct the EWG to develop specific measures and recommendations to expand natural gas trade, investment and production in the APEC region.

- 2. We request that the APEC economies share results of research and analysis to support meeting the aspirational goal to reduce aggregate energy intensity of APEC economies by 45 percent from 2005 levels by 2035. Taking into account the importance of funding, technology, and structural differences among economies as well as their past progress on improving energy efficiency, we also ask that the EWG and supporting bodies provide assistance and analytic support to economies upon request to help them achieve the aggregate energy intensity goal.
- 3. We encourage the EWG and APERC to work in collaboration with the International Energy Agency (IEA) and the Association of Southeast Asian Nations (ASEAN) on activities to improve the response to oil and gas emergency situations in the APEC region, including emergency response workshops and exercises.
- 4. We instruct the EWG to study the prospects for interested APEC economies to cooperate in the peaceful use of nuclear energy, considering the results of the Nuclear Power Emissions Reduction Potential Study (NUPERPS) and including the potential for existing and planned nuclear power stations in the APEC region.
- 5. We instruct the EWG to consider the potential for cooperation on nuclear safety with the International Atomic Energy Agency (IAEA), including its Asian Nuclear Safety Network (ANSN), and the Nuclear Energy Agency (NEA) within the Organization for Economic Co-operation and Development (OECD). Following its deliberations, the EWG should prepare a list of measures and recommendations for the creation of conditions for the organization of APEC economies' cooperation in the field of peaceful use of nuclear energy as well as for emergencies prevention, mutual emergency warning, and enhanced safety at nuclear facilities.
- 6. We instruct the EWG and the Transportation Working Group (TPT-WG) to collaborate on joint activities to implement the APEC Transportation and Energy Ministerial Conference Action Agenda, adopted at the joint Transportation and Energy Ministerial Conference in September 2011 in San Francisco.
- 7. We instruct the EWG to continue its analysis of technologies for carbon capture use and storage (CCUS) and its dissemination of best practices for applying these technologies to new and existing power plants and industrial processes using fossil fuel energy, working with the EGCFE and other multilateral fora. We also instruct the EWG and EGCFE to further pursue initiatives for deploying advanced clean coal technologies such as Ultra Super Critical (USC) and Integrated Gasification Combined Cycle (IGCC) to make coal-fired power plants more efficient.
- 8. We instruct the EWG to implement the studies and initiatives to cope with energy security challenges through cooperation with relevant multilateral fora and organizations such as IEA, International Energy Forum (IEF), ASEAN Centre for Energy (ACE), Economic Research Institute for ASEAN and East Asia (ERIA), and the International Renewable Energy Agency (IRENA).
- 9. We instruct the EWG to continue to build regional capacity for the reform of inefficient fossil fuel subsidies that encourage wasteful consumption and to report annually on progress using the Voluntary Reporting Mechanism. Accordingly we urge APEC economies to continue to report on progress using the Voluntary Reporting Mechanism.
- 10. We instruct EWG to take into consideration the discussions and main outcomes of APEC Public-Private Roundtable on energy Security which was held on the eve of this meeting.

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

MEETING OF APEC MINISTERS RESPONSIBLE FOR TRADE

Kazan, Russia 4-5 June 2012

Statement

- 1. We, the APEC Ministers Responsible for Trade, met in Kazan, Russia from 4 to 5 June, 2012 under the chairmanship of Andrey Belousov, Minister of Economic Development of the Russian Federation.
- 2. We welcomed the participation in the meeting of the Director-General of the World Trade Organization (WTO) Mr. Pascal Lamy, the APEC Business Advisory Council (ABAC), the Pacific Economic Cooperation Council (PECC), the Association of Southeast Asian Nations (ASEAN), and the APEC Secretariat.
- 3. In 2009, APEC Leaders looked beyond supporting the economic recovery to recognize the necessity of developing a new growth paradigm for the changed post-crisis landscape. Leaders called for progress in work to promote greater convergence in regional economic integration, and welcomed the APEC Supply Chains Connectivity Framework. In 2010 Leaders agreed on the Yokohama Vision and the Leaders' Growth Strategy, setting out a path for APEC to pursue an integrated, robust, and secure community achieving balanced, inclusive, sustainable, innovative, and secure growth. In 2011 Leaders set out a program aimed at achieving a seamless regional economy by strengthening regional economic integration and expanding trade, promoting green growth, and advancing regulatory convergence and cooperation.
- 4. Building on this commitment of our Leaders to foster sustainable economic growth, development and common prosperity demonstrated in recent years in APEC, we pledge to advance our work to promote deeper economic integration and stronger innovative growth. Our discussions in 2012 are aimed at achieving tangible results in the following priority areas:
 - (I) trade and investment liberalization, and regional economic integration;
 - (II) strengthening food security;
 - (III) establishing reliable supply chains; and
 - (IV) intensive cooperation to foster innovative growth

Trade and Investment Liberalization, Regional Economic Integration

- 5. We emphasize our strong commitment to trade and investment liberalization and facilitation, welcome the continuing progress made towards the Bogor goals of free and open trade and investment in the Asia-Pacific region and remain firmly committed to their achievement.
- 6. We are committed to the multilateral trading system, and will pursue our own regional economic integration agenda in this spirit, always seeking to ensure that the steps we take towards the eventual realization of the Free Trade Area of the Asia-Pacific (FTAAP) are steps towards more open global as well as regional trade. We commit to support the multilateral trading system by promoting APEC work that will complement commitments in the World Trade Organization (WTO). We encourage discussions in APEC to advance work on reducing protectionism.
- 7. We will promote broader integration, and trade and investment liberalization and facilitation in the APEC region. Taking note of various ongoing efforts towards FTAAP, we agreed on the importance of reporting regularly to APEC on developments related to these initiatives. We strongly support the capacity building and guidance in this area including the implementation of the action plan framework on Capacity Building Needs Initiative (CBNI).

- 8. In order to fulfill APEC Leaders' 2011 commitment to play a leadership role in launching negotiations focused on expanding the product coverage and membership of the WTO Information Technology Agreement (ITA) and to contribute to the multilateral trading system we call on ITA participants to strengthen their engagement in order to achieve a good outcome of the negotiations. To that end, we welcome the recent developments in Geneva on ITA, including the recently held 15th ITA Anniversary Symposium and accession of new members.
- 9. We encourage the efforts to promote facilitation and liberalization of services trade. Services trade is crucial to the achievement of APEC's goals to promote economic growth, innovation and supply chain connectivity, and in this context we note the vital role of education in supporting the cross-border flow of ideas, labor, investment and productivity growth. We welcome future efforts in this area and encourage work including improving the services statistics to facilitate the understanding of current situation and trends in services markets. We welcome the expansion of the APEC Services Trade Access Requirements (STAR) Database as a business friendly tool to facilitate services trade in the APEC region and welcome the development of other tools and indicators helping to assess the level of liberalization in the services sector, including voluntary liberalization.
- 10. We reaffirm our commitment to APEC's work to define, shape, and address next generation trade and investment issues, including the work to enhance small and medium-sized enterprises' participation in global production chains, facilitate global supply chains, and promote effective, non-discriminatory, and market-driven innovation policy. To take forward this agenda, we endorse transparency in trade agreements as a new next generation trade and investment issue. We instruct officials to intensify the work on the issues selected in 2011 and 2012, and report to us at AMM on the specific and substantive deliverables. We also note discussions on local content requirements, promoting the creation and dissemination of creative content, and facilitating trade in renewable and clean energy products.
- 11. Keeping in mind the large obstacle that technical barriers can present to trade, we reaffirm our commitment to promote regulatory coherence and good regulatory practices in the Asia-Pacific region through APEC. To that end, we encourage information exchange on standards among APEC economies, welcome work in 2012 to take forward our agendas on smart grid interoperability standards, green buildings, and solar technologies, and encourage officials to work on identifying additional key technologies of common interest with a view to reduce future technical barriers to trade.
- 12. We also commend work to fulfill 2011 Leaders' instructions to strengthen implementation of good regulatory practices (GRP) by undertaking related capacity-building and information sharing activities, including on regulatory impact analysis. We welcome the expanding cooperation among chemical regulators, including the APEC Regulatory Action Plan for Chemicals, and encourage further collaboration of APEC with other international fora such as the OECD and the UN Sub-Committee of Experts on the Globally Harmonized System of Classification and Labeling of Chemicals. We welcome work towards the facilitation of chemicals trade by examining behind the border issues and by promoting implementation of the Globally Harmonized System (GHS) across APEC economies and appreciate the work on the Integrated Information Resource.
- 13. We welcome work on regulatory and investment issues related to the life sciences sector, including steps taken to develop roadmaps in key priority areas under the 2011 strategic framework to achieve convergence on regulatory approval procedures for medical products by 2020. We further welcome the establishment of a regulatory network and enhanced presence of industry stakeholders in this work.
- 14. We welcome continued work by APEC economies to develop and implement common elements of import policies and regulations for the importation of advanced technology and non-salable, alternativefueled demonstration vehicles, as instructed by Ministers in 2011. We instruct officials to continue work to promote regulatory coherence for new automotive technologies, and to encourage policies that promote green growth and energy efficient vehicles for a more sustainable transport sector.

- 15. We reaffirm our commitment to promote trade and investment in environmental goods and services (EGS) in order to address environmental challenges. We are resolved and dedicating all available resources by AMM 2012 in Vladivostok to fulfill Leaders' instructions to work to develop in 2012 an APEC list of environmental goods that directly and positively contribute to our green growth and sustainable development objectives on which they resolved to reduce by the end of 2015 our applied tariff rates of 5 per cent or less, taking into account economies' economic circumstances without prejudice to APEC economies' positions in the WTO.
- 16. We commit to strengthen regional cooperation on trade and environmental matters. We take note of the importance of the work to advancing our shared green growth objectives and enhancing mutual supportiveness between trade and environmental policies, including through promoting international standards, transparency and information exchange among economies on environmental measures and requirements which could have significant trade effects; considering trade and development objectives alongside environmental protection in the development of environmental measures; strengthen capacity building. We will seek to ensure that measures taken for environmental purposes should be least trade restrictive and should be consistent with our international trade obligations.
- 17. We reaffirm our commitments to advance shared green growth objectives and to address both the region's's economic and environmental challenges by accelerating the transition towards a global low-carbon economy, which will contribute to energy security and reduce APE's aggregate energy intensity.
- 18. We welcome the work being undertaken to strengthen cooperation and share best practices for purposes of combating illegal logging and associated trade. We note our support for the work underway to counter illegal logging and illicit trade in forest products in the region. We instruct officials to take effective measures to facilitate the legal trade of forest products. We reaffirm our commitment to promote sustainable forest management and rehabilitation.
- 19. We confirm the importance of APEC efforts to improve investment climate in the region by implementing actions to promote greater transparency and better understanding of regulatory mechanisms for investment in APEC economies. Recognizing the value of the APEC Investment Facilitation Action Plan (IFAP) as an organizing framework for our goals in this area, we will continue to implement IFAP actions with a particular focus on 1) enhancing stability of investment environments and protection of investments including through developing mechanisms for dispute avoidance and resolution; 2) improving transparency, efficiency and effectiveness of investment procedures, including through the use of new technologies; and 3) building and maintaining constructive stakeholder relationships.
- 20. We reaffirm our commitment to take further steps to facilitate investment, and highlight the importance of implementing the APEC Strategy for Investment agreed in 2010, including the holding of public-private dialogues on investment. Taking note of ABAC's and broader business interest in the investment issue, we encourage officials to take concrete actions for facilitation of public-private partnership (PPP) in infrastructure investment in the APEC region.
- 21. Taking note of the progress of achieving the ambitious target of 25 per cent cost reduction in improvement in the ease of doing business indicators by 2015, we welcome the APEC Ease of Doing Business 2012 Stocktaking Workshop held in Moscow, Russia in February 2012, as well as bilateral workshops, where participants shared best practices in respect of their activities. We welcome capacity building activities to assist economies in achieving the set target, and instruct officials to continue sharing best practices in this area.
- 22. We reaffirm the importance of the APEC New Strategy for Structural Reform (ANSSR) endorsed by the Leaders in 2010, which promotes more balanced, inclusive, and sustainable growth and development through targeting behind-the-border barriers to trade. To advance its implementation, we welcome and endorse the 2013 ANSSR Mid-Term Progress Report Template. We expect that this report will enable

economies to highlight accomplishments in implementing structural reform priorities and track progress towards achieving their structural reform objectives by the end of the ANSSR process in 2015.

23. We endorse the importance of initiatives in anti-corruption activities within APEC economies to strengthen trade and investment in the APEC region, particularly by promoting public-private partnerships in this sphere. Corruption poses a significant market access barrier and high cost for companies, especially SMEs, limiting growth and financial integrity. We reaffirm our commitments to fight corruption and illicit trade, and to ensure transparency through boosting cooperation among APEC economies and other international stakeholders. We welcome continued APEC capacity building efforts to implement voluntary codes of business ethics and facilitate industry regulators and anti-corruption enforcement authorities to advance ethical collaborations in line with the APEC principles.

Strengthening Food Security

- 24. Acknowledging the Niigata Declaration we appreciate the efforts made by APEC Ministers Responsible for Food Security on the Kazan Declaration on Food Security. We subscribe ourselves to contribute to achieving its goals: increasing agricultural production and productivity; facilitating trade and developing food markets; enhancing food safety and quality; ensuring sustainable ecosystems based management and combating illegal, unreported and unregulated (IUU) fishing and associated trade. We also recognize the value of improving access to food for vulnerable groups of population to promote food security.
- 25. We welcome the efforts to increase agricultural production and productivity on a sustainable basis through boosting investment and actively adopting innovative technologies. We underline the importance of responding appropriately to environmental risks such as climate change and promoting the efficient utilization of agricultural inputs and natural resources in particular land, water and biodiversity, engaging farmers including women, and strengthening natural disaster preparedness and resilience in the most suitable manner to specific regions, considering the diversity of environmental and economic conditions world-wide and positive externalities of agriculture.
- 26. We consider it crucial to attract long term investment in agriculture. We recognize the key role of private investments, taking note of the catalytic role of public investment in creating appropriate conditions for farmers and other stakeholders. We note that there is a necessity to set up concrete goals to stimulate growth of private investment flows into agriculture. To do so, we note the importance of improving investment climate and conditions in agriculture in APEC region on the basis of wider transparency and reducing barriers for investment in agriculture. We also reaffirm the importance of responsible agricultural investment which, in particular, encourages sustainable use of resources and environmental protection. We encourage private investment to be carried out in a responsible manner with Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests (VG) and the Principles for Responsible Agricultural Investment (PRAI) being taken into account. We recognize an important role for PPP in the field of investment and welcome views and recommendations from the Policy Partnership on Food Security.
- 27. Agricultural trade plays a key role in achieving food security. To this end we reaffirm the value of an open and rules-based multilateral trading system as it provides predictability and stability in agricultural trade. We agreed on the need to sustain the benefits of globalization and open markets, highlighting the crucial importance of encouraging science-based standards, rejecting protectionism and encouraging the development of regionally integrated markets. We note the importance of effective food market monitoring and exchange of reliable and up-to-date information on production volumes, consumption, trade and food reserves for enhancing market transparency and predictability and mitigating the adverse affects of volatility of food prices. In this context we appreciate the elaboration and launch of the Asia-Pacific Food Security Information Platform (APIP). We emphasize the importance of transparency and WTO-consistent market regulations as an essential mechanism to enhance the agricultural trade and lower volatility risk. We also welcome the discussion on improving infrastructure for food markets and recognize its importance for development and integration of markets. We note the necessity to take

further steps towards reducing losses along the whole food supply chain. In this regard we will consider improvements in such relevant areas as policy, resources, education, services, infrastructure and logistics.

- 28. We note that APEC economies have made significant progress in adopting international standards on sanitary and phytosanitary measures as well as technical regulations on food safety and quality. The achieved results strengthen food supply chains in the region and provide new opportunities for developing trade in safe and quality food. We emphasize the importance of further development of mutual understanding among APEC economies regarding the benefits of harmonizing domestic regulations with international standards. We appreciate the effective and multi-faceted work of the Food Safety Cooperation Forum (FSCF) and its Partnership Training Institute Network (PTIN). We also support the creation of the World Bank Global Food Safety Partnership (GFSP) and encourage APEC economies to support the GFSP and its multi-donor trust fund, which will be housed at the World Bank and will harness contributions from both the public and private sector to fund GFSP activities.
- 29. We welcome the exchange of best practices and further discussions on improving access to food for vulnerable groups of population, including school meals and other social programs as well as the development of local agricultural production, procurement systems and processing industry.
- 30. Recognizing the importance of sustainable management of marine ecosystems, fisheries and aquaculture as significant components of social and economic wellbeing and contributors to food security we support efforts to facilitate sustainable, open and fair trade in products of fisheries and aquaculture. We emphasize the importance of strengthening partnership on a bilateral and multilateral basis on combating IUU fishing and associated trade as well as destructive fishing practices; improving capture fisheries management and sustainable aquaculture practices, implementing ecosystems based management approaches and enhancement of transparency in fishing regulations. We encourage the Ocean and Fisheries Working Group to promote cooperation and exchange information concerning IUU fishing and management measures applied by the Regional Fisheries Management Organizations and other relevant organizations.

Establishing Reliable Supply Chains

- 31. Noting the increasing attention given to supply chain connectivity, we support further discussions of relevant issues including policy recommendations for trade facilitation. We emphasize the importance of taking concrete actions to improve supply chain performance, in terms of reducing the cost, time, and uncertainty of moving goods and services throughout the region. We confirm that tangible outputs in this area will contribute to achieving the Bogor Goals, growth and prosperity in the region.
- 32. We welcome the discussions on facilitating global supply chains and enhancing the participation of SMEs in the global production chains, which were two of the next generation trade and investment issues identified in 2011. In recognizing that our businesses are increasingly operating across borders, and that the smooth functioning of global trade and production depends on efficient global supply chains, we instruct officials to further work on deepening understanding, highlight challenges and identify ways to enable businesses to participate in and benefit from global supply chains, and to explore possible avenues to foster SMEs involvement as supporting industries of global production chains. Noting APEC's goal to achieve an APEC-wide 10 percent improvement in supply chain performance by 2015, taking into account individual economy circumstances, we recognize the need to take a more systematic approach to addressing the underlying policies contributing to chokepoints in supply chains through targeted capacity-building.
- 33. We recognize the importance of minimizing risks to Asia-Pacific supply chain routes, and welcome the work on reliable supply chains, including diversification of supply chain routes. We encourage the analysis of the regional supply chain routes in order to identify ways to increase efficiency of supply chains by minimizing transportation, customs, and transaction costs for businesses. Taking into

consideration the risk management, work on diversification of supply chain routes should involve input from industry and other stakeholders.

- 34. We instruct officials to advance the discussion on the technological enhancement of supply chains with a view to forming intelligent supply chains and making them greener, smarter, more efficient and visible. We support continued discussion by officials on enhancing supply chain visibility and better coordination through tracking technologies, developing early warning systems, and better control of transportation of bulky and dangerous goods or hazardous materials, and enhancing logistics sub-providers capacity. In this regard, we welcome the results of the relevant projects including the recommendations of the Supply Chain Visibility Workshop and capacity building initiative for Local/Regional Logistics Sub-providers.
- 35. We recognize the importance of further facilitation, simplification and harmonization of customs procedures in APEC economies to make global trade more predictable, transparent and secure. In this regard, we instruct Sub-Committee on Customs Procedures (SCCP) to promote this work through application of international standards such as the Revised Kyoto Convention and World Customs Organization (WCO)/APEC SAFE Framework of Standards. Furthermore, we emphasize the necessity of cooperative efforts among relevant sub-fora on best practices to improve reliability of supply chains, effective risk management and diversification, in conjunction with relevant international organizations such as the WCO.
- 36. We emphasize the importance of work on improved reliability of supply chains, effective risk management, and diversification. We welcome work to establish reliable supply chains for chemical products through encouragement of product stewardship, safe use, and sustainability, and the development of a website for emergency response to chemical incidents and disasters. We reaffirm the importance of enhancing the emergency preparedness and disaster resiliency of APEC economies, communities and businesses. We welcome deepening scientific and technical cooperation among APEC economies in this field and support work on communication of crisis management centers in APEC economies. In this regard we encourage Senior Disaster Management Officials to focus on capacity building for PPP, business continuity, and supply chain resilience.

Intensive Cooperation to Foster Innovative Growth

- 37. We recognize innovation as a key growth factor for APEC economies and confirm the importance of open, competitive and well-functioning markets to the cultivation of innovation. Given the close relationship among science, innovation and economic growth, along with the likely dominant role of the Asia-Pacific region in science and innovation over the coming decades, we agree that a meeting of the chief science advisors or equivalents from APEC economies be held in 2013. This will be a valuable opportunity for the chief science advisors to network and discuss scientific issues of importance to the region, thereby reinforcing science relations at a senior level across the Asia-Pacific.
- 38. We recognize the importance of enhanced business involvement in discussions on innovation policy to our efforts to foster innovation in APEC economies. We support expanding the role of business and academia with establishing Policy Partnership on Innovation (PPI) through possible transformation of the Industrial Science and Technology Working Group (ISTWG). We instruct officials to develop the PPI mandate by AMM in Vladivostok.
- 39. We welcome work to assist economies in implementing the 2011 Leaders' commitment to promote effective, non-discriminatory, and market-driven innovation policy, including the outcomes of the APEC Conference on Innovation and Trade held in Singapore in April 2012 which emphasizes the importance of 1) free, open, fair and transparent trade and investment systems, including IP protection and open and non-discriminatory business environment; 2) human resource development; and 3) ICT networks, logistics, energy and other infrastructures for inter-connectedness among innovation actors, for accelerating innovation and trade. We instruct officials to take this work forward, including by

producing of innovation and trade implementation practices for Annex A of the 2011 Leaders' Statement.

- 40. We confirm the importance of bringing government, science, and businesses together to discuss issues associated with pre-commercialized technologies and share the prospects on development of relevant markets. We note the results of the Innovation Technology Dialogue on Nanotechnology for Energy Efficiency held in May 2012 in Kazan, and instruct officials to finalize by the AMM in Vladivostok recommendations on how APEC economies can make a contribution to this issue. We also instruct officials to consider mechanisms to hold innovation technology dialogues in the future.
- 41. We reaffirm our commitment to strengthen the protection and enforcement of intellectual property (IP) rights and reiterate the importance of comprehensive and balanced IP systems that provide for and protect incentives that encourage creativity and innovation and provide the tools for successful management and utilization of IP. We encourage cooperation among the relevant authorities of APEC economies towards this end. We also affirm the importance of work on IP education and training in the APEC economies and recognize the role of high-skilled human resources in IP protection. For this purpose we agree to improve the quality and effectiveness of educational programs, and promote the development of IP education systems in APEC economies.
- 42. Highlighting the results of 5th APEC Education Ministerial Meeting (AEMM) held on 21-23 May 2012 in Gyeongju, Korea, we confirm the importance of building open and transparent education systems that prepare workforces with skills and qualifications for the 21st century through innovative improvements, integration of advanced technology and improved information sharing and communication. We welcome the AEMM conclusion that educational cooperation is an essential driving force for sustainable, secure, inclusive, innovative, and balanced growth of the APEC region. We note different proposals for research, information and knowledge sharing in the area of education services. We recognize the importance of cross-border trade in education services and deepening educational cooperation in the Asia-Pacific. We ask officials to examine ways to better facilitate mobility of students, researchers and providers in the region taking into consideration circumstances of individual economies and to report on progress by September 2012.
- 43. Realizing the important role of Small and Medium Enterprises (SMEs) as source of innovative and forward-thinking ideas that can contribute to economic growth of the region, we reaffirm the importance of addressing trade and investment barriers for SMEs, including women enterpreneurs in the APEC region, and instruct officials to continue efforts to reduce such barriers. We are also encouraged by the performance of the Green Initiative aimed at promoting innovations of SMEs in green growth sectors by sharing best practices and policies of SME green innovations. Noting the importance of expanding SMEs' adoption and development of innovative practices in order to create a non-discriminatory market-driven innovation environment, we welcome work that promotes exchange of best practices on instruments for support of innovative SMEs.
- 44. We stress the importance of further innovative growth and deeper collaboration among APEC economies. To move forward in implementing Leaders' commitments on Growth Strategy from Yokohama and market-driven innovation policy from Honolulu, we instruct officials to report by AMM 2012 on APEC work undertaken to support this agenda.
- 45. We recognize the importance of the inclusion of young entrepreneurs in economic activities and, in this regard, support the implementation of Young Entrepreneurs Network (YEN) and welcome the first meeting of YEN to be held in August 2012 in St. Petersburg, Russia.
- 46. We welcome the follow-up work on the San Francisco Declaration of the High Level Policy Dialogue on Women and the Economy held in September 2011 to take concrete actions for women's economic participation and contributions towards sustainable and inclusive economic growth in the region. Noting the outcomes of APEC Leadership Forum on Women: Powerhouse for Economic Growth held in March 2012 in Yokohama, Japan, we support the preparations for the Women and the Economy Forum to be

held in June 2012 in St. Petersburg, Russia. We also call on APEC economies to ensure close collaboration between Policy Partnership on Women and the Economy, APEC SME working group, and YEN.

- 47. We reaffirm Leaders' commitment to deliver effective economic and technical cooperation recognizing the diversity in the range of experiences and systems across APEC economies.
- 48. Enhanced business engagement in APEC is important in achieving APEC's goals. We note the significant contribution that public-private activities can make to APEC work, and instruct officials to find ways to increase these interactions with ABAC and other stakeholders.
- 49. We acknowledge the increasing role of APEC economies in underpinning world growth. It is important to ensure that the upcoming AMM in Vladivostok will be a productive meeting in generating substantive recommendations to Leaders to strengthen the region's prosperity and leadership in the global economy.

MEETING OF APEC MINISTERS RESPONSIBLE FOR TRADE

Kazan, Russia 4-5 June 2012

Statement on supporting the multilateral trading system and resisting protectionism

- 1. We, the APEC Ministers responsible for trade, gathering for our XVIII meeting in Kazan, Russia, reiterate the importance of international trade as a key driver in fostering job creation and increasing the potential for strong, sustainable and balanced growth and development. We recognize the value, centrality and primacy of the multilateral trading system as embodied in the WTO.
- 2. We reaffirm that keeping markets open is essential for achieving a sustainable global recovery. Taking into account current uncertainties in the global economy and persistent risks of rising protectionist trends in world trade and investment, we remain firmly committed to keeping protectionism at bay and to continue working on initiatives which can contribute to further trade liberalization. At the same time, we express our deep concern about instances of rising protectionism around the world. We reaffirm the commitment made by our leaders in Honolulu to extend to the end of 2015 their pledge to refrain from raising new barriers to investment or to trade in goods and services, imposing new export restrictions, or implementing WTO-inconsistent measures in all areas, including those that stimulate exports. We remain committed to rollback the trade-distorting or protectionist measures introduced since the outset of the crisis and to continue to exercise maximum restraint in implementing measures that may be considered to be consistent with WTO provisions but have a significant protectionist effect and promptly rectify such measures, where implemented.
- 3. We share the view that in the current economic environment the multilateral trading system is more relevant than ever, and emphasize the need to enhance the WTO's functionality, including the work of the standing WTO bodies which are on the frontline of our efforts to combat protectionism. In this regard, we uphold the inventory and monitoring work of the WTO and other international organizations on trade and trade-related measures and encourage them to reinforce and deepen the work in these areas. We also reaffirm our previous undertaking to comply with WTO agreements, as well as to continue to ensure transparency and predictability in implementing measures that affect trade and investment.
- 4. We welcome the forthcoming accession of the Russian Federation to the WTO, which is a vote of confidence in the multilateral trading system and a valuable input to further strengthening of the WTO.
- 5. We reaffirm that the integration of developing economies into the multilateral trading system is an important task. In this respect, the "Aid for Trade" initiative, as well as other technical assistance and capacity-building activities, including in the APEC region, are important instruments in helping those economies to maximize the benefits of their participation in this system.
- 6. In conformity with the directive given by our leaders in Honolulu, and building on the work from the WTO 8th Ministerial Conference, we discussed the best ways to operationalize its "Elements for Political Guidance" outcome document. While we continue to be disappointed at the impasse in completing all the elements of the Round, our focus in APEC is on the best path forward. In that context, we discussed productive areas for ongoing work, including trade facilitation, as well as LDCs' accessions, as mandated by the WTO 8th Ministerial Conference, and other development-related issues. In working towards the successful multilateral conclusion of the Doha Development Round, we reaffirmed the instructions to our officials in Geneva to continue exploring different, fresh, and credible negotiating approaches while respecting the Doha mandate, the principles of transparency, the importance of the multilateral trading system, and development.

Document is designed for double-sided printing. Blank pages have been deliberately included to allow correct pagination.

SECOND APEC MINISTERIAL MEETING ON FOOD SECURITY

Kazan, Russia 30-31 May 2012

Kazan Declaration on APEC Food Security

Preamble

- We, the APEC Ministers responsible for food security, met in Kazan, the Russian Federation, from 30 to 31 May 2012 under the chairmanship of Mr. Nikolai Fedorov, Minister of Agriculture of the Russian Federation.
- 2. We welcomed the participation in the meeting of representatives from the Food and Agriculture Organization (FAO) of the United Nations, the World Food Programme (WFP), the International Fund for Agricultural Development (IFAD), the United Nations Conference on Trade and Development (UNCTAD), the World Bank (WB), the Asian Development Bank (ADB), the Association of South-East Asian Nations (ASEAN), and the APEC Business Advisory Council (ABAC).
- 3. Since the First APEC Ministerial Meeting on Food Security in Niigata in 2010, the situation in the field of food security has remained an issue of high importance.

In 2011 the FAO Food Price Index averaged 228 points, which exceeds its maximum value during the food crisis of $2007-2008^1$. According to OECD – FAO estimates, agricultural commodity prices will remain high and volatile until 2020^2 , making it even more difficult to enhance food security.

The number of undernourished people in the world is still high – 925 million in 2010 in comparison with 780 million in the late $1990s^3$. According to recent UN estimates, the global population is estimated to reach 9.3 billion by 2050^4 , requiring more efforts to raise global food production, and increase the efficiency of domestic and international markets. The situation of food insecurity in this region was further compounded by the increasing frequency of natural disasters often tied with global warming and extreme weather conditions.

- 4. We welcomed the Policy Partnership on Food Security (PPFS) established in 2011 to provide fuller integration of ABAC as well as relevant private sector and public sector stakeholders into APEC food security efforts in a more substantive manner; and we supported the long-term goal set by the PPFS to attain a food system structure by 2020 that would be sufficient to provide lasting food security to the economies of the region. We are pleased to note that Kazan hosted the first meeting of the Partnership and we expressed hope that this new entity will be the primary APEC consultative forum for consideration of food security policies.
- 5. We reaffirmed that APEC economies would collectively pursue the shared goals of (i) sustainable development of the agricultural sector, and (ii) facilitation of investment, trade and markets in the Niigata Declaration on Food Security. We further reiterated our support for the Rome Principles on Sustainable Global Food Security. In the follow-up of the Niigata Declaration, we agreed that to strengthen food security at the present stage, it is necessary, inter alia, to focus on the following issues:
 - increasing agricultural production and productivity;
 - facilitating trade and developing food markets;
 - enhancing food safety and quality;
 - improving access to food for socially vulnerable groups of population;
 - ensuring sustainable ecosystems based management and combating Illegal, Unreported and Unregulated (IUU) fishing and associated trade.

Increasing agricultural production and productivity

- 6. Increasing agricultural production on a sustainable basis is an essential factor of lasting food security in the APEC region. To achieve sustainable agricultural growth, it is necessary to raise agricultural productivity and decrease post-harvest losses, primarily through boosting investment and actively adopting innovative technologies in agriculture. The economies need to respond appropriately to environmental risks such as climate change, to work collaboratively to prevent the global spread of animal and plant pests and diseases that impact production, to promote efficient utilization of agricultural inputs and natural resources in particular land, water and biodiversity, to engage farmers including women, and to strengthen natural disaster preparedness and resilience, in the most suitable manner to specific regions, considering the diversity of environmental conditions world-wide and positive externalities of agriculture. We appreciated the efforts made by APEC members through the work of Agricultural Technical Cooperation Working Group (ATCWG) and Industrial Science and Technology Working Group (ISTWG) in carrying out the Niigata Action Plan on Food Security to enhance agricultural productivity and resilience to climate change in the region. We welcomed the efforts of the G20 under the Mexican Presidency to tackle sustainable agricultural productivity growth and bridging the gap for smallholder farmers.
- 7. High food prices contribute to attracting investment in agriculture in the long run. We recognized the need to create an enabling environment to encourage increased public and private investment in agriculture, the key role of responsible private investments, taking note of the catalytic role of public investment that can create appropriate conditions for farmers and other investors. We also recognized an important role for public-private partnership in the field of investment and called on the PPFS to pay close attention to this issue. While most required infrastructure investment in developing economies derives from public budget and resources, we agreed to pursue more sustainable infrastructure investment for agriculture from public-private partnership initiatives. We believe it is necessary to elaborate recommendations in the framework of the Partnership on improving the business climate in APEC economies.
- 8. Taking note of the positive role of foreign direct investment on increasing agricultural production, productivity and job creation in recipient economies, we appreciated the Principles for Responsible Agricultural Investment (PRAI) elaborated by the World Bank, FAO, IFAD and UNCTAD, and we supported the ongoing extensive consultations on these principles launched within the framework of the Committee on World Food Security (CFS). We welcomed the approval of the Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests (VG) by the CFS. We also welcomed ongoing works of the international organizations to identify best practices of responsible agricultural investment, in particular pilot projects to field test and operationalize PRAI. We encouraged private investment be carried out in a responsible manner with VG and PRAI being taken into account.
- 9. Since land, water and other natural resources are limited, it is especially important to encourage the safe development and application of innovative agricultural technologies, including: new high yield varieties of cultivated plants resistant to pests, diseases and climate change; improving animal genetics; the development of biotechnologies; extension services; adaptation of effective pest and disease management measures; and use of resource saving technologies and equipment. This requires a significant increase of long-term investment into agricultural research and development.

According to estimates of the International Food Policy Research Institute (IFPRI), such investment should be increased more than threefold by 2025. It also requires a commitment to facilitate appropriate access to genetic and genomic data, scholarly publications, and germplasm collections, and to support the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) for conservation and sustainable use of plant genetic resources. We encourage APEC economies to facilitate such access to the extent allowed by their laws and regulations. We welcomed the focus of G20 and FAO on the issue of agricultural research and innovations. In particular, we supported the efforts made by the Mexican Presidency of the G20 on giving the priority to strengthening R&D

coordination and cooperation, encouraging collaborative agricultural research through the mechanism of public-private partnerships.

10. We agreed that it was necessary to increase support, including funding, for agricultural research and development of innovative technologies through domestic and multilateral agricultural research systems. To strengthen these systems, it is important to strengthen domestic research institutes and innovation centers in each member economy, to establish new centers if necessary, and to enhance capacity building activities for researchers in developing member economies. We also agreed that it was necessary to improve the agricultural research system by engaging all stakeholders including farmers. We noted the importance of disseminating and utilizing innovative technologies by farmers in an efficient, effective and market driven manner. We supported better coordination and interaction among domestic research institutes and innovation centers, in particular through the Consultative Group on International Agricultural Research (CGIAR) and the Global Forum on Agricultural Research (GFAR). We also noted the importance of interaction among research institutes and innovation centers of APEC economies through a regional network of such institutes and centers so that they could exchange information and research results, and, in cases of mutual interest, collectively develop and introduce innovative technologies. We supported discussions in relevant APEC fora of the measures aimed at providing farmers and local communities with knowledge and practical research outcomes related to innovative agricultural technologies which are consistent with Annex A of the Honolulu Declaration.

We also supported elaboration of measures on using innovative technologies to mitigate and adapt to the impact of climate change on agricultural development and quality of products. In this regard, we welcomed collaborative work of the Global Research Alliance on Agricultural Greenhouse Gases (GRA), and encouraged APEC economies to enhance their engagement with this initiative.

- 11. Recognizing that agricultural biotechnologies are useful for increasing agricultural production and productivity, we agreed to promote more intense development and capacity building in the area of agricultural biotechnologies, harmonization of regulations in the field of biotechnologies, science based risk assessment related to agricultural biotechnology, and to improve transparency in decision-making. We reaffirmed our commitment to support implementation of the Action Plan: Facilitating Trade in Products Derived from Innovative Agricultural Technologies in order to fulfill APEC Ministers' commitment made at the APEC Ministerial Meeting (AMM) held on November 11, 2011. We instructed the High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB) to participate directly in this work including on the low level presence of genetically modified crops. We also supported reviewing implementation of recommendations of the Innovative Agricultural Technology Forum (September 2011) and elaborating proposals for further actions in this field.
- 12. Taking into account the fact that our region is particularly prone to natural disasters, we underscored the importance of strengthening APEC's agenda on disaster preparedness and for the recovery of agricultural production and the food supply chain.

Facilitating trade and developing food markets

- 13. A strategy of strengthening food security can only be effective if it is based on fair and market oriented trade. Therefore, we agreed that one of the key objectives in the food sector is combining efforts to search for efficient ways and tools needed for formation and development of food markets.
- 14. Agricultural trade plays a key role in achieving food security. To this end, we reconfirmed the value of an open and rules-based multilateral trading system under the framework of the WTO, which provides predictability and stability in agricultural trade. We agreed on the need to sustain the benefits of globalization and open markets, highlighting the crucial importance of encouraging science-based standards, rejecting protectionism and encouraging the development of regionally integrated markets.

We have to ensure the steady supply of food flow in the world market while working towards a longer term stabilization of food supply, thus enhancing productivity and ensuring regional food security. Recognizing that bans and other restrictions on the export of food may cause price volatility, especially for economies that rely on imports of staple products, we reconfirmed the commitments on protectionism made by APEC Leaders.

15. We noted that mitigating the impacts of excessive food price volatility can assist in strengthening global food security. Effective food market monitoring and the exchange of reliable and up-to-date data and information on production volumes, consumption, trade and food reserves will help enhance market transparency and predictability, and mitigate the volatility of food prices.

We appreciated the efforts of Japan on elaborating and launching the Asia-Pacific Food Security Information Platform (APIP) in March 2012. We also welcomed the Action Plan on Food Price Volatility and Agriculture adopted by the G20 Ministers of Agriculture in June 2011 in Paris and its measures, including the establishment of the Agricultural Market Information System (AMIS). We agreed to consider opportunities for cooperation between AMIS and APIP, starting with: the establishment of links between the two systems; participation of APEC economies that are beyond G20 and AMIS in the two information systems; and opportunities for further development of a common information system in terms of better functionality, availability, and coverage of more various agricultural commodities markets. We highly appreciated the new initiatives of the ASEAN region to create a new pilot forum on food such as the ASEAN Rice Trade Forum.

- 16. We noted the importance of transparency and WTO-consistent market regulations as an essential mechanism to enhance agricultural trade and lower volatility risk. We suggested that the APEC Finance Ministers discuss transparency and WTO-consistent market regulations of agricultural financial markets with due account for the activities of G20 and the International Organization of Securities Commissions in this area.
- 17. Development of food markets infrastructure and their better logistical support are important for the general development and mutual integration of markets, and help cut losses along the whole food supply chain. We noted the importance of attracting targeted investment in the development of food market infrastructure and more advanced post-harvest management, elaborating approaches to improving the operation of food supply chains, including through the development of modern supply chains the value chains. We confirmed the importance of APEC as a platform for technical cooperation and funding to economies in the field of food market infrastructure development, and post-harvest losses reduction along the whole food supply chain from production to consumption.

Enhancing food safety and quality

- 18. We noted that APEC economies had made significant progress in adopting international standards on sanitary and phyto-sanitary (SPS) measures as well as technical regulations on food safety and quality as developed by the Codex Alimentarius Commission, the World Organization for Animal Health (OIE) and the International Plant Protection Convention (IPPC). The achieved results strengthen food supply chains in the region and provide new opportunities for developing trade in safe and quality food. We emphasized the importance of encouraging the further development of mutual understanding and recognition among economies regarding the benefits of harmonizing domestic regulations with international standards.
- 19. We appreciated the effective and multi-faceted work of the Food Safety Cooperation Forum (FSCF) and its Partnership Training Institute Network (PTIN). To improve domestic systems of food safety regulation, it is necessary to better align domestic regulations to international standards, strive to minimize food safety incidents, implement preventive control measures, and build laboratory capacity. We acknowledged the establishment of PTIN training modules on supply chain and good manufacturing practices, more active interaction within the International Food Safety Authorities Network (INFOSAN), and increased dialogue and capacity building initiatives in regard to laboratory proficiency. We supported the creation of the World Bank Global Food Safety Partnership (GFSP) and encouraged APEC economies to support the GFSP and its multi-donor trust fund, which will be housed

at the World Bank and will harness contributions from both the public and private sector to fund GFSP activities.

Improving access to food for socially vulnerable groups of population

- 20. The objective of food security is not only to facilitate the accessibility of nutritious and sufficient food for people, but also to provide economic and physical access to food for socially vulnerable groups, including those facing emergency food needs due to natural disasters. We urged the economies to intensify dialogue and cooperation on this issue, to strengthen sustainable social protection and social safety nets, to continue searching for new sets of tools to improve them within domestic strategies, to actively engage the collaborative research potential, technical support and aid from the FAO, World Bank and World Food Programme (WFP), and other appropriate international and regional specialized governmental and non-governmental organizations to achieve this goal.
- 21. In this regard, we encouraged the exchange of best practices on the provision of food for vulnerable populations, including through social and school feeding, the development of local agricultural production in areas of comparative advantage, procurement systems, and the processing industry. We recommended that this topic should be included in the agenda of the ATCWG, PPFS and other relevant APEC bodies.

We agreed to work together and tasked ATCWG, Emergency Preparedness Working Group (EPWG) and ISTWG to enhance the regional capacity to mitigate, prepare for, respond to and recover from disasters. We appreciate the feasibility study on establishing the APEC Food Emergency Response Mechanism (AFERM) and anticipate a follow-up proposal to explore feasible approaches that would complement existing mechanisms.

Ensuring sustainable ecosystems based management and combating Illegal, Unreported and Unregulated (IUU) fishing and associated trade

- 22. In the follow-up of the main provisions of the Seoul Oceans Declaration (2002), the Bali Plan of Action (2005) and the Paracas Declaration (2010), we noted the extreme importance of the sustainable management of marine ecosystems, fisheries and aquaculture, and combating IUU fishing and associated trade. For many economies of the APEC region, fisheries and aquaculture are significant components of social and economic wellbeing and contribute significantly to food security. In recent decades, global fishing has faced serious problems degradation of the marine environment, overexploitation, and IUU fishing have damaged marine ecosystems and depleted fisheries resources.
- 23. We recognized the importance of strengthening partnerships on a bilateral and multilateral basis on: combating IUU fishing and associated trade as well as destructive fishing practices; improving capture fisheries management and sustainable aquaculture practices; implementing ecosystems based management approaches; reducing excess fishing capacity; enhancement of transparency in fishing regulations; and promoting contributions of small scale fisheries and aquaculture to food security. In this context, we requested Senior Officials and the Ocean and Fisheries Working Group (OFWG) to promote cooperation and exchange information concerning IUU fishing and management measures applied by the Regional Fisheries Management Organizations (RFMOs) and other relevant organizations.
- 24. We stressed the importance of facilitating sustainable, open and fair trade in products of fisheries and aquaculture. We also emphasized the need to enhance cooperation to combat IUU fishing, to effectively manage marine fisheries and sustainably develop aquaculture production, to promote strengthening of food security and to develop interactions with international organizations, financial institutions and private sector.

Follow-up

- 25. We noted the progress in carrying out the Niigata Declaration on APEC Food Security and supported the importance of continuing to conduct reviews of the implementation of the Niigata Action Plan. We requested that the APEC Secretariat take stock of the Action Plan implementation. The analysis of the results should take into account both achievements and concerns, and be transmitted to APEC economies, including through APIP.
- 26. We welcomed the success of the Second APEC Ministerial Meeting on Food Security and expressed our sincere gratitude to the Government of the Russian Federation and the Government of the Republic of Tatarstan for the warm welcome and excellent organization of the Ministerial Meeting.

⁴ UNFPA (2011) State of World Population 2011

¹ FAO Food Price Index – March 2012

² OECD - FAO (2011) OECD - FAO Agricultural Outlook 2011 - 2020

³ FAO (2010) The State of Food Insecurity in the World 2010

5TH APEC EDUCATION MINISTERIAL MEETING

Gyeongju, Republic of Korea 21-23 May 2012

Joint Statement Envisioning Together for the Future and Hope

Introduction

- We, the Education Ministers and senior officials of Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; the Philippines; the Russian Federation; Singapore; Chinese Taipei; Thailand; the United States; and Viet Nam convened for the 5th Ministerial Meeting in Gyeongju, Republic of Korea on May 21-23, 2012, under the Chairmanship of Ju-Ho Lee, Minister of Education, Science and Technology of the Republic of Korea.
- 2. We met under the theme of 5th AEMM, *Future Challenges and Educational Responses: Fostering Global, Innovative and Cooperative Education*, which closely correlates with APEC priorities proposed by the Russian Federation in the year of 2012 as far as cooperative education is an integral part fostering regional innovative growth, promoting future skills suitable for the global society, creating innovative instructional delivery systems, and fostering more collaborative policy decisions that provide for our common fulfillment.
- 3. We acknowledge that the mission of APEC is "to support sustainable economic growth and prosperity in the Asia-Pacific region," and recognize the significance of achieving a dynamic and harmonious Asia-Pacific community by championing free and open trade and investment and promoting regional economic integration, and the importance of providing all students with a quality education enabling them to engage in the globalized economy. With increasing flow of investment, skilled labor, knowledge, and skills among economies, education is critical in facilitating regional economic integration and enhancing prosperity among the APEC member economies.
- 4. We further recognize that the changing nature of work requires workers to have higher levels of highquality education and the competencies demanded by the nature of work and the change in nature of education with the integration of technology and introduction of innovative teaching and learning practices. Finally, the changing nature of education drives the need for increased cooperation and collaboration among education providers, businesses, researchers, and other stakeholders, to better meet the needs of all students and learners, as well as the economy.

Development & Progress

- 5. We acknowledge the development and progress made by the Human Resources Development Working Group (HRDWG) and the Education Network (EDNET) in expanding and extending the education knowledge-base for the APEC region. We recognize the importance of the work carried out by EDNET in building and sharing knowledge through the APEC Human Resource Development (HRD) Knowledge Bank Wiki and the APEC Learning Community Builders (ALCoB) networks in developing the 2008 education priority areas: mathematics and science education, career and technical education (CTE)/technical and vocational education and training (TVET), learning each other's languages, and information and communication technology (ICT) and systemic reform.
- 6. We recognize the wealth of knowledge accumulated in the priority areas since the 4th APEC Education Ministerial Meeting (AEMM) in Peru in 2008. We reaffirm the importance of developing priority areas to guide the APEC region towards creating learning societies and achieving prosperity for all the people of the member economies. Further, strengthening the competencies and skills of the entire 21st century

population with such qualities as critical thinking, problem-solving, communication, and collaboration, technology savvy, and foreign language is critical in this globalized world.

7. We acknowledge the successful Pre-ministerial meeting organized by EDNET in Moscow in February 2012, where researchers and policy-makers exchanged research findings and policy analyses that reflect our member economies' greatest needs. We recognize the progress made by HRDWG and EDNET in promoting the role of education in social, individual, economic and sustainable development, and agree to continue to support research and policy analyses through EDNET.

Globalization and Education

- 8. The increased flow of human capital and information has expanded the opportunities for regional integration of the APEC member economies. We are aware that people have greater access to information and knowledge, and that they are increasingly interacting with diverse cultures. We acknowledge that education plays a key role in sustainable and inclusive growth in the APEC region. We recognize the importance of the 2012-2016 APEC priority areas of mathematics and science, language and culture, and TVET and higher education quality to equip students with the 21st century competencies they need for their full participation in the globalized and knowledge-based society.
- 9. In the current state of the globalized society, we acknowledge that increased cultural sensitivity for fostering global competencies and communication skills is essential. In addition, improved teaching and learning of mathematics and science will further develop students' logical thinking and cognitive skills, along with promoting creativity and flexibility. These skills can be a basis for the students to acquire practical knowledge about disaster risks and related competencies and apply them to real-world problems. We also recognize the importance of preparing a qualified workforce with 21st century skills, promoting cultural understanding, and continuing quality improvement in TVET and higher education.
- 10. The Ministers reviewed the recommendations proposed by EDNET in the priority areas of mathematics and science education, language and culture education, and TVET and higher education quality. We agree on the importance of further refinement of educational responses in the following directions:
 - a) Continue to upgrade mathematics and science education capacity across the APEC member economies. Identify the best practices that ensure students are learning the foundation of mathematics and science and applying this learning to real-world issues, such as preserving the environment, reducing damage due to disasters, and achieving green and sustainable growth.
 - b) Create an open environment for education collaboration in mathematics and science starting with a joint data-base of mathematical problems, assessments, and evaluation methods.
 - c) Support foreign language education throughout students' academic careers and develop a system to nurture and train highly qualified language education teachers who also reflect cultural diversity.
 - d) Expand opportunities to participate in TVET programs for students, especially women and girls as well as diverse learners, and strengthen public-private partnership integrating TVET education so that the skills students acquire reflect the actual needs of the global labor market for in-demand occupations within high-growth industry sectors.
 - e) Improve the quality of higher education by strengthening the teaching force, assuring quality through high quality indicators and best practices facilitating the mobility of students and education providers between and among APEC member economies.

Innovation in Education

11. We daily witness advances in technology and the consequential rapid transformation in ways information is shared. ICT is a tool for social and economic development. We acknowledge the importance of enhancing ICT use in education for innovative and inclusive growth in the APEC region, but recognize that an ICT infrastructure and development divide still exists across the APEC member economies. We also recognize that there is a need to improve teachers' capability to use ICT effectively so that they can help students acquire the 21st century competencies, and that considerable attention needs to be paid to teacher preparation and training.

- 12. We recognize the importance of teachers, and teacher quality as the most important factor determining students' success. Developing students with 21st century competencies requires fundamental and innovative changes in instruction and hence teacher preparation and development. We acknowledge that supporting teachers at every stage from recruitment to induction to career development is critical in establishing APEC's education capacity to provide workers that are among the most productive in the world.
- 13. In review of the recommendations proposed by EDNET in the priority areas of ICT in education and teacher quality, the Ministers direct EDNET to focus on the following educational responses:
 - a) Share experiences of ICT use in education, including development and implementation of nationallevel Master Plans for ICT utilization in education and the creation of open education resources (OERs), such as those found on the APEC HRD Wiki. Also, encourage the sharing of information about the development of ICT use in education among the member economies.
 - b) Strengthen teacher practices in ICT-utilized instruction that provides the most benefits for students' learning in the mathematics, science, language, culture, and TVET subject areas.
 - c) Increase the number of teachers' participation from the member economies in APEC eLearning courses.
 - d) Share promising practices on strengthening the teacher development pipeline, from pre-service to in-service stages of a career on issues such as recruitment, preparation, career paths, induction, incentives, assessment, and quality standards.

Educational Cooperation for the Future

- 14. We recognize the importance of the APEC Leaders' Growth Strategy for prosperity in the Asia-Pacific region and emphasize that education plays a key role as one crucial vehicle for implementing and realizing it. In the context of globalization, the Ministers agree that educational cooperation is an essential driving force for sustainable, secure, inclusive, innovative, and balanced growth of the APEC region.
- 15. We recognize that educational cooperation must be enhanced among and within the member economies in overcoming our global and regional challenges such as overcoming financial and environmental crises, reducing economic and digital divides, reducing natural and man-made disaster risks, and increasing the feasibility of the recommendations made for the priority areas. The Ministers agree on the need to explore ways of expanding education cooperation among the APEC member economies.
- 16. We acknowledge that the extent to which the member economies cooperate is vital for strengthening the capacity and future viability of education efforts within the APEC region. The Ministers applaud the growth of university-sponsored projects that bring together consortia of universities such as Mathematics and Science Lesson Study led by Kheon Kaen (Thailand) and Tsukuba (Japan) universities, Foreign Language Lesson Study led by Ming Chuan University (Chinese Taipei), ALCOB co-supported by Pusan National University (Korea), teacher preparation in mathematics and science secondary education quality projects led by National Institute of Education (Singapore), Columbia University (United States), and the University of Waikato (New Zealand), and higher education quality projects led by Monash University (Australia), East China Normal University (China), the University of Hawaii (United States), and Far Eastern Federal University (Russian Federation). The Ministers agree that the direction of future educational cooperation efforts should include both information exchange and other practical forms of cooperation which aligns with the HRD-PPP (Moscow Initiative).
- 17. We recognize the need for cooperative models and best practices in order to share and learn from each other and elevate the level of educational cooperation. We agree on the need for multi-year projects in EDNET in facilitating and evaluating regional collaborative projects. Future directions for support need to include the development of strategies for collaborating among people, sharing resources, and networking institutions in all the APEC member economies. We expect this educational cooperation will produce synergies when combined with current collaborative mechanisms like the on-going, US-

funded APEC Wiki knowledge creation and dissemination efforts and the Korea-sponsored ALCoB activities that already support regional cooperation. Ministers noted the work of officials in exploring a number of proposals for research, information, and knowledge sharing in the field of education services including the proposed initiative by the Russian Federation for the development of higher education cooperation. The Russian Federation informed the Ministers that they will hold a conference on this topic.

- 18. We welcome Korea's recommendation to enhance practical and sustainable educational cooperation with the title of Education Cooperation Project (ECP), Gyeongju Initiative. Ministers appreciate Korea's initiative on cooperation.
- 19. After consideration by EDNET, we direct the Education Cooperation Project draft an outcome report, tentatively entitled, APEC Educational Cooperation Strategies and be submitted to the 6th AEMM through EDNET by 2016. This report of APEC Educational Cooperation Strategies should include identification of possible ways for expanding educational cooperation for the future prosperity of all APEC member economies, and should consolidate all the findings of the collaborative research and the discussions in the symposiums for the years 2013 to 2016. The report should also provide directions for building a mutually beneficial system of APEC educational cooperation for the maximum benefit of all APEC economies. In addition, we direct EDNET to build an education cooperation portal page on the APEC Knowledge Bank Wiki that links to external resources and to wiki pages describing ECP related research findings, materials, and resources.

Conclusion

- 20. We affirm that education efforts are underway by APEC member economies with international education organizations beyond the Asia-Pacific region, such as OECD, EAS, OAS, SEAMEO, the World Bank, and UNESCO, for the strengthening of cooperative research and the sharing of best practices across the global community within APEC guidelines on managing cooperation with non-members. We request EDNET to leverage and strengthen these current relationships and build new partnerships with bilateral and multilateral organizations by promoting activities that correspond with the Ministers' priorities as well as APEC HRDMM.
- 21. We request that EDNET, report on conclusions reached at the 5th APEC Education Ministerial Meeting at the next APEC Leaders' Meeting in Vladivostok, Russia in September 2012, and provide the Ministers with an Annual Report of Progress towards the goals that we have established.
- 22. We would like to extend our most sincere appreciation and gratitude to the Republic of Korea, our host economy, for their excellent coordination and preparation of the meeting. We also express our thanks to the APEC Support Fund and Russia for funding the 3rd Pre-Ministerial Symposium on Education Research and Policy, and to China, Korea, Peru, Russia, and the United States, for building the research and policy base for the priority areas adopted by the Ministers. Finally, our sincere appreciation to EDNET, the HRDWG, and the APEC Secretariat for their important contributions to the success of this meeting.

Abbreviations and Acronyms

ABAC	APEC Business Advisory Council
ACTWG	Anti-Corruption and Transparency Experts' Working Group
AEMM	APEC Education Ministerial Meeting
AFERM	APEC Food Emergency Response Mechanism
ALCoB	APEC Learning Community Builders
AMIS	Agricultural Market Information System
AMM	APEC Ministers Meeting
ANSSR	APEC's New Strategy for Structural Reform
APEC	Asia-Pacific Economic Cooperation
APERC	Asia Pacific Energy Research Centre
APIP	Asia-Pacific Food Security Information Platform
ARFP	Asia Region Funds Passport
ASA	APEC Start-up Accelerator Initiative
ASEAN	Association of Southeast Asian Nations
ASPIRE	APEC Science Prize for Innovation, Research, and Education
ATCWG	Agricultural Technical Cooperation Working Group
CBNI	Capacity Building Needs Initiative
CMCs	Crisis Management Centers
CTE	career and technical education
CTI	Committee on Trade and Investment
DRM	disaster risk management
ECOTECH	economic and technical cooperation
EDNET	Education Network
EGCFE	Expert Group on Clean Fossil Energy
EGEDA	Expert Group on Energy Data and Analysis
EGILAT	Experts Group on Illegal Logging and Associated Trade
EPWG	Emergency Preparedness Working Group
ESI	Energy Security Initiative
EWG	Energy Working Group
FATF	Financial Action Task Force
FSCF	Food Safety Cooperation Forum
FTAAP	Free Trade Area of the Asia-Pacific
GFSP	Global Food Safety Partnership
GHS	Globally Harmonized System
GNSS	Global Navigation Satellite Systems
GRP	good regulatory practices
HRDWG	Human Resource Development Working Group
HWG	Health Working Group
ICT	information and communication technologies
IEA	International Energy Agency
IFAP	Investment Facilitation Action Plan
IP	intellectual property
IPR	Intellectual property rights

ISTWG	Industrial Science and Technology Working Group
ITA	WTO Information Technology Agreement
ITD	Innovation Technology Dialogue
ITS	Intelligent Transportation Systems
IUU	illegal, unreported and unregulated
LCMT	Low-Carbon Model Town
LSIF	Life Sciences Innovation Forum
MRA-CA	Mutual Recognition Arrangement for Conformity Assessment of
MIKA-CA	Telecommunication Equipment
MRA-ETR	Mutual Recognition Arrangement for Equivalence of Technical Requirements
MRM	Ministers responsible for Mining
MRT	Ministers Responsible for Trade
NCDs	non-communicable diseases
OFWG	Ocean and Fisheries Working Group
PATA	Pacific Asia Travel Association
PECC	Pacific Economic Cooperation Council
PIF	Pacific Islands Forum
PISA	Programme for International Students Assessments
PPFS	Policy Partnership on Food Security
PPSTI	Policy Partnership on Science, Technology and Innovation
PPWE	Policy Partnership on Women and the Economy
PRAI	Principles for Responsible Agricultural Investment
PSU	Policy Support Unit
PTIN	Partnership Training Institute Network
REI	regional economic integration
RFID	radio frequency identification
SMEs	small and medium-sized enterprises
SMEWG	Small Medium Enterprises Working Group
SMMEs	small, medium and micro-sized enterprises
STAR	Services Trade Access Requirements
TFI	Travel Facilitation Initiative
TMM	Tourism Ministerial Meeting
TVET	technical and vocational education and training
UNCAC	United Nations Convention against Corruption
WFP	World Food Program
WSIS	World Summit on the Information Society
WTO	World Trade Organization
YEN	Young Entrepreneurs Network