

Environmental Services Action Plan (ESAP)

Final Review

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Introduction

Overview

APEC has been working on trade liberalization, facilitation and cooperation in environmental goods and services in pursuit of clean and sustainable development. This agenda has been advanced through several key initiatives such as “the APEC Environmental Goods and Services Work Program” identified by APEC Leaders as a key thrust in APEC’s sustainable growth agenda¹, the Leaders’ commitment declared in the Yokohama Vision in 2010², and the Leaders’ agreement set out in the Annex C of the Honolulu Declaration in 2011.³

In 2012, APEC leaders endorsed the APEC List of Environmental Goods that directly and positively contribute to APEC’s green growth and sustainable development objectives. APEC economies collectively committed to reduce tariff rates applied to goods on the list to five percent or less by the end of 2015, factoring in economies’ financial circumstances without prejudice to their positions in the WTO.

In line with the significant achievements in the area of environmental goods, in 2015, APEC Ministers welcomed the endorsement of the Environmental Services Action Plan (ESAP) to promote liberalization, facilitation, and cooperation in environmental services, aiming for an interim progress review by 2018 and a final review in 2020.

The importance of the ESAP agenda is heightened by the Covid-19 pandemic, as environmental services are important for the avoidance of air quality dangers known to exacerbate the effects of the virus. Moreover, the efficiencies and capacity building facilitated by international trade are key to pursuing swift economic recoveries.⁴ Environmental products and services remain critical to human wellbeing, particularly as the globe deals with the combined threats of the pandemic, climate change, and the degradation of air and water quality. APEC economies are rightly seeking to expand their efforts to provide all residents with high-quality environmental services. Despite temptation for economies to withdraw into isolation and protectionism, endeavors to facilitate the flow of these essential services should not be abandoned in these trying times.

ESAP Phase 1

Actions based on ESAP were divided into three phases. Phase 1 consisted of studies conducted by APEC in collaboration with the Policy Support Unit (PSU) and has two stages according to varying objectives.

¹ “2009 Leaders’ Declaration”, APEC, 2009.

² “The Yokohama Vision – Bogor And Beyond”, APEC, 2010.

³ “Annex C - Trade and Investment in Environmental Goods and Services”, APEC, 2011.

⁴ “Statement on COVID-19 by APEC Ministers Responsible for Trade”, APEC, 2020. https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Trade/2020_trade

During the first stage of Phase 1 (Phase 1-1), APEC conducted a survey of regulatory measures relating to environmental services as defined in the Central Product Classification (CPC).⁵ The title of the study is “Survey of Regulatory Measures in Environmental Services” (2016).

The second stage of the Phase 1 (Phase 1-2), involved the development of the following sectoral studies to build and enhance common understanding of the roles of a wider range of services in environmental business:

- Sector Study on Environmental Services: Energy Efficiency Businesses (2017)
- Sector Study on Environmental Services: Environmental Damage Remediation Services (2017)
- Sector Study on Environmental Services: Renewable Energy (2017)

In addition, to identify key challenges which industrial experts and business representatives face in this region, APEC, PSU, the Pacific Economic Cooperation Council (PECC), and Japan’s Ministry of Economy, Trade and Industry (METI) organized the “APEC Workshop on Environmental Services” in Hanoi, Viet Nam, in May 2017.

ESAP Phase 2

The overarching goal of Phase 2 of ESAP was to promote trade liberalization, facilitation and cooperation in environmental services. Initially, APEC reviewed the work completed in Phase 1 and identified the following key challenges in need of further exploration:

- Widening the scope of environmental services
- Liberalizing environmental services in line with environmental goods
- Optimizing regulatory measures on environmental services
- Developing human resources
- Raising awareness towards environmental services

These challenges are summarized below and explained in more detail in the Interim Review of ESAP.⁶ Based on these challenges, APEC compiled a set of recommended action items, which were refined into a research project, “Study for Final Review of Environmental Services Action Plan (ESAP)” (GOS 02 2019T). This study forms the backbone of ESAP Phase 3.

Widening the Scope of Environmental Services

The Central Product Classification (CPC) is the most widely-used definition for environmental services, having first been developed in 1991 and providing the foundation for liberalization commitments in the WTO General Agreement on Trade in Services (GATS). Although the CPC has been revised multiple times (now on version 2.1), commitments in most Free Trade Agreements (FTAs) are still based on the first iteration, known as the Provisional CPC.

Despite changes to the environmental sector and the CPC itself, environmental services, found in Division 94 of CPC 2.1, are still only considered to include:

- Sewerage services
- Waste collection services
- Waste treatment and disposal services

⁵ The Central Product Classification (CPC) is a product classification for goods and services promulgated by the United Nations Statistical Commission. Environmental Services are found in Division 94 of the CPC.

⁶ “Environmental Services Action Plan (ESAP): Interim Review”, APEC, 2018.

- Sanitation and similar services
- Other environmental protection services.

Surveys conducted during Phase 1 reveal shortcomings in the current definition. The Phase 1-1 study examined environmental services covered by CPC 94 and concluded that the current coverage of CPC 94 could be amended to include a more detailed set of environmental services, as well as complementary services which impact businesses delivering environmental services in foreign markets. A wider definition would facilitate more complete understanding of the relevant regulatory measures in place. The three sectoral studies conducted in Phase 1-2 also illustrate the necessity of review of the range of environmental services.⁷

In addition, at the APEC Workshop on Environmental Services (2017), the importance of widening the range of environmental services was intensely discussed. A speaker from the WTO Secretariat noted that the environmental services classification used in most FTAs has been repeatedly criticized for being obsolete⁸ because it does not include any services that can have non-environmental end-uses. Various proposals have been submitted to WTO but there is no consensus regarding how to modify the definition of environmental services.

Liberalizing Environmental Services in line with Environmental Goods

The trend of servicification leads to the increasing importance of services in manufacturing activities and the increased difficulty in distinguishing goods from services.⁹ Although this trend is not unique to the environmental sector, there are good reasons to believe this phenomenon to be particularly outstanding in the case of environmental goods and services because there exist strong complementarities between environmental goods and the provision of services. For example, the installation and operation of machines and equipment used in preventing or abating pollution can be complex, requiring users to possess specific knowledge and skills that can be costly to acquire.¹⁰

Phase 1 of ESAP also describes strong complementarities between environmental goods and services. The study on renewable energy services (2017) explains the necessity of liberalizing environmental services along with environmental goods because numerous services are essential to the proper delivery, installation and operation of renewable energy equipment. This strongly suggests that efforts to liberalize trade in renewable energy services and the current negotiations to address obstacles to trade in environmental goods cannot be considered independently.

On top on this, APEC is in a good position to promote liberalization of environmental services keeping pace with environmental goods because, as noted by one panelist at the workshop on environmental services (2017), APEC is the only organization that has produced positive results regarding the liberalization of environmental goods (referring to the APEC List of Environmental Goods).¹¹

⁷ Modern FTAs (e.g. USMCA and CPTPP) often avoid the issue of defining the environmental services sector by using the negative list approach. The use of negative lists is discussed in more depth in the APEC Study for Final Review of Environmental Services Action Plan (ESAP) - Final Report. (Project No. GOS 02 2019T, expected to be published in the year 2020).

⁸ "APEC Environmental Services Workshop summary report", APEC. Pp 2

⁹ "Services in Global Value Chains", OECD, 2017. Pp8.

¹⁰ "Trade in services related to the environment", OECD, 2017. Pp 9.

¹¹ "APEC Environmental Services Workshop summary report", APEC. Pp 6

Optimizing Regulatory Measures on Environmental Services

Phase 1 of ESAP indicates two types of regulatory challenges. One is the lack of clear regulations. The other is the existence of regulatory measures which work as barriers to trade.

Regarding lack or absence of regulations, the Phase 1-1 study which conducts research on regulatory measures in APEC economies, claims that regulations are largely informal, nonexistent, and not publicly available in less developed APEC economies in general.

Regarding acting as barriers to trade, the Phase 1-1 study identifies regulatory measures which apply to all service sectors and are specific to environmental services. The study indicates that licensing and approval procedures are the most numerous measures impacting on environmental services, and the multiplicity and complexity of their requirements can impede trade, especially where approval procedures are open to administrative discretion or are lacking in transparency. Controls on workers, limits on foreign investment, and restrictions on the form of legal entity are also regulatory measures identified in the study. In cases that these measures impede the ability of foreign providers to participate in the market, they may act as barriers to trade.

The renewable energy study points out that local content requirements can be the most critical barrier to trade in renewable energy products and services through mandating that foreign service providers have local partners or majority local ownership.

Developing Human Resources

The Phase 1-1 study describes that controls on workers are significant and widespread and they can limit effective access for services operation and establishment. According to the energy efficiency businesses study (2017), energy efficiency service providers (ESPs) face human resources challenges at all stages of business development and project implementation. Also, in economies where the energy efficiency services are less developed, companies lack human resources with technical competence. This results in companies having insufficient human capacity to meet the actual market demand for services.

The environmental damage remediation services study (2017) illustrates that as services need local expertise to advancing projects, lack of local experts acting as consultants and workers can drive up costs. The lack of skilled technicians to design and install renewable energy equipment are also identified as barriers that limit the deployment of renewable energy.

Raising Awareness towards Environmental Services

With regards to regulation, some environmental services sectors suffer from a lack of recognition. The energy efficiency businesses study shows that governments may not recognize or understand the ESP industry. This leads to over or under-regulation of the industry, which can hurt economic growth.

The study on environmental damage remediation services points out that, generally in developing economies, the demand for these services is seen as lower priority, as other policy needs such as economic advancement and basic public services are considered to have a more immediate and apparent impact on quality of life and productivity.

Though the recognition of negative environmental and socioeconomic impacts caused by pollution is increasing, the path to recognition, and thus regulatory optimization, for many environmental services companies is unclear.

ESAP Phase 3

The Study for the Final Review of ESAP is split into three study items and accompanied by a presentation. Table 1 shows the relationship between APEC's recommended action items and the Study for Final Review of ESAP.

Table 1: Phase 2 Recommended Action Items & Study

Study Section	Action Item
1) Explore methodologies to identify the scope of environmental services	Stocktaking discussions regarding coverage of environmental services through reviewing existing suggestions of classifications of environmental services
	Providing a more comprehensive picture to depict the relationship between environmental goods and services in trade
2) Gather good regulatory practices and to propose a capacity-building plan on licensing and approval procedures	Collecting and sharing good regulatory practices from actual cases regarding encouraging trade in environmental services
3) Identify capacity building needs of technicians and workers in the sectors of environmental services	Identifying capacity building needs to elevate human resources availability in environmental projects through measures related to technicians and workers
4) Presentation made during workshop held in August 2020	Introducing good precedence or existing initiatives which successfully raised public awareness and help economies achieve sustainable growth, while promoting economic advancement

Source: APEC CTI

Phase 3 also includes this Final Review of ESAP, which summarizes the goals and achievements of the initiative, and proposes ways to proceed beyond 2020.

Study for Final Review of ESAP

Overview

The Study for the Final Review of ESAP builds on the previous APEC reports that have contributed to ESAP. Each section of the report seeks to address established action items intended to advance the liberalization of trade in environmental services (Table 1). The project began in February 2020, with the first progress report due in April and the final product submitted in August 2020.

Desk-based research was complemented by findings from interviews and correspondence with stakeholders and experts from government, industry, and academia in APEC and beyond. Experts from various fields and professional backgrounds were consulted to ensure that the study reflects a range of perspectives and negotiating positions. Assessing a diversity of positions is key to the ultimate goal of encouraging APEC-wide alignment on trade in environmental services that has so far proven elusive.

Section 1: Defining Environmental Services

Previous research that has found the scope of environmental services to be too narrow. Numerous studies, including APEC reports from Phase 1 of ESAP, have suggested that definitions for the environmental sector could be expanded to include additional services that contribute to environmental protection by preventing pollution and mitigating climate change, as opposed to mainly addressing environmental waste and degradation ex-post.

Commitments to liberalize trade in environmental services are made through the multilateral General Agreement on Trade in Services (GATS) and bilateral or regional Free Trade Agreements (FTAs). In these agreements, the definition of environmental services is based on the UN Statistical Commission (UN Stats) Central Product Classification (CPC), first published in the early 1990s and only lightly edited since. This definition has long been considered flawed, and economies have recognized the need for an updated definition of environmental services that better reflects the full range of services that it entails. In recent years, most progress on the liberalization of environmental services has been achieved through the use of negative lists, which are increasingly popular in modern FTAs. However, negative lists are not always possible, and the CPC remains the only agreed-upon way to define environmental services in trade agreements that use the positive list approach, such as GATS. This outdated definition can partially explain why there has been little progress on the liberalization of environmental services at the multilateral level since the turn of the millennium.

Around 2000, the “Core and Cluster” approach emerged as a popular method by which to define environmental services for the purpose of trade liberalization. The cluster approach uses the CPC to define a “core” set of environmental services, and also a suite of other services that are important to the delivery of core environmental services (the cluster). Liberalization of the cluster ensures that environmental service providers can freely engage in all activities crucial to their operations. However, the cluster approach has not been adopted on a multilateral level, in large part due to concerns among some economies that it would lead to the unintentional liberalization of some sectors of the economy.

Two suggestions by economies weary of the cluster approach were the Environmental Projects Approach (EPA) and Integrated Approach. The EPA proposed that economies should define environmental projects for which imported goods and services would be liberalized. The Integrated Approach proposed that economies should define environmental activities, list the entities responsible for those activities, and liberalize all goods and services imported by those entities.

The cluster approach should be considered the best option to revive negotiations regarding the liberalization of trade in environmental services. The approach accounts for the integration of environmental services with other trade sectors and avoids some of the legal and administrative pitfalls that led to the eventual dismissal of the other approaches. Nonetheless, the cluster approach does have drawbacks that concern developing economies in particular. Any renewed negotiations will need to address these concerns, learning from past failures by placing more value on compromise.

Adoption of the cluster approach alone will not solve the issues that have delayed progress on trade liberalization. The cluster is still based on the CPC, which in many cases does not allow for distinction between services that may hurt or harm the environment. Furthermore, beyond the definition of environmental services, some provisions included in trade agreements have made some economies apprehensive about pursuing further liberalization. New approaches to trade negotiations may be needed to bring more economies, particularly developing ones, on side.

Section 2: Good Regulatory Practices in Licensing and Approval

Businesses can be deterred or hindered from expanding their operations into economies with poor regulatory practices. Thus, establishing good regulatory practice is a means by which economies can unilaterally promote the liberalization of trade in environmental services. APEC has directed significant attention to this topic, and in 2018 adopted the APEC Non-binding Principles for Domestic Regulation of the Services Sector, a set of principles by which economies and regulatory authorities should seek to abide. In 2020, APEC published a commissioned study of these principles in practice, with focus on measures intended to enhance transparency and predictability in rulemaking.¹²

The Study for Final Review of ESAP study specifically addresses the category of regulations identified in the APEC Survey of Regulatory Measures in Environmental Services (2016) as the one most frequently applied to environmental service providers: licensing and approval measures. The study also focuses on measures applied to sewerage, waste collection, waste management, and renewable energy services. The former three services are included as the APEC Survey of Regulatory Measures found them to be the areas in which the most APEC economies have active licensing and approval measures. Renewable energy services are included due to their centrality to the modern-day environmental services sector, centered as it is around climate change.

Good regulatory practices in this section are defined as those promoted by organizations including APEC, the Office of the United States Trade Representative, and the Association of Southeast Asian Nations (ASEAN).¹³ The practices highlighted are those that can most reasonably be applied directly to licensing and approvals. Table 2 shows a snapshot of the good practices that the profiled regulations include, split into five categories.

Table 2: Good Regulatory Practices for Licensing and Approval Measures

Category	Measure
Simplicity	License applicants are required to approach only one regulatory authority
	Relevant laws and regulations are accessible in multiple languages
Transparency	License applicants can track status of applications
	License applicants are informed of reasons for applications being unsuccessful
Accountability	Unsuccessful license applicants can appeal decisions without penalty
	Alternative authorities exist to oversee license application appeals
Accessibility	License applications can be received, completed and submitted electronically
	License examinations are frequently and regularly held
Cooperability	Unsuccessful license applicants are allowed to re-submit applications
	Regulatory authority provides potential license applicants with information on how to submit successful applications (e.g. checklist)

Source: Study for Final Review of ESAP

New Zealand, Singapore, and Japan were chosen for further analysis of good practices. New Zealand's Resource Management Act (RMA) is a high-level regulation governing much of the economy's

¹² "Study on APEC's Non-binding Principles for Domestic Regulation of the Services Sector". APEC.

<https://www.apec.org/Publications/2020/01/Study-on-APECs-Non-binding-Principles-for-Domestic-Regulation-of-the-Services-Sector>

¹³ The Association of Southeast Asian Nations (ASEAN) is comprised of Thailand, Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam, Viet Nam, Lao PDR, Myanmar, and Cambodia.

environmental services sector. The RMA is found to be a bastion of good regulatory practices, with a high premium on transparency and holding all regulatory authorities accountable. Singapore's good regulatory practices are augmented by its online GoBusiness Licensing portal, which simplifies the process of license applications and management for service providers. Japan's encourages liberalization through the JETRO¹⁴ Invest Japan Support Center (IBSC), where foreign service providers receive support establishing themselves in the Japanese market. Key measures required for economies to build capacity for good licensing and approval practices include regulatory review, private consultation, and placing higher value on bilingual capabilities.

Section 3: Building Domestic Human Capacity

In the context of the environmental services sector, local human capacity is important for three main reasons. The first is to unlock the potential for the domestic environmental services industry to flourish, creating a base of educated and qualified individuals to own and staff valuable firms. The existence of strong domestic capacity can allay fears about liberalization acting only as a threat. Instead, with strong domestic firms able to withstand competition, liberalization can be approached as a means of generating a competitive market that only benefits from foreign participation. Moreover, as environmental service providers develop and become internationally-competitive, they create export opportunities, which attune domestic officials to the benefits of more open global markets.

The second reason is that strong domestic capacity can attract foreign investment in environmental projects. Many environmental services projects, especially those related to complex large-scale infrastructure such as power plants and transmission infrastructure, require a critical mass of highly skilled professionals. An economy's ability to attract foreign companies with the capacity to administer these projects is heightened when these firms recognize the potential to employ, contract, or partner with local workers to carry out development projects as well as operate and maintain infrastructure. The third, closely related, point is that domestic service capacity can reduce the need for foreign firms to import workers, which can undermine liberalization benefits in terms of direct job creation.

Developing APEC economies must focus on building a core of qualified environmental services professionals, which involves providing support for quality and focused higher education programs. Technical workers in the sector should have transferable skills that are recognized in other economies, which some APEC economies already ensure through membership of international initiatives such as APEC Engineer and the Washington Accord. Other APEC economies should seek to join such initiatives or replicate their core principles domestically. Environmental services workers should also feel secure that the domestic market provides sufficient opportunity for professional growth and collaboration. APEC economies can guarantee this through actions such as providing access to resources (e.g. technical journals) and facilitating the proliferation of professional networks in the environmental services sector.

Summary of ESAP Results

ESAP has succeeded in facilitating crucial discussions about the importance of environmental services in the context of a fragile global environment and changing economy. The reports produced as part of Phase 1 have cast light upon the regulatory measures that affect providers of traditional

¹⁴JETRO is the Japan External Trade Organization

environmental services. Understanding the regulatory environments in which environmental service providers operate is fundamental to securing informed and targeted changes that will spur liberalization of the sector. Moreover, these reports have brought attention to the range and complexity of services that contribute to environmental protection, many of which are not considered environmental services for the purposes of international trade. ESAP has been pivotal in highlighting the challenges created by relying only on the CPC to define the modern-day environmental services sector. Phase 2 of ESAP was critical as it synthesized the key findings of Phase 1 and provided a foundation for the impactful recommendations made in the final phase.

Work in Phase 3 contextualized international discussions regarding the liberalization of trade in environmental services. Only by fully understanding why progress has proven so difficult for the past 20 years can APEC economies hope to foster more productive negotiations in future. The Study for Final Review of ESAP provided justification for APEC economies to pursue liberalization based on the cluster approach, produced suggestions regarding how environmental services may be defined, and recommended how proponents of liberalization may be able to frame and approach agreements more successfully going forwards. Furthermore, the 2020 ESAP Workshop provided a valuable forum for stakeholders from industry, government, and academia to discuss issues concerning environmental services. The participants considered new opportunities for collaborative activities for APEC member economies to better support the future liberalization of services trade across the Asia-Pacific region.

During ESAP, APEC has flagged the importance of good regulatory practice to creating markets in which foreign providers of environmental services are able to compete. Phase 3 provided in-depth case studies of some of these practices and suggested ways for other APEC economies to bolster their own business environments in similar ways. Even if international agreements do not materialize, ESAP has helped grow the potential for APEC economies to support the liberalization of the environmental services sector through domestic regulation. Based on the work described above, Phase 3 also generated proposals for how APEC economies can better develop domestic environmental services workers in a way that may ensure the strength and stability of the sector.

In all, ESAP has been a useful project that has advanced the discussions about the liberalization of trade in environmental services. APEC economies are well-placed to use this strong foundation as a means by which to usher in a new era of cooperation.

Recommended Next Steps

Agree Upon Definition for Environmental Services

APEC economies may engage in further official discussions regarding how to define the environmental services sector. While ESAP has contextualized the state of play and offered suggestions, trade representatives must now take concrete action. To allow for this, APEC should consider case study research which may help define the scope of environmental services. In this way, APEC could test the real-world applicability of proposed sectoral definitions and determine if there are ways to improve these definitions or build on the results of prior ESAP research findings. Eventually, releasing the environmental services sector from the constraints of discussions about its definition will allow for full exploration of liberalization options.

In this realm and others, APEC should take care to ensure that initiatives undertaken do not overlap with those underway in other international organizations, such as the WTO. For instance, APEC may

benefit from continuing to monitor, and align its work with, discussions taking place in WTO's Council for Trade in Services¹⁵.

Categorize Barriers to Trade in Environmental Services

A key challenge will be to identify and categorize barriers to trade in environmental services, with a view to reducing and eliminating them, wherever possible. Such actions will allow APEC economies to understand the conditions under which trade may be hindered, and to collectively determine common ways to address these. As with many APEC projects, this work will be dependent on input from both the governments of member economies and private firms delivering environmental services. While an agreed-upon scope of environmental services may help inform understanding of the relevant trade barriers, it is not necessarily required.

Assess Costs & Benefits of Liberalization

ESAP research uncovered that the lack of progress on liberalization of the environmental services sector is partially due to uncertainty about the costs and benefits that might accrue to all stakeholders. APEC should collaborate to share information among economies on the possible economic, environmental, and social impacts under various liberalization scenarios, through a combination of data collection (survey and literature research) and discussions among experts from member economies. This should facilitate a transparent environment for all negotiating parties that will encourage cooperation rather than protectionism.

Conduct Regional Surveys

Another next step for environmental services should be to conduct surveys to gather the stances of key officials in APEC economies regarding the liberalization of trade in environmental services. For example, a survey conducted for MSAP gathered feedback from 13 APEC economies on actions they had taken in recent years to further the project's agenda, and related capacity building needs they believed APEC should address. Similar actions could allow APEC-wide capacity building initiatives based on the needs and recommendations of member economies.

Develop Regional Capacity Building Initiatives

Most APEC economies are already involved in APEC mutual recognition agreements concerning certifications of engineers, such as APEC Engineer. While this remains important, the next step should be for APEC economies to work towards alignment on skills and qualifications specific to the environmental services sector (e.g. environmental remediation). In addition, APEC economies should explore the potential for collaboration on other joint capacity building measures such as professional workshops and training programs, on both a multilateral and bilateral basis.

Produce Frameworks for Regulatory Review

Reforming and optimizing domestic regulation of the environmental services sector first requires APEC economies to review the existing regulatory environment. To complement the APEC Non-Binding Principles for Domestic Regulation of the Services Sector (2016), APEC should seek to produce frameworks by which economies can review and judge their existing regulations in various categories, including licensing and approval measures, limits on foreign investment, and controls on use of land.

¹⁵ Details of the current work of WTO's Committee on Trade and Environment (CTE) and Council for Trade in Services in Special Session (CTS SS) were detailed by speakers from WTO during Workshop on Manufacturing-related Services and Environmental Services held on August 19, 2020.