

LIBERALIZATION OF TRADE IN ENVIRONMENTAL SERVICES
AND THE ENVIRONMENT

Contribution by the United States

I. INTRODUCTION

1. This paper examines the potential benefits of liberalizing trade in environmental services. Through this paper we are taking a first step towards examining the relationship between improved market access for services to trade and the environment. Environmental services is a unique sector given that the relationship between such services and the environment is direct and quite obvious on its face. Similarly, this link between trade issues and environmental quality is also present with respect to environmental goods. We believe it is useful for the CTE to examine this area as part of its work.

II. WHAT ARE ENVIRONMENTAL SERVICES?

2. Environmental services can be described as those which generate revenue by fees for a service related to a project which benefits the environment. The environmental services industry supplies pollution control, reduction, clean-up and waste handling services, and a growing range of other environmental services.¹

3. An OECD report prepared as background for a 1994 meeting of environmental industry experts in Washington noted that the industry could be described by considering the usage of goods and services with respect to environmental protection in different domains: e.g., water, air, soil, noise, natural resources, etc. A resulting listing of industry functions would include:²

- waste handling and facility operations;
- implementation and installation of new or existing systems for environmental clean-up;
- remediation, pollution prevention, source reduction and monitoring;
- implementation of environmental quality control and pollution reduction services;
- maintenance and repair of environment-related systems;
- on-site environmental investigation, evaluation and monitoring;
- environmental research and development;
- technical and engineering services;
- analytical, monitoring and related conservation and protection services;
- environmental training and education;
- accounting and legal services; and
- consulting related to these areas.

¹OECD Secretariat, "Background Paper: Meeting of Experts on the Environment Industry", Co-sponsored by the OECD, U.S. Department of Commerce and U.S. Environmental Protection Agency, 13-14 October 1994, Washington, DC (hereafter "Background Paper"), p 3.

²*Ibid.*, pp 5-8.

III. WHAT ARE ENVIRONMENTAL GOODS?

4. Building on the above definition of environmental services, the environmental goods industry produces a range of products related to: water pollution and effluent treatment; remediation/clean-up; air pollution control; waste management and recycling; noise reduction; environmental assessment and monitoring; scientific, research and laboratory equipment; natural resource conservation/protection and urban amenities; energy efficiency and renewable energy, etc.

IV. ENVIRONMENTAL INDUSTRY STRUCTURE AND GROWTH OUTLOOK

5. It is expected that environmental services and goods will continue to expand rapidly as a sector worldwide well over the medium to long-term. Private sector surveys have estimated the environment industry will grow from the current US\$420 billion to US\$600 billion by the year 2010 and continue to grow at an unprecedented rate through the 21st century. Some sources have predicted slightly higher rates of growth for the environmental services subsector. The scale and potential of this industry is such that it has attracted the interest of professionals who previously ignored investment or business promotion activities in this sector.

6. Initial survey work by the OECD suggests that, apart from a small number of large firms dominating a few market segments, the industry is predominantly made of small and medium enterprises. The degree of diversification of production/service provision is quite high in the more mature sectors of this industry and for the larger companies.

7. Furthermore, the trend is towards providing “packaged” environmental solutions incorporating both products and services: from design and equipment production, to providing the services related to installation and application of the equipment. This is partially in response to an ongoing change in the structure of industry, with a shift from end-of-pipe equipment and clean-up services to integrated and “clean” environmental technologies. This reinforces the need for complete solutions calling for firms to employ broader approaches involving greater competencies in different fields.

V. KEY BARRIERS TO THE DEVELOPMENT OF THE ENVIRONMENTAL GOODS AND SERVICES INDUSTRY

8. In most countries, the majority of the demand for environmental services has traditionally been derived from public expenditures and public procurement.³ Thus, national and international environmental regulation has been the engine of growth for the environment industry. It stands to reason, then, that the biggest obstacle to the growth of a strong domestic environmental services industry in some areas has been the relative lack of environmental regulation, and/or uncertainty and inconsistent application of environmental regulations and standards.

9. More recently, there has begun a shift away from regulations and standards as the sole or overwhelmingly predominant instruments of environmental policy and the growing use of economic instruments such as taxes, charges and other incentives. In line with and reinforcing this change, the business sector has been increasingly focusing proactively on process modifications which save money by reducing consumption of raw materials and energy, thereby also reducing waste and pollution.

10. Nevertheless, there are barriers to market access in this sector that can impede trade and limit governmental and business choices in terms of strategies to employ in dealing with environmental issues.

³A recent OECD study found this to be true for all OECD member countries except the United States and the Netherlands.

Some of the services barriers are the direct result of the fact that many aspects of environmental services are closely related to construction and engineering. In addition to barriers that more generally affect professional service providers (e.g., engineering, consulting, design), other significant barriers include investment restrictions, inadequate intellectual property rights protection, regulatory restrictions based on outdated technologies, and government procurement restrictions. With respect to environmental goods, product standards and government procurement issues likely represent major sources of actual and potential barriers to market access.

VI. THE EFFECTS OF TRADE LIBERALIZATION ON TRADE AND THE ENVIRONMENT

11. Improved market access for the environment industry increases availability of services and goods while lowering their cost. Increased competition, a product of increased market access, can spur innovation which can produce even better environmental services and goods, which lead to improved environmental quality. Cheaper and more efficient environmental services and goods would also have positive benefits for the global environment in regard to developing countries, where domestic financial concerns may require careful balancing of environmental with other priorities. All countries can benefit from exposure to the newest technologies and capacities whether developing or developed.

12. Trade liberalization in the environment industry would encourage technology flows that can help countries build domestic capacity they need to better achieve a wide range of environmental goals. In this connection it should be recalled that at the 22-24 September meeting of the Committee the representative of the Global Environment Fund (GEF) identified lack of knowledge about the availability of environmental goods and services as an important impediment to technology transfer.

13. Trade liberalization can also have positive effects on the environment by leading to more efficient use of resources. Eliminating market distortions that cause natural resources to be undervalued leads to a more efficient use of such resources, and therefore directly supports increased levels of environmental quality.

VII. CONCLUSION

14. Trade liberalization in the environmental services sector will yield environmental and economic benefits. These can be expanded by corresponding liberalization of trade in environmental goods.

15. Liberalization of trade in environmental services, as well as environmental goods, holds significant potential to produce both trade and environmental benefits. These benefits would be realized through improved market access, more efficient allocation of resources, and the promotion of innovative services. In addition, given the fact that environmental services are quite “knowledge-intensive”, experience with globalization and increasing intra-industry trade suggests that increased international openness would result in a dynamic improvement in the ability of firms to provide high quality services while minimizing costs.

16. In addition, the economic and environmental gains to be derived from increased openness of markets in terms of environmental services can be augmented through similar focus on improving market access for environment industry goods. Addressing product standards and other market access issues with respect to goods could yield the same types of benefits as described above with respect to services. This is particularly relevant given the trend in the industry towards the provision of environmental “solutions” embodying goods as well as services.