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**ENVIRONMENTAL GOODS MARKET LIBERALIZATION:
 CASE STUDY OF CZECH REPUBLIC AND POSSIBLE WAY
 TO FOLLOW FOR UKRAINE**

Global liberalization of environmental goods (EG) has been a core of a long-standing debate for more than 10 years at many international forums. Despite the consensus on benefits of liberalization, there has been a little progress on opening up the global market for EG. This paper summarises the current state of discussions on the problems and potential benefits of improving the market access to EG. The case study of Czech Republic's trade with EG is shown and particularly the development after the entry to the EU is analysed and discussed as an example of the best practice for Ukraine which intends to join the EU in future.

Keywords: environmental policy, environmental goods, international trade negotiations, duty import tariffs.

JEL: F13, F18, Q56, Q55, F53.

**Житка Знаменачкова, Пётр Шауер, Рене Фернандо Лара Сервантес
 ЛІБЕРАЛІЗАЦІЯ РИНКУ ЕКОЛОГІЧНИХ ТОВАРІВ:
 ПРИКЛАД ЧЕСЬКОЇ РЕСПУБЛІКИ З ПОДАЛЬШИМИ
 РЕКОМЕНДАЦІЯМИ ДЛЯ УКРАЇНИ**

У статті показано, що глобальна лібералізація екологічних товарів (ЕТ) є предметом активних дискусій у світі протягом останнього десятиліття. Незважаючи на загальне розуміння усіх переваг такої лібералізації, з практичного боку зроблено мало щодо відкриття світових ринків для ЕТ. Представлено найбільш вживані формулювання ЕТ та потенційні переваги активізації торгівлі ними. На прикладі Чеської Республіки показано розвиток ринку ЕТ, зокрема, після приєднання Чехії до ЄС. Чеський досвід може стати прикладом для України, яка також має намір приєднатися до ЄС і для якої торгівля ЕТ є актуальним питанням.

Ключові слова: екологічна політика, екологічні товари, міжнародні торгові переговори, митні тарифи.

Табл. 2. Літ. 20.

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 ЛИБЕРАЛИЗАЦИЯ РЫНКА ЭКОЛОГИЧЕСКИХ ТОВАРОВ:
 ПРИМЕР ЧЕШСКОЙ РЕСПУБЛИКИ С ПОСЛЕДУЮЩИМИ
 РЕКОМЕНДАЦИЯМИ ДЛЯ УКРАИНЫ**

В статье показано, что глобальная либерализация экологических товаров (ЭТ) активно обсуждается мировой общественностью в последнее десятилетие. Несмотря на общее понимание всех преимуществ такой либерализации, мало что сделано практически в плане открытия мировых рынков для ЭТ. Представлены наиболее популярные формулировки ЭТ и потенциальные преимущества активизации торговли ними. На примере Чешской Республики показано развитие рынка ЭТ, в частности, после присоединения Чехии к ЕС. Чешский опыт может стать примером для Украины, которая также намерена присоединиться к ЕС и для которой торговля ЭТ является актуальным вопросом.

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Ключевые слова: экологическая политика, экологические товары, международные торговые переговоры, таможенные тарифы.

1. Introduction.

Global trade in environmental goods has been flourishing for the last decade. Depending on the definitions and coverage, the estimated annual turnover of world trade in environmental goods (EG) was USD 750 bln in 2007 and about USD 1 trl in 2010. The main trigger of the booming trade in environmental goods has been the debate on climate change and searching for new environment-friendly technologies, particularly those focused on renewable energy, water and waste water management.

Developed countries (the European Union, the USA, Japan, Australia, New Zealand, South Korea) are the global leading exporters of EG, producing the majority of the world EG exports. Experts estimate an annual 10% increase in demand for environmental goods among the developing countries, some of them, such as Brazil and India expect more than 30% increase in these imports (Sang Hee Yoo and Jisun Kim, 2011, p. 9, 17). A boom of trade in EG could be expected by reducing import tariffs imposed especially for the developing and least developed countries. Currently, import tariffs on environmental goods range up to 40%, and the long-term goal is to reduce them to 0.

According to the World Bank report, removing tariff and non-tariff barriers to clean energy technologies alone could result in a 7–14% increase in trade volumes (World Bank, 2007, p. 50). Liberalization of trade in EG could not only boost the world merchandise, but contribute to further innovations in green technologies and technology transfers as well.

The objective of this paper is to describe the importance of liberalization of environmental goods market and pose questions on the potential benefits of improving market access to EG. The first part of the paper describes different approaches to defining EG and the current state of discussions and negotiations. In the second part of this paper, the case study of Czech Republic's trade with EG is shown and particularly the development after the entry to the EU is analysed by using a trend analysis. This could be an example of best practice for a country such as Ukraine which intends to join the EU and open its market. The last part summarises the potential gains from tariff elimination for EG.

2. Defining the Environmental Goods.

The crucial question about the definition of EG in scholarly literature is whether it should be defined as goods, which lower the negative impacts on environment or goods produced in an environmentally friendly way. Consider the two integrated circuit boards, one being produced in a way that emits ozone-depleting substances, and another in a non-polluting way. Are these products alike? If they are, then environmental regulators cannot give preference to a green product over the other one when both arrive as export goods at the border. Nor can they discriminate against the polluting product if it arrives at the border to compete against domestically produced clean versions. To these questions no clear answer is available today. It is a different matter if pollution occurs not due to how a good is produced, but due to the characteristics of the good or the manner in which it is used or disposed of. That is, is an energy-efficient automobile the same as an energy-wasteful one? 4 criteria are usually used to determine whether products are alike, all designed principally to test

whether they were in direct competition for a market share, whether they were "commercially substitutable": 1. Physical properties, nature and quality; 2. End use; 3. Consumer tastes and habits; and 4. Tariffs classification (Mattoo et al., 2008).

In governmental and business spheres there is no international agreement on the definition of environmental goods and services (EGS) in the global scale so far. A number of international organizations have proposed definitions, but these have not been universally adopted. One of the earliest definitions of EGS was developed by the joint group of OECD and Eurostat experts in the 1990s: "the environmental goods and services industry consists of activities which produce goods and services to measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. This includes cleaner technologies, products and services that reduce environmental risk and minimize pollution and resource use" (OECD, 1999, p. 10).

Other definitions mostly deal with environmental goods only (i.e. they do not cover environmental services). One of the world's biggest producers and exporters – the European Union – defines EG as "goods that have been produced for the purpose of preventing, reducing and eliminating pollution and any other degradation of the environment and preserving and maintaining the stock of natural resources and hence safeguarding against depletion" (Eurostat, 2012, p. 1).

Some international organizations provide different EG lists/definitions depending on the interests of their members:

Asia Pacific Economic Cooperation: The list was first formed in 1995. Since September 2012 the APEC list of EG has officially 54 environmental goods including renewable and clean energy technologies, waste water treatment technologies as well as environmental monitoring and assessment equipment, the list does not include biofuels (APEC, 2012, Annex C, p. 1).

World Bank: "the World Bank has identified 43 products as broadly being "climate friendly" (the WB 43); however, accurate trade data for these products are largely unavailable because these goods are commingled with other non-environmental goods classified within the same broad product categories recognized at the international level. The WB 43 list is generally viewed as the basis for international trade negotiations to reduce or eliminate trade barriers to environmental goods. Until today, there was not a clear understanding of the share of these 43 goods that serve a specific (or "real") environmental purpose in relation to broader product groupings in which these goods are classified at the international level" (Wyden, 2010, p. 3).

World Trade Organization (WTO): Those activities which produce material, equipment or technology used to address particular environmental problems; or products considered preferable than similar goods because of the relative benign impact on the environment (Hamwey et al., 2003). Several lists of EG were suggested under WTO negotiations, the last of them cover 26 items of core EG.

Organization for Economic Cooperation and Development: The list includes goods spanning 6-digit Harmonized Commodity Description and Coding System (HS codes). 25 are the minerals and chemicals used in water and waste treatment and in renewable energy systems. Some environmentally sound technologies are included as well, although their trade is not tracked internationally since there are no HS codes for these technologies.

United Nations Conference on Trade and Development (UNCTAD): EG is defined as a product which cause significantly less harm at some stage of its life cycle (production/processing, consumption, waste disposal) than alternative products that serve the same purpose and contribute significantly to the preservation of the environment. It involves two categories: goods that provide some environmental service and inputs/products that reduce the damage and provide a similar utility and function (UNCTAD, 2003, p. 35).

The main differences in these lists can be explained as different approaches to EG definition, either as products minimizing harmful effects on environment, or goods made in an environment-friendly way, e.g., minerals and chemicals for water treatment belong exclusively to OECD list, which also has a larger number of environmental preferred products; meanwhile APEC involves a set of goods needed for environmental monitoring and assessment (Steenblik, 2003). Nevertheless, these lists take into consideration capital goods which are almost exclusively manufactured by the developed countries, relegating developing countries to remain net importers. After the boom of the industry in 1996 just a few countries within the Asia region had increased their EG exports in 75% (e.g., South Korea, Japan, China). Further, some Western countries developed their own lists for government use, e.g., the United Kingdom, Germany and the USA.

Perhaps the most elementary observation to make from any comparison of various lists of EG produced to date is that the number of goods that could be included in an eventually agreed list is potentially large. Both the OECD and the APEC lists have helped to frame the current APEC and WTO negotiations on environmental goods. But it is also clear that many, if not most, WTO members regard the lists as just helpful but not definitive.

3. Liberalization of EG: definitions, history and development.

Trade liberalization represents the opening of markets on both exports and imports and removing tariff and non-tariff barriers to trade in the global scale. Trade liberalization leads to once-and-for-all efficiency gains as well as to dynamic gains (Lopez, 1994). We have witnessed a shift in the meaning of "liberalization", in more traditional policy literature of the 1960s and 1970s trade liberalization was defined in a very general way; what economists usually meant was some relaxation of trade and exchange controls. Liberalization is used to be defined as a more extensive use of the price mechanism that would reduce the anti-export bias of the trade regime. Today trade liberalization has acquired a more drastic connotation, meaning reduction or elimination of tariffs. The term "economic liberalization" becomes synonymous of free market oriented policies with minimum or no government intervention at any level (Edwards, 1989).

The very beginning of the discussion on the need for trade liberalization in EG started in late 1990s in the OECD and WTO. The 1992 and 1996 reports prepared by the Industry Committee described market developments in the environment industry and the role of environmental policies (OECD, 2005). The reports showed a clear need to improve information on the industry and undertake further analysis. Publication of these results prompted numerous questions: What was the situation with the exports of environmental technologies? Was it possible to measure the impact on industrial competitiveness of the application of cleaner technologies? How

could environmental and economic policy encourage and support growth, job creation and trade in goods and services of the environment industry?

Then the liberalization of international trade in environmental goods and services was raised as a separate agenda within the Doha Development Round of the World Trade Organisation (WTO DDA, 2001) in 2001. Since then, the WTO members have been trying to agree on a way to liberalize the trade in environmental goods and services and eliminate the related import tariffs. The discrete provision is comprised in the Doha Development Agenda in Article 31iii, (Brack and Gray, 2003). Given that the WTO DDA agenda has not yet been completed as a whole, the negotiations on the liberalization of the world trade in environmental goods still continue. It is a subject almost all the WTO members agree on, but there are still differences in how to define environmental goods and how to choose a formula to eliminate tariffs. Currently, the average of the applied import tariffs on EG is up to 20% and more, the long-term goal is to reduce them to zero. The core of EG liberalization within the WTO DDA is negotiated under the Committee for Trade and Environment (CTE). There is just a little progress in current negotiations, even the WTO members declare their will to liberalize the trade in EG. In 2011, the list of 26 items of EG called "WTO Core List" was created and is the nearest compromise for global opening of the EG market. In 2013 the Chair of CTE proposed to refresh the discussion in less formal level and the WTO has been planning a seminar on trade liberalization of green technologies.

The main promoters of EG liberalization in a multilateral scale are the European Union, the US, Japan, Australia and South Korea. Though, the US have been currently more in favour of the debate on this very matter ongoing in the APEC. In September, 2012 the leaders of the APEC countries endorsed the list of 54 environmental goods and committed to reduce the applied tariffs to 5% or less by the end of 2015. The list has been considered as an important milestone in international efforts to liberalise EG being the first internationally agreed list of EG. It will benefit not only the APEC countries but all the WTO members, since it will need to be implemented in accordance with the Most Favourite Nation (MFN) principle. Further, some WTO members see it as an opportunity to refresh multilateral negotiations on EG liberalization within the WTO.

Further negotiations will depend on the will of the WTO members and the ability of negotiators to provide sufficient data and arguments in favour of EG liberalization. Demand for clean technologies and products, which is already growing faster than trade in industrial goods (Sang and Jisun, 2011), has been increasing in both developed and developing countries. This implies that lowering current tariff barriers, resulting in price reductions, would benefit domestic consumers and the industries in need of those products. Tariff cuts on imports of environmental goods would certainly encourage trade in green technologies, which would become more affordable for developing countries. It is also very likely that the liberalization of trade in environmental goods would encourage new investments and innovations.

4. Benefits of liberalization of trade in EG.

The academic literature suggests that the most important benefits of liberalization of trade in EG are as follows: toughening of environmental protection, better

practices, more access to technology, technology transfers for developing countries, lower costs of technology, environmentally friendly products, more investment into green technology and incentives to generate domestic technology. Developed countries own the monopoly of EG technology and they get the bigger share of the gains of the trade. Many developing countries would also benefit from liberalization of trade in EG (Mathew and Fernandez, 2009).

Mutually beneficial, the tariff cut would boost the trade in green technologies, which would become more affordable for developing countries. Then companies could reboot their earnings into new investments and innovations in green technologies which would be for the benefit not only for a country of their origin, but also for their trading partners. These innovations would be a base for new technologies which could minimize the negative effects on the environment. It should be emphasized that tariff reduction or elimination alone for EG will have little effect on their use if it is not implemented as an integral part of broader policies and strategies.

According to the WTO experts, the liberalization of trade in environmental goods and services would lead to a win-win-win (Trade, Environment, Development) situation for both developed and developing countries. Firstly, trade negotiations can facilitate a reduction or elimination of tariff and non-tariff barriers. Domestic purchasers, including businesses and governments at all levels, would be able to acquire environmental technologies at lower costs. In addition, a scheme of liberalization of trade in environmental goods would encourage the use of environmental technologies, which could stimulate innovation and technology transfer. This could directly improve the quality of life for citizens in all the countries providing a cleaner environment and better access to safe water, sanitation or clean energy. Moreover, the use of environmental goods can reduce harmful side effects of various activities ("negative externalities") that damage the environment and are hazardous to human health. Finally, the liberalization of trade in environmental goods and services can be beneficial for the development by assisting developing countries in obtaining the tools that address the key environmental priorities as a part of their development strategies.

5. Case study: Trade in EG in Czech Republic.

Taking example from practice, Czech Republic is an accurate case to show the causality of trade in EG. As shown in Table 1, the total of EG exports defined according to the WTO Core list has been increasing in past few years. In 2010 the total exports of EG was USD 3,4 bln and in 2011 it was 4,05 bln. According to the statistics (Table 1) the dynamic growth of Czech exports of EG was 25 to 40% between 2005 and 2008. The main reason was the accession of Czech Republic to the EU single market, therefore the Czech export to the EU countries increased and the import tariffs were cut to zero.

Czech EG share in the total export is less than 10% and aims mainly to developing countries, often to the countries of BRIC, but the USA and other EU members are big importers. Needless to say, the EU and USA import tariffs for EG are globally at the lowest level as compared to BRIC and other developing countries, including Ukraine.

Table 1. Czech exports of EG according to the WTO core list (in mln USD)

HS Code and HS description	2005	2006	2007	2008	2009	2010	2011
460120. Mats, matting and screens of vegetable materials	0,158	0,223	0	0	0	0	0
730820. Towers and lattice masts, of iron or steel	18,48	20,28	41,93	70,46	50,28	15,90	31,83
732111. Cooking appliances, plate warmers, for gas fuel or for both gas and other fuels	20,00	26,99	28,54	31,21	18,63	21,37	24,12
732490. Other sanitary ware and parts thereof, of iron or steel	4,09	3,42	4,47	5,96	4,35	7,24	8,69
840290. Parts of steam or vapour generating boilers	100,11	58,00	89,47	138,97	91,90	108,73	26,96
840410. Auxiliary plant for use with boilers of heading no. 84,02 or 84,03	0,58	11,85	0,21	0,44	4,11	2,33	1,27
840510. Producer gas, wtr gas, acetylene gas, wtr pro gas gen	0,98	0,28	0,22	0,46	0,32	1,14	0,41
840681. Other steam and vapour turbines, over 40MW	33,78	0	23,31	27,06	11,54	9,33	15,42
840999. Parts of compression-ignition internal combustion piston engines	286,33	350,68	429,38	560,58	426,32	667,45	745,19
841011. Hydraulic turbines and water wheels, up to 1000kW	3,51	4,37	4,36	10,15	5,95	6,31	7,71
841012. Hydraulic turbines and water wheels, 1000-10000kW	0,73	2,75	1,05	1,06	1,94	1,96	4,13
841090. Parts of hydraulic turbines, water wheels, regulators	8,90	17,40	14,97	29,11	25,21	28,08	41,80
841861. Refrigerating or freezing equipment, heat pumps, compression type units	6,75	8,18	5,31	12,28	9,67	9,12	10,33
841919. Other instantaneous or storage water heaters	6,33	9,31	11,57	16,69	13,34	12,31	15,23
841950. Heat exchange units	136,78	174,91	234,06	312,98	228,22	207,35	268,45
847989. Other machines, mechanical appliances	126,91	140,09	204,73	346,51	177,94	150,36	201,97
850231. Wind-powered electric generating sets	0,067	0,03	2,03	0,34	0,28	0,74	0,62
850440. Static converters	86,01	129,82	236,76	254,01	186,21	272,06	422,76
853710. Bases for electric control of the distribution, not exceeding 1,000 V	459,38	551,61	693,78	738,12	622,14	726,02	998,27
854140. Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light emitting diodes	78,93	209,21	331,97	752,98	659,80	1001,21	1033,32
900190. Prisms, mirrors, optical elements, of any materials	24,85	28,83	34,82	41,54	29,64	30,86	33,01
900290. Other lenses, other optical elements	1,74	1,64	4,14	6,16	8,05	26,53	40,24
902730. Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)	1,93	3,34	4,29	4,29	2,77	6,80	10,68
903210. Thermostats	48,32	57,27	68,76	100,41	80,32	95,63	117,24
Total	1455,74	1810,57	2470,23	3461,87	2659,03	3408,92	4059,74

Source: Czech Statistical Office, 2012.

The study by the OECD (Kennett, Steenblik, 2005) describes how in late 1990s the lack of adequate information available to domestic firms about the market, and the lack of local capacity, allowed foreign firms initially dominate the market of EG in Czech Republic. The report also highlighted the substantial barriers that Czech exporters had faced and the problems associated with the lack of capital and the inaccessibility of export credits, suggesting that it may only be a problem for the countries at the advanced stage of development. However, Czech firms have been strengthening and regaining the market share and now they are fully competitive. Given the facts, it can be stated that the main determinants of Czech EG export increase are as follows:

1. Elimination of tariffs: A great deal of international trade liberalization including environmental goods in the global scale brought the WTO Uruguay Round completed in 2000. Tariffs on EG posed by developing countries are higher, since their environmental industry is at early stages and they are trying to protect it.

2. Entering the EU single market: The biggest change in tariffs for Czech Republic was brought by the entering the EU. Czech Republic became a part of the EU single market, the tariffs for Czech exporters to the EU countries were dropped to zero and further the common tariffs for imports from the third countries were introduced.

3. Elimination of non-tariff barriers to trade: Import licences, regulatory, testing or certification rules for environmental goods are not so common globally. Environmental oriented non-tariff barriers to trade (NTBs) are usually the measures to lower CO₂ in environment, energy saving measures or eco-labelling. NTBs exist because of the lack of uniformity in environmental regulation, affecting environmental preferred products which need certification. Their elimination is part of Doha development round as well as bilateral free trade agreements.

4. State incentives for environmental technologies and investment incentives: Czech government has been supporting the environment new green technologies by several incentives through its innovation policy, a vast support comes from the EU structural funds as well.

5. Access to credits and export credits: Support by export credits for Czech EG producers has been one of the most important incentives done by the government. The Czech Export Bank is one of the government agencies providing special attention for new technologies by loans.

Ukraine: few steps to further liberalization of trade in EG

Ukraine belongs to the developing countries which keep the import tariffs on environmental goods on leash, the range is up to 10% (see Table 2) and a lot of items are tariff free, still the average rate is still higher than the corresponding EU import tariffs. The highest tariffs on Ukraine EG imports are imposed particularly on clean energy items. The reason lies in Ukraine's energy production which has been oriented to clean energy in past few years, therefore, higher import tariffs protect domestic production. Though, sometimes it can be unproductive, because some imports can be fully competitive for comparable price if without import tariffs.

Over the past years Ukraine has liberalised its markets, reduced market regulation, removed the majority of licensing requirements and restrictions on foreign currency exchange. The country has curbed inflation and the national currency has been relatively stable over the last 6 years. Ukraine's membership in the WTO prompts fur-

ther reforms and much remains to be done to achieve full economic liberalization. Ukraine also stated its interest in renewable energy, the main document covering the state energy policy in Ukraine is the "National Energy Policy Until 2030", approved in 2006 (IISD, 2008). The energy policy sets a strong emphasis on reducing the imports of fossil fuels, increase of domestic electricity production (mainly nuclear, hydropower and renewable energy).

Table 2. MFN applied duty maximum rates for the WTO Core list of EG, 2011 (in %)

HS Code	Item	EU/CZ	UA
460120	Mats, matting and screens of vegetable materials	3,7	5
730820	Towers and lattice masts, of iron or steel	0	0
732111	Cooking appliances, plate warmers, for gas fuel or for both gas and other fuels	2,7	10
732490	Other sanitary ware and parts thereof, of iron or steel	3,2	5
840290	Parts of steam or vapour generating boilers	2,7	2
840410	Auxiliary plant for use with boilers of heading no. 84,02 or 84,03	2,7	8
840510	Producer gas, wtr gas, acetylene gas, wtr pro gas gen	1,7	2
840681	Other steam and vapour turbines, over 40MW	2,7	2
840999	Parts of compression-ignition internal combustion piston engines	2,7	0
841011	Hydraulic turbines and water wheels up to 1000kW	4,5	5
841012	Hydraulic turbines and water wheels, 1000-10000kW	4,5	5
841090	Parts of hydraulic turbines, water wheels, regulators	4,5	5
841861	Refrigerating or freezing equipment, heat pumps, compression type units	4,1	0
841919	Other instantaneous or storage water heaters	4,1	0
841950	Heat exchange units	2,2	5
847989	Other machines, mechanical appliances	2,6	5
850231	Wind-powered electric generating sets	1,7	0
850440	Static converters	1,7	0
853710	Bases for electric control of the distribution, not exceeding 1000 V	2,7	0
854140	Photosensitive semiconductor devices, photovoltaic cells; light emitting diodes	3,3	0
900190	Prisms, mirrors, optical elements, of any materials	2,1	5
900290	Other lenses, other optical elements	0	0
902730	Spectrometers, spectrophotometers and spectrographs using optical radiations	2,9	5
903210	Thermostats	6,7	2

Source: WTO database, 2012.

For further liberalization of EG in the near future there are two main reasons in Ukraine. One is the EU single market, which would be open if joining the European Union. Ukraine declares its willingness to harmonize its legislation with the EU, in particular in the field of single market and environmental protection. The second impulse is more close and contemporary: APEC liberalization of EG goods, which will involve the Russian market in many ways crucial for Ukraine. These are quite convincing reasons for further cut of EG import tariffs.

According to Zhang (2011), the countries with a sufficiently large domestic market to develop domestic manufacturing capacities across the supply chain would prefer to take the latter course. Taking that course may involve short-term economic and environmental costs, but if successful, may pay off in the longer run. For example, with regard to wind turbines, India has imposed very high tariffs with the aim of encouraging domestic production and jobs, China has put in place a local content requirement and Ukraine took efforts to develop a domestic wind sector. These poli-

cies act as barriers to foreign suppliers of wind turbines, and are seen as beneficial for local wind turbine makers. However, such policies hurt home countries financially.

Further, Zhang describes the efforts of developing countries to adopt green technologies: "in Ukraine projects ended up being saddled with installation costs two to three times the world average, and a near complete lack of foreign private investment in the sector despite otherwise favourable conditions. Ukraine is not an exception. A study by the WTO 2004 shows that most countries open to trade adopt cleaner technologies more quickly, and increased real income is often associated with greater demand for environmental quality. These examples suggest the need for a high degree of flexibility to accommodate different situations and stakes in the liberalization of trade in EG. They accordingly exemplify the challenges ahead and the uncertainty about whether a deal can be concluded on a desired degree and level of such trade liberalization" (Zhang, 2011, p. 12).

6. Conclusions.

All the studies made to date and mentioned here indicate various benefits of the EG liberalization, as described. According to the WTO experts, the liberalization of trade in environmental goods and services would lead to a win-win situation for both developed and developing countries. The most important step is to agree on the definition and the liberalization approach of EG in the international context.

As shown by the current plurilateral APEC agreement, the liberalization of EG at the multilateral level will be in final stage subject to the political decision within the WTO. Further approach and strategies could be agreed during the WTO 9 Ministerial Conference next year.

Given the above analyses of Czech Republic's case study, it is shown that the reduction of import tariffs and non-tariff barriers is crucial for increasing the trade and particularly EG exports. The single market is an example of liberalization of trade related to EG in our case. It could be a case to follow by Ukraine. Both the EU and Ukraine has now the opportunity to join the APEC initiative of liberalization of EG trade and to promote the benefits multilaterally within the WTO.

Acknowledgement

The paper has been supported with in the grant FMV IGA "Impacts of Environmental Goods Trade Liberalization", No. F2/5/2012.

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Стаття надійшла до редакції 27.02.2013.