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CHAPTER VIII THE FINANCIAL ASPECTS OF SUSTAINABLE DEVELOPMENT

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ABSTRACT

An important problem in the implementation of sustainable development concept is to form a measurement system of quantitative and qualitative assessment of this extremely complex and multifold process. The main requirements for these systems are their informational completeness and adequate presentation of interconnected components of sustainable development triad. The well-known international organizations and numerous research teams are working in this sphere, but no official agreement has been achieved due to the use of different methodological approaches.

KEY WORDS: sustainable development, funding, CO₂ emissions, Official development assistance, foreign direct investment, Subsidies for agricultural, Kyoto protocol, emissions trading.

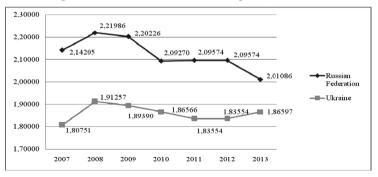
INTRODUCTION

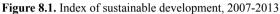
According to the metrics of sustainable development processes measurement (SDIM) its numerical value is estimated by using of corresponding index (ISD) in the space of three dimensions: economic (IEC), ecological (IE) and socio-institutional (IS). This index is a vector, the normal value of which determines the level of sustainable development and its spatial position in the coordinate system (IEC, IE, IS) characterizes the level of this development's "harmony" (harmonization degree of sustainable development – G).

The vector's equidistance Isd from each of the coordinates (IEC, IE, IS) corresponds to the highest harmonization degree of sustainable development. Approaching of this vector to one of the coordinates indicates the priority development of the corresponding dimension and ignoring the other two. Index (ISD) and the harmonization degree of sustainable development (G) are calculated by the components (IEC), (IE), (IS).

The Sustainable Development Index is the integrated assessment of the society development sphere which includes all three dimensions of sustainable development and this indicates the interrelation between three inseparable spheres of society development being economic, ecological and social spheres.

The policy categories and indicators used for evaluating of sustainable development of Ukraine and RF in 2007-2013 (Figure 8.1).





Source: http://wdc.org.ua/en/data

Russia's SDI is higher than the similar index of Ukraine, but during the period 2007-2011 there has been a tendency to reduce the gap between these indices.

The economic dimension of sustainable development is a part and one of the paradigms of modern society development. During the being of the economies of most countries in the global economic crisis for the leadership of our country there is an urgent need for scientific and methodological tools, which would enable to make the preventive measures, stabilization, and possibly unpopular social and economic reforms.

The information above will help to reconstruct the national economy on the basis of the concept of sustainable development.

RESULTS AND DISCUSSION

An important element of sustainable development is its funding. The success of the strategy of sustainable development depends on the amount of financial resources and its efficient use.

There is no complete estimate yet of resources needed to make the transition to a green economy or sustainable development. One indication of green investment gaps for low-carbon energy supply and energy efficiency at the global level is provided by the IEA Energy Technology Perspectives 2010, based on CO₂ emission reduction targets. This high-end estimate does not include other aspects such as resource efficiency across sectors. The IEA BLUE Map scenario aims to halve worldwide energy-related CO₂ emissions by 2050.¹²⁵

Investments required from 2010 to 2050 in this scenario are US\$ 46 trillion higher – an increase of 17 per cent – than what is required in the Baseline sce-

¹²⁵ Searchinger, T. et al. (2013): *The Great Balancing Act.* Working Paper, Installment 1 of Creating a Sustainable Food Future. Washington, DC: World Resources Institute. Available online at http://www.worldresourcesreport.org

nario. This corresponds to approximately US\$ 750 billion per year up to 2030 and US\$ 1.6 trillion per year from 2030 to 2050 (IEA 2010).¹²⁶

Additional investment needs under the BLUE Map scenario – which increases projected global investment needs to US\$ 316 trillion by 2050 – are dominated by the transport sector, which take up 50 per cent of total additional investments, particularly in the area of alternative vehicle technologies. The buildings sector absorbs 26 per cent of the additional investment, energy supply 20 per cent and industry 4%. These indicative amounts correspond, on average, to the scenarios modelled for the Green Economy Report, which analysed investments averaging US\$ 1.35 trillion per year over 2010 to 2050, across a range of sectors – not just those related to greenhouse gas (GHG) emissions.¹²⁶

Alternatively, an earlier IEA study estimated (IEA 2009) that over the next 30 thirty years, US\$ 1 trillion annually is required to enable the world's energy infrastructure to maintain and extend the supply of power to more people (US\$ 500 billion) and to finance the transition to a low carbon, cleaner energy infrastructure (a further US\$ 500 billion). The projected annual shortfall to drive this lowcarbon transition in developing economies alone is US\$ 350 billion. While relying heavily on an industrial approach to reducing carbon emissions, the IEA estimates can be considered as a high-end estimate of annual investment needs and correspond to a range of 1 to 2 per cent of global GDP.¹²⁶

Estimates by the private financial sector also underline the scale of the challenge. The World Economic Forum (WEF 2010a) and Bloomberg New Energy Finance calculate that clean energy investment must rise to US\$ 500 billion per year by 2020 to restrict global warming to 2°C. HSBC estimates the transition to a low carbon economy will see a total growth in cumulative capital investments of US\$ 10 trillion between 2010 to 2020 (HSBC 2010).¹²⁶

Furthermore, the concept of "additionality" is fundamentally important. In the context of the UN Framework Convention on Climate Change (UNFCCC); additionality refers to an effort that is supplemental to the business-as-usual (BAU) scenario in at least two areas: the additionality of financial contributions of developed countries beyond BAU official development assistance (ODA) to assist climate change adaptation in developing countries; and the additionality of investment to reduce GHG beyond BAU. Additionality of financial resources to the widely agreed target for ODA of 0.7 per cent of developed country gross domestic product (GDP) is the contribution that developing countries seek from developed nations as a key element of a global resolution of climate change problems in the context of the UNFCCC and the Kyoto Protocol (KP) (UNFCCC 1998). Despite a decade of attempts to define additionality, the concept continues to be poorly understood and its application contested. However, additionality is likely to continue to be an important criterion for climate finance beyond 2012.¹²⁶

Developed and tested methodology that is based on the concept of sustainable development, may be used for the analysis of a given region or area state

¹²⁶ Searchinger, T. et al. (2013): *The Great Balancing Act.* Working Paper, Instalment 1 of Creating a Sustainable Food Future. Washington, DC: World Resources Institute. Available online at http://www.worldresourcesreport.org

and in decision-making at regional and national levels. Adaptation of existing development for use at the regional level (administrative units' level) of a particular country will create mutually beneficial economic links between regions, will help to achieve more favourable terms of inter-regional trade and cooperation in global economic crisis.

To promote sustainable development actively worldwide and ensure that the Ukraine and RF internal and external policies are consistent with global sustainable development and the Ukraine and RF international commitments.

The overall picture presented by the indicators in the global partnership theme is rather favourable. Most of the indicators have shown a favourable tendency since 2000, in particular those on trade flows, financing for sustainable development and natural resource management. However, the EU is not on track for the headline indicator, which measures the share of gross national income dedicated to official development assistance to developing countries. Furthermore, many indicators developed unfavourably over the period 2007 to 2012, in parallel with the global economic crisis.

For estimation of sustainable development will be used method described in The Brandtland Report.

Level 1	Level 2	Level 3
Official de- velopment assistance	Globalisation of trade	
	Imports from devel- oping countries	Share of imports from less developed countries
		Subsidies for agricultural
	Financing for sustainable development	
	Financing for devel- oping countries	Share of foreign direct investment in low- income countries
		Share of official development assistance
		Share of untied assistance
		Assistance for social infrastructure and services
		Assistance for debt relief
	Global resource management	
	CO2 emission per capita	Assistance for water supply and sanitation

Table 8.1. Evaluation of changes in the global partnership theme

Source: European Commission (2011) Sustainable development in the European Union – 2011 monitoring report of the EU sustainable development strategy Luxemburg: Publication Office of the European Union. – 377 pp.

Global partnership is a concept that originates in the world of development co-operation. It was first coined as part of the Millennium Development Goals (MDGs). Presented as the eighth MDG "Global Partnership for Economic Development", it has an overarching function providing a roadmap on how to achieve the other seven MDGs, which are in the field of poverty reduction, education, health and environment, among others.¹²⁷ Global partnership in this context reflects mutual responsibility to achieve the goals both by developed and developing countries. At the same time, it also shows that development is a multifaceted concept: it is not only focused on economic development, but clearly takes into account other elements, in areas as environment, gender, health, etc. The multifaceted nature of global partnership points to the interaction between various themes, and the need for policy coherence.

The elements of mutual responsibility and the multifaceted nature of global partnership are taken up in the Brundtland Report,¹²⁸ in the form of two direct links between sustainable development and the concept of global partnership. Firstly, it emphasises the urgency of meeting the essential needs of the world's poor in order to achieve sustainable development, calling directly for the support of developed countries in improving the living standards of the developing parts of the world. Secondly, the title of the report, "Our Common Future", highlights the importance of collective action and the idea of sitting 'all in one boat', which is the concept of global partnership.

The EU has missed the intermediate official development assistance (ODA) target of 0.56% in 2010. Furthermore, progress between 2005 and 2010 appears to be too weak to allow the target of dedicating 0.7% of gross national income (GNI) to ODA in 2015 to be reached.

In 2010 the EU spent 0.43% of its GNI on ODA, 0.02 percentage points more than in 2005. Thus it did not reach the intermediate target. It also seems unlikely that the EU will achieve its 2015 target. At current growth rates, it would only happen around 2040.

Within the overall ODA commitment, the EU, in 2008, pledged to collectively spend at least 0.15% of its combined GNI by 2010 on ODA to the leastdeveloped countries (LDCs). This target has been only narrowly missed: Combined EU ODA to LDCs corresponded to 0.13% of GNI in 2010, based on preliminary data available.¹²⁹

At the international level, ODA disbursements reached an all-time high in 2010. However, only five donor countries reached the 0.7% target; four of them were Member States of the EU.

¹²⁹ Commission communication, Enhancing EU Accountability on Financing for Development towards the EU Official Development Assistance Peer Review, COM (2011) 218.

¹²⁷ European Commission (2011): Sustainable development in the European Union — 2011 monitoring report of the EU sustainable development strategy, Luxembourg: Publications Office of the European Union — 377 pp.

¹²⁸ United Nations (1987): *Our Common Future*. Report of the World Commission on Environment and Development to the General Assembly of the United Nations.

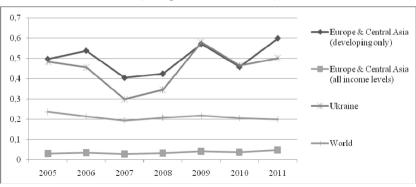


Figure 8.2. Official development assistance, by country (region) (% of gross national income)

ODA level to Ukraine within 0.5% and is very similar to the level of ODA countries in Europe and Central Asia (Group countries). World average level of ODA is within 0.2%.

The latest value for Net official development assistance and official aid received (current US\$) in Russia was \$1,331,040,000 as of 2004. Over the past 14 years, the value for this indicator has fluctuated between \$2,419,400,000 in 1993 and \$254,020,000 in 1990.

Furthermore, ODA can be analysed in relation to the amount of assistance spent per inhabitant in donor countries and received per inhabitant in recipient countries. The average contribution to ODA per EU citizen was EUR 108 in 2010, a total increase of 17% as compared to 2005.

The contribution of open trade to sustainable development was acknowledged as long ago as 1992: "Agenda 21" considered that an open multilateral trade system could ensure a better allocation and better use of resources, thereby contributing to development and the protection of the environment.

Various international declarations emphasise the importance of a greater share in world trade for developing countries, including the Doha Declaration on Financing for Development. In its Sustainable Development Strategy, the Ukraine commits itself to undertaking efforts that international trade and investment are used as a tool to achieve genuine global sustainable development.

It also dedicates a share of its ODA to "Aid for Trade",¹³⁰ with the objective of supporting developing countries in enhancing their capacity to trade.

Source: http://www.oecd.org/statistics/

¹³⁰ Commission communication, Towards an EU Aid for Trade strategy – the Commission's contribution, COM (2007) 163.

EU import statistics indicate to what extent developing countries can access the EU market, but provide no measure of the use of environmentally and socially sustainable modes of production in developing countries. However, sustainability impact assessments consider the impact of each trade negotiation in the economic, social and environmental terms.

In 2000, the EU spent EUR 44 419 million on agriculture subsidies that are qualified as trade-distorting according to the rules of the World Trade Organisation (WTO). In 2007, this amount had been reduced to EUR 12 354 million, less than a third. This represents an average annual decrease of 16.7% between 2000 and 2009. The EU has thus made progress on reducing agricultural subsidies that are considered trade-distorting and have to be reduced according to the rules of the WTO.

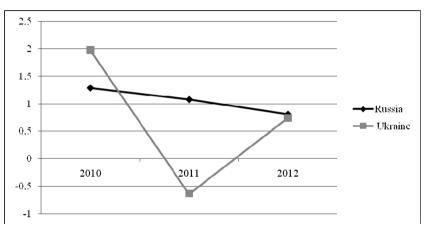


Figure 8.3. Total support to agriculture (TSE), Ukraine and RF

Source: http://www.oecd.org/tad/agricultural-policies/AgMon_2013_Ukraine_ENG.pdf http://www.oecd.org/tad/agricultural-policies/AgMon_2013_Russia_ENG.pdf

Ukraine's producer support has been variable over the long-term, largely reflecting fluctuations in market price support. Overall the % PSE (Producer Support Estimate) was negative in 2011, as budgetary payments only partly offset negative market price support which was due to grain export restrictions; this balance became slightly positive in 2012 resulting in a % PSE of 1%. On aggregate, producer prices are below world levels, but disparities in protection across commodities are significant. Around two-thirds of producer support is provided in the most production and trade distorting forms, with budgetary transfers dominated by input subsidies. PSE changed from negative to positive in 2012, largely due to the fact that aggregate market price support (MPS) became less negative. On average, domestic prices moved up closer to border prices. This price effect was almost doubled by the changes in the quantities, mainly because less wheat was produced, a product characterised by negative transfers.¹³¹

Support to agriculture in Russia fluctuated over the long-term, but declined in 2011 and 2012. The decline in 2011 was largely due to the effects of export restrictions depressing domestic grain prices, while in 2012 developments in the livestock sector dominated: protection of this sector decreased, in part reflecting WTO-committed tariff reductions, and also because livestock producers benefitted less from cheaper feeds. Around 60% of producer support (PSE) derives from market price support, largely due to border protection. Livestock producers also benefit from domestic grain prices being below the world levels, although these benefits eroded in 2012 as domestic prices moved up closer to world levels. Budgetary transfers to producers are dominated by subsidies to variable inputs and investments. Over four-fifths of total support to agriculture (TSE) is provided to producers individually, with the rest directed to general services for agriculture.^{132,132}

Agricultural subsidies make agricultural products cheaper and thus make it harder for producers from other countries with less supported to compete with more supported producers in agricultural markets.

The Monterrey Consensus highlights that ODA and foreign direct investment (FDI) are key contributors to sustainable development. They provide much-needed funds to developing countries to invest in sectors such as education, health and agriculture. FDI can also create jobs for the local population and, ideally, generate public revenue in developing countries. The indicator measures various kinds of financial inflows to developing countries and presents the most important contributions of different actors (private, governments and civil society).¹³³

The indicator comprises net disbursements of official ODA, other official flows (OOF), private flows and private grants. ODA consists of grants or loans from the official sector to promote economic development and welfare in the recipient countries. Private flows include private direct investment, export credits and financing to multilateral institutions. OOF are transactions that do not meet the conditions for eligibility as ODA, either because they are not primarily aimed at development or because they have a grant element of less than 25%. Private

¹³¹ OECD (2013): Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies, OECD Publishing. doi: 10.1787/agr_pol-2013-en.

¹³² Erokhin, V., Ivolga, A. (2012): Support of Agriculture within WTO System: Perspective Direction for Russia. Bulletin of the Novgorod State University n.a. Yaroslav the Wise, Vol. 69, pp. 66-69. (in Russian: Ерохин В., Иволга А. Поддержка сельского хозяйства в системе ВТО: перспективные направления для России // Вестник Новгородского государственного университета им. Ярослава Мудрого. – 2012. – № 69. – С. 66-69).

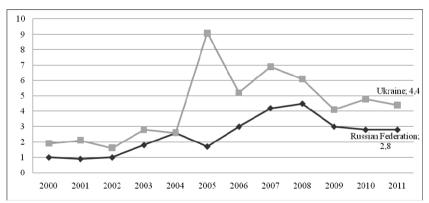
¹³³ United Nations (2003): Monterrey Consensus on Financing for Development.

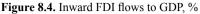
grants refer to aid from private sources, mostly NGOs. The indicator covers aid from EU countries to the countries mentioned in the DAC list.

Least-developed countries and other low-income countries – the two poorest groups of developing countries – received a higher share of foreign direct investment from DAC EU Members in developing countries in 2009 than in 2000.

The Monterrey Consensus and the Doha Declaration on Financing for Development identify private international capital flows as "vital complements to development efforts" and stipulate that they should be increased. However, while investments are important for a country's development, they may also have negative effects on people and the environment if human rights and social and environmental standards are not observed.¹³⁴

FDI includes investments by foreign companies in production facilities or shares in national companies.





Source: UNECE Statistical Database, compiled from national and international (CIS, EUROSTAT, IMF, OECD) official sources. Indicators that base on OECD Handbook on Economic Globalisation Indicators are indicated (OECD).

By the indicator FDI Ukraine is ahead of Russia.

Carbon dioxide (CO₂) emissions per capita in the EU have dropped slightly since 2000. In 2007 emissions in the EU were 3.4 times higher than in developing countries. In 2000 they had been 4.7 times higher. The gap between the two groups of countries has narrowed since 2004: emissions have grown in developing countries, while they have decreased in the EU.¹³⁵

¹³⁴ United Nations (2003): Monterrey Consensus on Financing for Development.

¹³⁵ European Commission (2011): Sustainable development in the European Union — 2011 monitoring report of the EU sustainable development strategy, Luxembourg: Publications Office of the European Union — 377 pp.

During the 1990s CO_2 emissions per capita in the EU decreased on average by 1.0% per year, from 9.4 tonnes in 1990 to 8.5 tonnes in 2000. Emissions have remained relatively stable during the 2000s, dropping only slightly to 8.2 tonnes in 2008.

Between 2000 and 2007 CO₂ emissions per capita in developing countries increased from 1.8 tonnes to 2.5 tonnes. This represents a total increase of 38.9% in this period. In comparison, the increase had been 5.9% during the previous decade. The increase in per capita CO₂ emissions can be mostly attributed to the fast economic growth of major developing countries, namely China, Brazil and India.

EU emissions per capita were still about 7 times higher than in India and 60% higher than in China in 2008.

Harmful emissions of oxygen in Ukraine are lower than in Russia and in the EU. An international comparison shows that the EU is below the OECD average concerning the CO₂ emissions per capita. Furthermore, it shows that CO₂ emissions per capita have also decreased in other industrialised countries like the United States or OECD-countries. However, the period evaluated here (2000-2008) in general reflects a quite positive trend in the CO₂ emissions per capita in industrialised countries. In addition to a generally declining trend, the economic crisis led to economic stagnation which translated into less CO₂ emissions per capita. In contrast, the CO₂ emissions per capita increased in both China and India. The increase in China was particularly substantial with an annual growth rate of 9.1 % between 2000 and 2008.

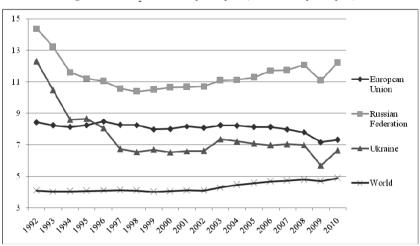


Figure 8.5. CO₂ emissions per capita (metric tons per capita)

Source: www.worldbank.org

At the same time, although the emissions tend to decrease in industrialised countries and increase in emerging economies, the CO_2 emissions per capita of the United States were still 3.7 times higher than those of China and almost 15 times higher than those of India.

This is a contextual indicator, providing background information helpful to an understanding of the topic. One of the objectives of the EU Sustainable Development Strategy is to "contribute to improving international environmental governance¹³⁶ and to strengthening multilateral environmental agreements". For mitigating climate change the reduction of the emission of greenhouse gases, notably CO₂, is essential. CO₂ emissions per capita is thus one of the indicators for monitoring the achievements towards the Millennium Development Goal 7 (ensure environmental sustainability).

The indicator compares the level of CO_2 emissions per capita in the EU with levels in developing countries, in tonnes per inhabitant. "Developing countries" refers to the countries and territories on the DAC list for which CO_2 emission data are available.

Detailed methodological notes on the indicators used in this publication can be found on the Eurostat sustainable development indicator web pages: http://ec.europa.eu/eurostat/sustainabledevelopment.

We consider the most effective mechanism for reducing the harmful impact on the environment implemented under the Kyoto Protocol: carbon emission trading.

The Mechanisms under the Kyoto Protocol: Emissions Trading, the Clean Development Mechanism and Joint Implementation

Countries with commitments under the Kyoto Protocol to limit or reduce greenhouse gas emissions must meet their targets primarily through national measures. As an additional means of meeting these targets, the Kyoto Protocol introduced three market-based mechanisms, thereby creating what is now known as the "carbon market."

The Kyoto mechanisms are:

Emissions Trading. Parties with commitments under the Kyoto Protocol (Annex B Parties) have accepted targets for limiting or reducing emissions. These targets are expressed as levels of allowed emissions, or "assigned amounts", over the 2008-2012 commitment period. The allowed emissions are divided into "assigned amount units" (AAUs). Emissions trading, as set out in Article 17 of the Kyoto Protocol, allows countries that have emission units to spare – emissions permitted them but not "used" – to sell this excess capacity to countries that are over their targets. Thus, a new commodity was created in the form

¹³⁶ European Commission (2011): Sustainable development in the European Union — 2011 monitoring report of the EU sustainable development strategy, Luxembourg: Publications Office of the European Union — 377 pp.

of emission reductions or removals. Since carbon dioxide is the principal greenhouse gas, people speak simply of trading in carbon. Carbon is now tracked and traded like any other commodity. This is known as the "carbon market".

- The Clean Development Mechanism (CDM), defined in Article 12 of the Protocol, allows a country with an emission-reduction or emissionlimitation commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can be counted towards meeting Kyoto targets.

The mechanism is seen by many as a trailblazer. It is the first global, environmental investment and credit scheme of its kind, providing standardized emissions offset instrument, CERs.

A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy-efficient boilers.

The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets.

A CDM project must provide emission reductions that are additional to what would otherwise have occurred. The projects must qualify through a rigorous and public registration and issuance process. Approval is given by the Designated National Authorities. Public funding for CDM project activities must not result in the diversion of official development assistance.

The mechanism is overseen by the CDM Executive Board, answerable ultimately to the countries that have ratified the Kyoto Protocol.

Operational since the beginning of 2006, the mechanism has already registered more than 1,650 projects and is anticipated to produce CERs amounting to more than 2.9 billion tonnes of CO2 equivalent in the first commitment period of the Kyoto Protocol, 2008–2012.

The mechanism known as "joint implementation" defined in Article 6 of the Kyoto Protocol, allows a country with an emission reduction or limitation commitment under the Kyoto Protocol (Annex B Party) to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another Annex B Party, each equivalent to one tonne of CO₂, which can be counted towards meeting its Kyoto target. Joint implementation offers Parties a flexible and cost-efficient means of fulfilling a part of their Kyoto commitments, while the host Party benefits from foreign investment and technology transfer.

A JI project must provide a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to what would otherwise have occurred. Projects must have approval of the host Party and participants have to be authorized to participate by a Party involved in the project. Projects starting as from the year 2000 may be eligible as JI projects if they meet the relevant requirements, but ERUs may only be issued for a crediting period starting after the beginning of 2008.

If a host Party meets all of the eligibility requirements to transfer and/or acquire ERUs, it may verify emission reductions or enhancements of removals from a JI project as being additional to any that would otherwise occur. Upon such verification, the host Party may issue the appropriate quantity of ERUs. This procedure is commonly referred to as the "Track 1" procedure."

If a host Party does not meet all, but only a limited set of eligibility requirements, verification of emission reductions or enhancements of removals as being additional has to be done through the verification procedure under the Joint Implementation Supervisory Committee (JISC). Under this so-called "Track 2" procedure, an independent entity accredited by the JISC has to determine whether the relevant requirements have been met before the host Party can issue and transfer ERUs.

A host Party which meets all the eligibility requirements may at any time choose to use the verification procedure under the JISC (Track 2 procedure).

The Kyoto mechanisms:

- Stimulate sustainable development through technology transfer and investment
- Help countries with Kyoto commitments to meet their targets by reducing emissions or removing carbon from the atmosphere in other countries in a cost-effective way
- Encourage the private sector and developing countries to contribute to emission reduction efforts

JI and CDM are the two project-based mechanisms which feed the carbon market. JI enables industrialized countries to carry out joint implementation projects with other developed countries, while the CDM involves investment in sustainable development projects that reduce emissions in developing countries.

The carbon market is a key tool for reducing emissions worldwide. It was worth 30 billion USD in 2006 and is growing.

Annex I Parties must provide information in their national communications under the Protocol to demonstrate that their use of the mechanisms is "supplemental to domestic action" to achieve their targets. This information is assessed by the facilitative branch of the Compliance Committee.

Eligibility requirements.

To participate in the mechanisms, Annex I Parties must meet, among others, the following eligibility requirements:

- They must have ratified the Kyoto Protocol.
- They must have calculated their assigned amount in terms of tonnes of CO2-equivalent emissions.
- They must have in place a national system for estimating emissions and removals of greenhouse gases within their territory.

- They must have in place a national registry to record and track the creation and movement of ERUs, CERs, AAUs and RMUs and must annually report such information to the secretariat.
- They must annually report information on emissions and removals to the secretariat.

Unlike the Kyoto Protocol, the BAP affirms the importance of reducing deforestation, which accounts for 17 to 20 percent of the world's annual greenhouse gas emissions, as a strategy for mitigating climate change. It specifies "policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries" (REDD) to be included in the NAMAs that countries can undertake (UNFCCC 2007, 3; FCCC/ CP/2007/6/Add.1 Decision 1).

The following recommendations are intended to encourage all countries to develop and support sustainable development policies:

- Developed countries should encourage and support developing countries to reduce forest degradation and loss under NAMAs, including sustainable development policies and measures that do not provide tradable carbon credits.
- Climate negotiators should support a range of approaches in the climate agreement to measure, report, and verify REDD NAMAs.
- Both developed and developing countries should adopt policies dealing with the consumption of products that drive illegal deforestation as NA-MAs, and they should start by addressing the illegal timber trade.

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