



BACKGROUND ANALYSIS¹
Green Economy and the Black Sea region²

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² The views expressed in this document are those of the author(s) and do not necessarily represent those of the United Nations, including UNDP, or their Member States.

Globalization, Climate Change and Green Economy

The United Nations Conference on Sustainable Development (Rio+20) in June 2012 will put the sustainable development paradigm once again on the forefront of the global political economy. It will point on the multiple challenges the world is facing and the urgency for collective action. It will call for the global transition to a low-carbon and climate change resilient economy.

The recent report of the United Nations Secretary-General's High-level Panel on Global Sustainability reiterates that the world must fully understand the dimensions of the challenge. It must recognize that the drivers of that challenge include unsustainable lifestyles, production and consumption patterns and the impact of population growth. As the global population grows from 7 billion to almost 9 billion by 2040, and the number of middle-class consumers increases by 3 billion over the next 20 years, the demand for resources will rise exponentially. By 2030, the world will need at least 50 per cent more food, 45 per cent more energy and 30 per cent more water — all at a time when environmental boundaries are throwing up new limits to supply. This is true not least for climate change, which affects all aspects of human and planetary health.

Despite the adoption of the United Nations Framework Convention on Climate Change and its Kyoto Protocol, annual global carbon dioxide emissions from fuel combustion grew by about 38 per cent between 1990 and 2009, with the rate of growth faster after 2000 than in the 1990s. Even with aggressive action to reduce emissions, the world would still face challenges to limit global temperature increase to 2 degrees Celsius since pre-industrial times. The global carbon dioxide level reached 389 parts per million in 2010 and, in absence of significant shifts in policy, is on track to exceed 450 parts per million over the coming decades. In its 2010 Emissions Gap Report, the United Nations Environment Programme (UNEP) concluded that the currently forecast 2020 emission levels were consistent with pathways that would lead to a likely temperature increase of between 2.5 and 5 degrees Celsius by the end of the twenty-first century, putting millions of lives at risk from increased malnutrition, disease or injury in heat waves and weather-related disasters, and changes in the geographic range of some infectious disease vectors.

Thus, the long-term vision of the High-level Panel on Global Sustainability is to eradicate poverty, reduce inequality and make growth inclusive, and production and consumption more sustainable, while combating climate change. These pillars of development cannot be treated in isolation any longer. This reaffirms the landmark 1987 report by the World Commission on Environment and Development, "Our Common Future", known as the Brundtland report. The United Nations Secretary-General's High-level Panel on Global Sustainability reiterates that the key for achieving the global transition to a low-carbon and climate change resilient economy is to integrate sustainable development principles at all scales and within all spheres of economic, political and social development.

Green growth is acknowledged to be the instrument for turning the vision into reality. It can shape strategies for a response to climate change by reducing carbon emission through the development, improvement and deployment of various renewable energy sources and efficient energy use. At the same time, it can stimulate economic growth and equip an economy with better tools to cope with rapid demographic changes by fostering green businesses and accompanying synergy effects, and generating green jobs. It can also help a society to tackle resource scarcity and improve the environment and natural assets, including ecosystems and biodiversity, through improved and enhanced natural asset and resource management. Green growth allows thus to produce more resilient societies.

Priority Sectors and Opportunities for the Transition to a Green Economy

The Green Economy Report³ recently launched by UNEP demonstrates once again that the greening of economies is not generally a drag on growth but rather a new engine of growth, that it is a net generator of decent jobs, and that it is also a vital strategy for the elimination of persistent poverty. It argues that the rewards of greening the world's economies are tangible and considerable, and that the means are at hand for both governments and the private sector.

UNEP defines a green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. A green economy can be thought of as one which is low carbon, resource efficient and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. The development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and as a source of public benefits, especially for poor people whose livelihoods and security depend on nature.

There are several sectors of crucial importance for the transition to a green economy.

Sustainable agriculture is capable of nourishing a growing and more demanding world population at higher nutritional levels up to 2050, will reduce poverty and has significant environmental benefits by reducing waste and inefficiency. It will require national and international policy reforms and innovations as well as investment, research and capacity building.

The world's marine **fisheries** are socially and economically vital, providing animal protein and supporting food security to over 1 billion people. But Global marine fisheries are currently underperforming in both economic and social terms. Investing to achieve sustainable levels and practices (with tools currently available) of fishing will secure a vital stream of income in the long run and would increase resource rent from global fisheries dramatically.

The existing inadequacies in provision of **water** and sanitation services generate considerable social costs and economic inefficiencies. Nearly 1 billion people lack access to clean drinking water; 2.6 billion lack access to improved sanitation services. Continuing current practices will lead to a massive and unsustainable gap between global supply and demand for water withdrawal. This is exacerbated by failure to collect and treat used water to enable subsequent uses. Accelerated investment in water-dependent ecosystems, in water infrastructure and in water management can be expected to expedite the transition to a green economy.

Forests are a foundation of the green economy, sustaining a wide range of sectors and livelihoods.

³ UNEP's work on the green economy raised the visibility of this concept in 2008, particularly through our call for a Global Green New Deal (GGND). The GGND recommended a package of public investments and complementary policy and pricing reforms aimed at kick-starting a transition to a green economy while reinvigorating economies and jobs and addressing persistent poverty. Designed as a timely and appropriate policy response to the economic crisis, the GGND proposal was an early output from the United Nations' Green Economy Initiative. This initiative, coordinated by UNEP, was one of the nine Joint Crisis Initiatives undertaken by the Secretary-General of the UN and his Chief Executives Board in response to the 2008 economic and financial crisis.

Short-term liquidation of forest assets for limited private gains threatens this foundation and needs to be halted. Tried and tested economic mechanisms and markets exist which can be replicated and scaled up and investments in natural forests and plantations can deliver economic benefits. Legal and governance changes are needed to tip the balance towards sustainable forestry.

Renewable energy can make a major contribution to the twin challenges of responding to a growing global demand for energy services, while reducing the negative impacts associated with current production and use. Renewable energy can help enhance energy security at global, national and local levels and eliminate energy poverty and a shift to renewable energy sources brings many new employment opportunities due to higher labor intensity. Policy support will need to be expanded considerably to promote accelerated investment in renewable energy.

As currently configured, **manufacturing** has a large material impact on economy, environment and human health. Key resource scarcities – including easily recoverable oil reserves, metal ores and water – will challenge the sector. Win-win opportunities exist, if manufacturing industries pursue life-cycle approaches and introduce resource efficiency and productivity improvements. Key components of a supply-side strategy include remanufacturing – for example of vehicle components – and the recycling of heat waste through combined heat and power installations.

The increasing volume and complexity of **waste** associated with economic growth are posing serious risks to ecosystems and human health. The growth of the waste market, increasing resource scarcity and the availability of new technologies are offering opportunities for greening the waste sector. Investing in greening the waste sector can generate multiple economic and environmental benefits by substantial resource savings and creation of new jobs. Greening of the waste sector requires financing, economic incentives, policy and regulatory measures and institutional arrangements.

The **buildings** sector of today has an oversized ecological footprint. Constructing new green buildings and retrofitting existing energy- and resource intensive buildings stock can achieve significant savings, brings significant health and productivity benefits and can lead to an increase in jobs. Developing countries have the opportunity to lay the foundation of energy-efficient building stocks for decades to come. The role of public policy and leadership by example is vital in triggering the greening of the building sector.

Present patterns of **transportation** – based mainly on petrol and diesel-fuelled motor vehicles – generate serious social, environmental and economic damage and are highly unsustainable. Investment in public transportation and vehicle efficiency improvements generates exceptional economic returns. It is crucial to shift to less harmful modes of transportation and to improve vehicles towards lower carbon intensity.

Tourism has significant potential as a driver for growth for the economy but the development of tourism is accompanied by significant environmental and social challenges. But tourism development can be designed to support the local economy and reduce poverty. Green tourism has the potential to create new jobs. Investing in the greening of tourism can reduce the cost of energy, water and waste and enhance the value of biodiversity, ecosystems and cultural heritage. Much of the economic potential for green tourism is found in small and medium-sized Enterprises (SMEs), which need better access to financing for investing in green tourism.

Environmental Products, Green Job Potentials and Climate Change

Green jobs hold the promise that humankind will be able to face up to the two defining challenges of the twenty first century: 1) Averting dangerous and potentially unmanageable climate change and protecting the natural environment which supports life on earth; and 2) Providing decent work and thus the prospect of well-being and dignity for all in the face of rapid population growth worldwide and the current exclusion of over a billion people from economic and social development.

Green jobs reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable. A report of the United Nations Environmental Programme (UNEP 2009) defines green jobs as work in agriculture, industry, services and administration that contributes to preserving or restoring the quality of the environment. Green jobs are found in many sectors of the economy from energy supply to recycling and from agriculture and construction to transportation. They help to cut the consumption of energy, raw materials and water through high-efficiency strategies, to de-carbonize the economy and reduce greenhousegas emissions, to minimize or avoid altogether all forms of waste and pollution, to protect and restore ecosystems and biodiversity.

Six economic sectors are particularly important in terms of greenhousegas emission and use of natural resources for raw material, as well as their contribution to the economy and as sources of employment and income: energy supply, in particular renewable energy, building and construction, transportation, basic industry, agriculture and forestry. Millions of green jobs already exist in industrialized countries, emerging economies and developing countries alike:

Energy supply – renewable sources of energy: more than 2.3 million green jobs have been created in recent years in this sector; however, these only supply 2 per cent of the world’s energy (2009). The wind power industry employs some 300,000 people, the solar-photovoltaic sector an estimated 170,000, and the solar thermal industry more than 600,000, a large proportion of these in China. Countries with active policies to promote renewable energy have seen employment surge in this sector. In Germany, for example, the number of jobs almost quadrupled to 260,000 in less than 10 years.

Energy efficiency, particularly in buildings and construction: this is one of the areas with the highest potential to reduce greenhousegas emissions and to create jobs. Buildings are responsible for 30–40 per cent of all energy use, greenhousegas emissions and waste generation. The construction and renovation of buildings also represents the sector with the highest technical and economic potential for reducing emissions. Using current technology, high-performance buildings have the potential to cut energy costs by at least 80 per cent compared with traditional building construction. Jobs in the building sector will be redefined in terms of new skills, training and certification requirements.

Transportation is the lifeblood of the globalized economy. While efforts are being made to reduce the footprint of cars, public transport systems offer lower emissions and more green jobs. Only some 250,000 jobs in the manufacture of fuel-efficient, low-pollution and low-emissions cars can be considered green, in comparison to over 5 million jobs in the railways in China, India and the European Union alone, and millions more in public transport worldwide. Railways can generally be regarded as sources of green employment. Public transport is a growth sector in a low-carbon world. Bus rapid transit systems are being put in place in more and more cities around the world, providing affordable and reliable public transport options. There are also substantial green employment opportunities in retrofitting diesel buses to reduce air pollutants, and in substituting cleaner compressed natural gas

(CNG) or hybrid-electric buses.

Basic industries and recycling: industrial sectors such as those of iron and steel, aluminium, cement, pulp and paper account for a large proportion of the use of energy and raw materials, along with greenhousegas emissions, but a relatively small proportion of global employment. Greening basic industries is difficult and the green employment creation potential rather low. The best option for reducing the impact of these industries is through recycling. For example, secondary steel production, based on recycled scrap, requires 40–75 per cent less energy than primary production and can therefore be seen as a proxy for greener production. In addition, communal recycling and composting efforts are likely to account for many more jobs.

Agriculture is still the single largest employer in the world, with 1.3 billion farmers and agricultural workers in total. Decades of neglect and deteriorating farm gate prices have led to unsustainable land-use practices and to bad jobs and low incomes, turning farmers and agricultural workers into the largest contingent of poor people in the world. Agriculture is both extremely vulnerable to climate change and a major contributor to it. It is also a major user and polluter of water, a driver of deforestation and of loss of biodiversity. There is considerable potential in this area as evidenced by sustainable practices on productive family farms, organic production and successful adaptation to climate change. With sales reaching \$100 billion in 2006, organic farming is beginning to register a considerable impact. More labour intensive than industrialized agriculture, the conversion of farmland for organic production could provide a good source of green employment in the future. Terracing or contouring land, building irrigation structures, conserving water and other related activities are labour intensive and will therefore provide employment, as will the rehabilitation of dams, barrages, and embankments.

Forests play a major role in maintaining the world's natural life-support systems. Given the current hope pinned on forests as carbon sinks and considering their role as providers of renewable raw material, pools of biodiversity, regulators of water flows and other environmental services, it is clear that green jobs in forests will play an increasingly important role in the future.

The business case for greening both the economy and the job market has been growing increasingly powerful. Energy and commodity prices are surging and customers and policy makers are exerting growing pressure on businesses to adopt greener practices and production methods in order to avert dangerous climate change. The greening of the economy presents a major opportunity to start new businesses, develop new markets and lower energy costs.

The global market for environmental products and services is projected to double from \$1,370 billion per year at present (2009) to \$2,740 billion by 2020. Half of this market is based in energy efficiency and the balance in sustainable transport, water supply, sanitation and waste management. Investments in improved energy efficiency in buildings could generate an additional 2–3.5 million green jobs in Europe and the United States alone. The potential is much higher in developing countries. Another sector where forecasts of green jobs are possible is renewable energy. Investment in renewable energy is booming, surging from \$10 billion in 1998 to at least \$66 billion in 2007, equivalent to 18 per cent of all energy investment. It is expected to reach \$343 billion in 2020 and to almost double again by 2030 to \$630 billion. In the past even optimistic predictions concerning the development of renewables have consistently been exceeded. Projected investments would translate into at least 20 million additional jobs in the sector, making it a much larger source of employment than today's fossil energy industry (mining, petroleum extraction, refining and fossil power generation), which, in spite of rising production, has been shedding jobs through technological advances.

Financing the green economy = Financing Climate Change Adaptation and Mitigation

While the scale of financing required for a green economy transition is substantial, it can be mobilized by smart public policy and innovative financing mechanisms. The rapid growth of capital markets, the growing green orientation of these markets, the evolution of emerging market instruments such as carbon finance and microfinance, and the green stimulus funds established in response to the economic slowdown of recent years, are opening up the space for large-scale financing for a global green economic transformation. Concentrated pools of assets, such as those controlled by long term investors, such as public financial institutions, development banks, sovereign wealth funds as well as some pension funds and insurance funds, whose liabilities are not due for payment on a short-term basis, will be needed to transform the economy.

Public financing is essential for jumpstarting a green economic transformation. The important role of public finance in supporting a green economy was demonstrated by the green components of the massive fiscal stimulus packages launched by G20 countries in responding to the financial and economic crisis, which broke out in 2008. Out of the estimated US\$ 3.3 trillion in stimulus funds, almost 16%, or US\$ 522 billion, was initially allocated towards green investments. The careful use of public expenditure and investment incentives can play an important role in enabling markets to incentivize green economic activity. Such situations might include the need to overcome market barriers or the need to act quickly, due to fear of locking in unsustainable assets and systems, or of losing valuable natural capital that people depend on for their livelihoods. Three important focuses for public spending are: (a) the promotion of innovation in new technologies and behaviors that are vital to green markets; (b) investment in common infrastructure that is required for certain green innovations to flourish; and (c) fostering infant green industries, as part of a strategy to build comparative advantage and drive long-term employment and growth.

The emergence of major **green funding mechanisms** is needed. At the Climate Conference in Cancun in December 2010, a process was established to design a Green Climate Fund. This is an important first step in devising an international mechanism to fund a low-carbon, green economy transition. The conference decisions included US\$ 30 billion in fast start finance from developed countries to developing countries for climate action up to 2012, and the plan to jointly raise US\$ 100 billion per year by 2020. These resources are urgently needed and can form the nucleus of an international fund to support a green economy transition in low-income countries. But additional financing mechanisms will be needed to maintain global natural capital. The Clean Development Mechanism (CDM) that grew out of the Kyoto Protocol is another example of a global initiative to promote green growth that involves developing countries. Apart from climate financing, the UN-REDD Programme – an initiative launched in September 2008 by FAO, UNDP and UNEP in support of national efforts to reduce deforestation and forest degradation and enhance forest carbon stocks – along with other REDD+ mechanisms can provide an important vehicle to drive the green economy transition. The Global Environment Facility (GEF) is another important financing vehicle for the green economy that needs to be scaled up and strengthened. There are also specialized funds being set up on regional levels, like the Green for Growth Fund. It is the first specialized fund to advance energy efficiency (EE) and renewable energy (RE) in Southeast Europe, including Turkey. Initiated by the European Investment Bank and KfW Entwicklungsbank, GGF is an innovative public-private partnership established to reduce energy consumption and CO2 emissions. GGF provides refinancing to financial institutions to enhance their participation in the EE and RE sectors and also makes direct investments in Non-Financial Institutions

with projects in these areas. The activities of GGF are supported by a Technical Assistance Facility.

The **development finance institutions** at international and national levels will play a key role in supporting the green economy. These institutions include multilateral development banks such as the World Bank and regional/sub-regional development banks, like the Black Sea Trade and Development Bank, bilateral development assistance agencies such as KfW of Germany and Caisse des Dépôts and AFD of France, and national development banks such as BNDES from Brazil, DBSA from South Africa and CDB from China, or within the BSEC region, the Development Bank of Turkey and the Bulgarian Development Bank. In 2009, multilateral development finance institutions committed US\$ 168 billion in development assistance, whereas national development banks and bilateral agencies provided over US\$ 350 billion in 2008. The Asian Development Bank is a prime example for a regional multilateral development bank turning green thus responding to the growing need for innovative policies, institutions, and investments to lead the region to a low-carbon and climate-resilient future. From 2009 to 2010, ADB invested more than \$8 billion in 227 loans, grants, and technical assistance for which climate change mitigation and/or adaptation comprised a substantial component of the entire project. In line with its Strategy 2020, ADB is integrating climate change into its planning and investment to ensure continued economic growth and a sustainable future for all in Asia and the Pacific. Several BSEC Members States recently joined the bank, Armenia in 2005, Azerbaijan in 1999 and Georgia in 2007.

The role of these institutions in supporting a green economy transformation could be strengthened further. They could, for instance, adopt the goal of supporting green economy development and link it to specific targets such as CO₂ emissions reduction, access to water and sanitation, biodiversity promotion, on top of poverty alleviation. They could also measure the net contribution of their activities to climate change, biodiversity loss and the green economy at large. Policies can be designed to improve the “green efficiency” of their portfolio, examining for example the carbon and ecological footprint of their investments. In addition, these institutions also influence the nature of investments and public financing through loans agreements and due diligence in their lending procedures. They can jointly define protocols for green due diligence and standards and goals for sectors in which they have major influence such as municipal finance, transport, and energy. Domestic development banks can also play a major role in developing and sharing new ways of addressing the green role of municipalities as well as greening the housing sector.

Foreign direct investment (FDI) is generally recognized as an important source of financing and of transfer of technology and know-how between countries. Therefore, there is a mounting recognition of green FDI as an important source for scaling up the financing and to foster the dissemination of environmentally-sound technology and practices in countries, which host vital ecosystems and account for a rising share of global emissions of greenhouse gases (GHG) and other pollutants, yet may have limited means for financing environment preservation and pollution mitigation. FDI has the potential to transfer environmentally-friendly industries, technology and practices that directly contribute to environmental progress.

There are two main definitions of green FDI. First, it can be defined as FDI in the environmental goods and services sector (these industries typically include renewable energy production and distribution and some environmental services such as waste management and recycling); and second, as FDI in environmental-damage mitigation processes, i.e. use of cleaner and/or more energy-efficient technologies. Environmentally-relevant FDI is defined as occurring in sectors where the scope for environmental spillovers (energy efficiency and pollution reduction and control) is greatest, i.e. in agriculture, manufacturing, mining, forestry, transport, construction, energy and water. As the OECD

highlights in a recently published paper, the two definitions are quite different in nature. The first part is in line with various efforts, including by the trade community and Eurostat, to identify the limited number of industries that directly contribute to pollution remediation or to environmental resource management. The second aims to capture the potential of FDI to foster environmentally-preferable technology and know-how in a much broader range of sectors.

The stagnant FDI causes serious concern and calls for adjustments in the operations of many **investment promotion agencies**. There is an increased demand for guidance, advice and training on how to react to the emerging challenges. There is the need to re-adjust to capitalize on changing global trends, such as a growing share of services and the primary sector in FDI, increased FDI flows to and from developing and transition economies (South-South flows), and emerging investment opportunities, particularly in green industries. It is a growing need to enhance the capacity of investment promotion agencies to attract green FDI, for example in renewable energy, sustainable agriculture and more energy efficient production. Countries will need to focus on sectors/subsectors where they can develop an internationally competitive offer and in which there are significant development benefits to be reaped through FDI. To identify suitable sectors, investment promotion agencies need to have the capacity to analyse global trends in green FDI and assess their own country.

Opportunities for sustainable lending are also prevalent for commercial banks and at the microlevel. An ever growing number of **commercial banks** develop in-house capacities for lending targeting green sectors, particularly for renewable energy sources. But disclosing environmental information of the banks' operations becomes also increasingly part of corporate social responsibility practices. For example, the Erste Bank, operating in many countries of CEE, is promoting social entrepreneurship and inclusive financing via a specialized company. Good.bee is the financial inclusion business of Erste Group. Set up in 2008 by the Erste Foundation and Erste Group, its principle task is to develop innovative solutions to break down the barriers to financial inclusion for individuals and enterprises in Central and Eastern Europe. In addition to its well-known success in helping to provide sustainable livelihoods and reduce poverty, **microfinance** has recently been extended to such areas as drinking water and sanitation and small-scale decentralised energy systems. Microinsurance products provide furthermore the potential to help households, SMEs and other "micro agents" at local level to adapt to challenges such as climate change.

Innovative partnerships between the development world and banking, insurance and private business sectors are increasingly taking place to reach out for the bottom billion that represent a large, yet untapped, consumer group and who are the most vulnerable to climate change with the aim to including them in value chains as producers, entrepreneurs, employees or consumers, thus making them more resilient to outside shocks. For example, in 2009 the Indonesian insurance company Asuransi Wahana Tata, together with the world's leading reinsurer Munich Re and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) launched a pilot product offering low income households in the Indonesian capital Jakarta the opportunity to insure against the direct economic losses and social risks caused by severe flooding. The Opportunities for the Majority (OMJ) Initiative of the Interamerican Development Bank promotes and finances market-based, sustainable business models that engage private sector companies, local governments and communities in the development and delivery of quality products and services for the majority of the population of Latin America and the Caribbean. UNDP's Growing Inclusive Market initiative (GIM) seeks to demonstrate how business can significantly contribute to human development by including the poor in the value chain as consumers, producers, business owners or employees ('inclusive business models'). GIM highlights portraits of successful simultaneous pursuits of revenues and social impact by private actors, from social entrepreneurs to local

small and medium-sized enterprises, large domestic companies and multinational corporations, but also state-owned companies and civil society organizations. It runs a programme in Eastern Europe and Central Asia to broker inclusive business investments and recently published a flagship report highlighting the inclusive business models of more than 30 entrepreneurs in the region.

Renewable energy equity investments taking an ownership stake in a project, or company, involve investments by a range of financial investors including Private Equity Funds, Infrastructure Funds and Pension Funds, into companies or directly into projects or portfolios of assets. UNEP’s Sustainable Energy Finance Initiative provides current and targeted information to financiers and facilitates new economic tools that combine social and environmental factors. A report by UN-Energy, an umbrella body of UN agencies working on sustainable development and their business partners, in conjunction with leading electricity companies and other partners launched a report which outlines the conditions necessary for successful **public-private partnerships** (PPP) on electricity with the aim to bring clean energy to the poor. PPP is in general viewed as the future for renewable energy financing and for mobilizing the private sector for development.

Green Entrepreneurship tackling Climate Change

Green entrepreneurship is at the frontline of the green economy and a crucial tool for poverty reduction as well as to create an inclusive and innovative economy. Private companies are the driving forces in most national economies today. With their capacity to invest and innovate, they are uniquely positioned to create solutions that reduce resource use, while at the same time improve human well-being. Companies and investors are quickly realizing that climate change and poverty are not merely social, political, or moral issues - they present economic and business issues as well. Business models that create opportunities for the poor and help to mitigate or adapt to climate change are sure to see growing demand. Companies can provide essential goods and services to the poor that reduce carbon emissions and help the poor adapt to the effects of climate change. They can also procure low-carbon goods and services in their supply chain.

There are enormous business opportunities in climate action. The following table showcases key opportunities per some strategic sectors for the areas of mitigation and adaptation.

Agriculture and Forestry Sectors	
Mitigation	Adaptation
<ul style="list-style-type: none"> Support climate friendly agriculture of low-income farmers, such as low methane rice cultivation, low nitrogen usage, zero tillage, or biodigesting agricultural waste. This can be achieved by providing extension services to farmers and by rewarding low-carbon practices. Payment for carbon sinks, such as forest projects through the UN Initiative on REDD (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) that attempts to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon development paths. 	<ul style="list-style-type: none"> Provide extension services to farmers to adapt to changing environmental conditions that include use of native plants and shifting crop variety to increase drought resilience. Diffuse water-saving practices such as drip irrigation and water harvesting. Provide poor farmers with insurance options to protect their crop against weather-related events such as drought and flood.
Energy Sector	
Mitigation	Adaptation
<ul style="list-style-type: none"> Provide renewable energysources off-grid but also in 	<ul style="list-style-type: none"> Provide alternatives to cooking with firewood and

<p>small grids (e.g. small hydro, wind or solar) and on the grid.</p> <ul style="list-style-type: none"> • Develop and diffuse energyefficient appliances such as stoves, fridges, and heaters at affordable cost. Private sector investment is still biased towards energy generation technologies; hence a push is also needed for more investment in energy-efficiency technologies. The IEA has shown that, on average, an additional one dollar invested in more efficient electrical equipment, appliances and buildings, avoids more than two dollars in investment in electricity supply. This ratio is highest in non-OECD countries. 	<p>more efficient use (which might become scarce in dry areas)</p>
Finance	
Mitigation	Adaptation
<ul style="list-style-type: none"> • Develop financial products that enable private and institutional investors to invest in pro-poor, pro-climate solutions. • Work closely with project developers to increase and improve the portfolio of available investment opportunities into climate friendly, pro-poor projects. 	<ul style="list-style-type: none"> • Develop insurance products that help the poor manage risks, especially weather-related agricultural and property insurance. • Develop smart financial products that encourage adaptation, e.g. housing finance that includes insurance for certain construction types.
Infrastructure and construction sector	
Mitigation	Adaptation
<ul style="list-style-type: none"> • Develop and diffuse energy efficient housing for low-income populations that includes better insulation. • Use less carbon intensive building material or building material that is sustainably harvested. 	<ul style="list-style-type: none"> • Provide construction materials and know-how to build housing that can resist extreme weather events and are adaptable to a changing environment. • Provide integrated housing and mobility solutions that provide options for low-income households to live in areas that are less likely to be affected by climate

Microenterprises are the backbone of the EU and most of the BSEC Member State’s economy. More than 3 million SMEs are operating in the BSEC region employing more than 21 million workers. While 99% of the companies in the EU are SMEs, 90% of them are microenterprises with less than 10 employees. SMEs provide 53% of all jobs in the EU. The private sector plays moreover a key role for including poor and vulnerable people into the market economy and for restoring the environment. According to the EC, social economy enterprises represent 2 million enterprises (i.e. 10% of all European businesses) and employ over 11 million paid employees (the equivalent of 6% of the working population of the EU). Social economy enterprises are present in almost every sector of the economy, such as banking, insurance, agriculture, craft, various commercial services, health and social services, local development, tourism and environmental protection. Social and green enterprises offer fresh solutions to social and environmental challenges and directly address the need for sustainable and equitable growth. They make profits not only for their investors but also seek to deliver social and environmental benefits. Such microenterprises contribute to local development by: 1) providing unique goods and services, 2) promoting employment often among poor and vulnerable groups, 3) stimulating entrepreneurial spirit, and 4) advancing sustainable development. By reducing social inequality and improving the environment, SGMs help to ensure that local economic development is truly sustainable. The EU recognized their importance and has been promoting favorable policy framework and financial support through its various programs.

Civil Society, Private Sector Engagement, Development and Sustainability Service Providers

Civil society and business have already taken up a progressive stand on climate change and green economy. Globally, business networks and civil society infrastructure for sustainability as well as

international development projects are increasing to promote a low carbon and climate change resilient economy. Private sector is realizing the business case behind the transition to a low carbon economy and forms lobbying groups to advocate for the transition while offering its know-how for piloting new innovative partnerships. Similar developments are slowly but steadily progressing in the BSEC region. Some important players that are part of the emerging support infrastructure for green entrepreneurs in the region are highlighted below.

The **GEF Small Grants Programme** (SGP) has been working with communities around the world to combat the most critical environmental problems. With presence in 122 countries, including most of the BSEC Member States, and more than 12,000 grants awarded worldwide, SGP supports projects of non-governmental and community-based organizations in developing countries demonstrating that community action can maintain the fine balance between human needs and environmental imperatives. The main focal areas of the programme are climate change abatement and adaptation, conservation of biodiversity, protection of international waters, reduction of the impact of persistent organic pollutants and prevention of land degradation. The programme is funded by the Global Environment Facility (GEF) as a corporate programme, implemented by the United Nations Development Programme (UNDP) on behalf of the GEF partnership, and executed by the United Nations Office for Project Services (UNOPS). To date the program funding from the GEF is approximately US\$401 million. In addition, the program has raised US\$407 million from other partners in cash or in-kind equivalents.

The **World Business Council for Sustainable Development** (WBCSD) is a CEO-led organization of around 200 transnational corporations who advocate for cooperation between business and government to balance economic and environmental interests. 5 of them are from the BSEC Region – in Greece Public Power Corp. (PPC) and Titan Cement; in Russia JSC Gazprom; and in Turkey Borusan Holdings and Eczacıbaşı Holding. The WBCSD's Regional Network is an alliance of nearly 60 CEO-led business organizations united by a shared commitment to providing business leadership for sustainable development in their respective countries or regions. The Regional Network has an integral role to play in creating awareness, advocating action and concrete implementation of the WBCSD's messages and activities worldwide and to promote the implementation of concrete projects on the ground. In several BSEC Member States WBCSD regional networks were created, such as in the Ukraine (Centre for CSR Development), Greece (SEV-BCSD Greece), Russia (Vernadsky Foundation) and Turkey (Turkey Business Council for Sustainable Development).

Ashoka is the world leading organization in the supporting social entrepreneurship. Its mission is to identify and support leading social entrepreneurs through a Social Venture Capital approach with the goal of elevating the citizen sector to a competitive level equal to the business sector. The organization currently operates in over 70 countries and supports the work of over 3,000 social entrepreneurs, and implements programmes in the fields of education, social financing and policy development. Ashoka's Environmental Innovations Initiative (EII) applies the tools of social entrepreneurship to help refine, accelerate, and showcase innovative new solutions for tackling the world's most pressing environmental problems. EII works with partner organizations and over 350 leading social entrepreneurs who are already improving the relationship between humans and the natural world. EII identifies underlying principles in successful environmental innovations and then promotes those back to the Ashoka community of Fellows and programs for direct implementation, to the broader environment and development community, and to leading educational institutions. Six green entrepreneurs of Turkey are members of Ashoka's Environmental Innovations Initiative operating in the fields of organic food production, nature conservation, sustainable fisheries and agriculture as well as water management.

The **SEED Initiative** is a global partnership for action on sustainable development and the green economy. Founded by UNEP, UNDP and IUCN at the 2002 World Summit on Sustainable Development in Johannesburg, SEED supports innovative small-scale and locally driven entrepreneurs around the globe which integrate social and environmental benefits into their business model. The goal of SEED is to support the ability of such entrepreneurs to scale up or replicate their activities. This furthers their contribution to their local economies and communities while promoting sustainable management of natural resources and ecosystems and reducing poverty, marginalisation and exclusion. Despite having a focus on African and Asian countries, SEED has already identified several promising green entrepreneurs in the BSEC region.

The **United Nations Global Compact (UNGC)** is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. It is the largest corporate citizenship and sustainability initiative in the world. It has 8,000 corporate participants and non-business participants from the civil society and the public sector from more than 130 countries. The network just celebrated its tenth anniversary at the Global Compact Leaders Summit in New York, uniting more than 1,000 leaders. A new target was set: 20,000 participants by 2020. Local Global Compact Networks remain at the heart of the global initiative. There are currently more than 90 Local Networks around the world. Local UN Global Compact Networks were set-up in most countries of the BSEC region, usually spearheading national efforts for creating CSR infrastructure. Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Russia, Serbia, Turkey and Ukraine have already operating UNGC Networks and have developed a multitude of associated projects and spin-offs.

CSR also increasingly wins space and recognition in the Balkans. In Macedonia, a National CSR Platform was established within the Ministry of Economy in 2008 and the national Global Compact Network has more than 50 companies as members. The Business Leaders Forums Serbia – launched in 2008 – is the first coalition of socially responsible companies in Serbia established with a mission to stimulate development of corporate social responsibility and set a permanent and stable CSR practices in Serbian business sector. The organization Croatian Business Council for Sustainable Development promotes sustainable development in private sector since 1997. In 2010, the European Commission endorsed the creation of a CSR platform for the Republic of Croatia. Similar developments can be witnessed throughout the BSEC region.

Bilateral Agencies and International Organizations are an active force in advancing the CSR agenda as well as social and green economy initiatives. Main bilateral development agencies in the Balkan region for example – like USAID – actively promote CSR, renewable energies and sustainable entrepreneurship since several years through pilot initiatives. National employment and SME development programmes increasingly integrate environmental and social standards. Traditional donors in Eastern Europe – like Austria and Sweden – phase out and shift the focus from development to business cooperation. UNIDO, UNDP or ILO are actively engaged in supporting national greener production centers, Global Compact Networks and sustainable business development programmes. The World Bank started to support countries in the region to develop green growth strategies, such as recently in Bulgaria. The European Commission supports CSR and social economy projects through the Instrument for Pre-Accession Assistance (IPA) and its Neighborhood Policy. Partnering with the private sector becomes a must for development. This spurs again the proliferation of innovative partnerships.

A **consultancy market** is slowly emerging in countries in transition providing the essential services to support the transition of individual companies and organizations. National environmental consultant

databases and rosters are being set up and interest groups formed. CSR, though still a relatively new field, already achieved remarkable influence and recognition. Despite the growth forecasts, climate change and CSR service providers are still in the process of professionalization. National capacities still need to develop. At this stage, services are mainly supplied by NGOs, which have a fragmented approach and are specialized in single aspects of the CSR Agenda, often without previous corporate consulting experience. In western markets sustainability service providers are already operating in the mainstream. Good indicators for that are the service menus by big consultancy houses, like PricewaterhouseCoopers, Mckinsey & Company, Ernst & Young or Accenture. They have build up fast capacities and specialized departments offering services reaching from CSR, climate change adaptation and mitigation, environmental management to inclusive business solutions and are increasingly engaging in lobbying groups and innovative partnerships for the development of the sector.

Regulatory Frameworks and International Governance

Concrete policy options for transitioning to a green economy not only exist, they are being implemented by many countries throughout the world. A well-designed regulatory framework can define rights and create incentives that drive green economic activity as well as remove barriers to green investments.

International environmental agreements can facilitate and stimulate a transition to a green economy and initiate reforms of the regulatory framework. Multilateral environmental agreements (MEAs), which establish the legal and institutional frameworks for addressing global environmental challenges, can play a significant role promoting green economic activity. The Montreal Protocol on the Substances that Deplete the Ozone Layer is widely considered to be one of the most successful MEAs. The Protocol led to the development of an entire industry focused on the replacement and phase out of ozone-depleting substances. The MEA with the most potential to influence the transition to a green economy is the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC's Kyoto Protocol has already stimulated growth in a number of economic sectors, such as renewable energy generation and energy efficient technologies, in order to address greenhouse gas emissions. At a global level, the renewal of a post-Kyoto framework for carbon will be the single most significant factor in determining the speed and scale of the transition to a green economy.

All countries of the BSEC region are intertwined with the multilateral environmental policy landscape (Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Serbia, Turkey and Ukraine). The countries are required to fulfill their obligations under the international environmental agreements they have ratified and within the intergovernmental governance structures they are part of and/or aspire to join. Naturally, the degree of international embeddedness of environmental governance, national political commitment, institutional maturity to integrate climate change into development planning, the level of capacity to implement climate change projects as well as the vulnerability to climate change and the GHG mitigation potential varies from country to country.

All countries of the region have signed the **United Nations Framework Convention on Climate Change** and the associated Kyoto Protocol. Parties to the Convention must submit national reports on implementation of the Convention to the Conference of the Parties (COP). Through the national communications, both Annex I and non-Annex I Parties, developed greenhouse gas inventories and vulnerability assessments, generated climate change projections, produced mitigation and adaptation action plans, integrated climate change into national development planning and conducted capacity building initiatives.

Since two decades the United Nations has been asking all countries to pursue strategic and coordinate action for sustainable development through the creation of **national sustainable development strategies**. A national sustainable development strategy (NSDS) can be defined as a coordinated, participatory and iterative process of thoughts and actions to achieve economic, environmental and social objectives in a balanced and integrative manner. Five principles that distinguish an NSDS have been derived: (1) country ownership and commitment; (2) integrated economic, social and environmental policy across sectors, territories and generations; (3) broad participation and effective partnerships; (4) development of the necessary capacity and enabling environment; and (5) focus on outcomes and means of implementation.

This call was first made at the 1992 UN Conference on Environment and Development (UNCED) and through its program of action for sustainable development - Agenda 21- the Conference asked countries to adopt a national strategy for sustainable development to “build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country” (UN Division for Sustainable Development – DSD 2004). In addition, integrating the principles of sustainable development into country policies and programmes is one of the targets contained in the United Nations Millennium Declaration to reach the goal of environmental sustainability. In 2010, More than 100 countries are implementing a national sustainable development strategy. Moreover, there exist important regional commitments to implement NSDSs, for example in the European Union, the Mediterranean Action Plan and in the Pacific Islands Forum. Most of BSEC Member States have developed or are in the process of developing National Sustainable Development Strategies, such as Romania, Greece, Moldova, Bulgaria, Serbia, Turkey, Armenia, Azerbaijan or Turkey. All National Sustainable Development Strategies emphasize the importance of SME’s for the sustainable development of key economic sectors. Driven by international development actors such as the World Bank, countries of the region like Turkey or Bulgaria are additionally starting to develop and implement green growth policies and strategies. It remains a challenge to integrate climate change, sustainable development and green growth strategies and action plans as well as to effectively link and coordinate them within the wider national policy development process.

The European Union, Climate Change, Economic Recovery and Smart Growth

The transposition of the EU climate change, energy and environmental legislation is being taken into account by Member States of BSEC and BSC. It provides a positive framework for accelerating climate change mitigation and adaptation in the region through directives on issues such as promotion of renewable energy, establishment of the EU ETS, reducing GHG emission from transport fuels, end-use energy efficiency and energy, environmental impact assessment, environmental liability, chemical waste management, integrated pollution prevention and control or integrated watershed management.

Bulgaria, Greece and Romania are EU Member States and therefore tied to the EU environmental acquis communautaire and the EU climate and energy policy. Albania and Serbia are potential candidate countries for EU accession and Turkey began full membership negotiations with the EU in 2005. Albania, Serbia, Moldova and Ukraine are part of the Energy Community, which intends to extend the EU internal energy market to South East Europe and beyond in line with the relevant acquis, including key EU legal acts in the area of electricity, gas, environment and renewable energy. According to the National Gap Analysis Report of the Russian Federation, a closer EU-Russia cooperation in the environmental field is found to be essential to move ahead the implementation of the objectives and priorities of the EU-Russia Common Economic Space Road-map.

The economic challenge of environmental approximation alone is enormous, but it is a prerequisite for reducing vulnerability to climate change. For example, the **Serbian** environmental approximation strategy estimates that the total cost of meeting the requirements of the environmental Acquis will be around €10.6 billion (between 2011 and 2030), the most demanding sectors being water (€ 5.6 billion), waste (€2.8 billion) and industrial pollution (€1.3 billion). An important part of the costs are operational ones, which cannot be covered by international sources and will have to be financed from public budgets, private sources or charges. The need of additional financing from Serbian public budgets is estimated to peak at around €360 million in 2018 and should steadily decrease thereafter until about 2025, when full cost recovery can be achieved. Therefore, also the institutional challenge is significant. On the other side of the balance, the direct economic benefits arising from environmental compliance over the same period should outweigh the costs by the factor of approximately 2.4.

In November 2008 the EU launched the **European economic Recovery Plan**. The objective was to drive a coordinated EU response to the economic crisis. The priority was to treat the symptoms of the economic crisis and protect jobs and purchasing power in the short-term while also investing in Europe's long-term economic health and in boosting the fight against climate change. The Plan set out a comprehensive programme to direct action to "smart" investment. Smart investment means investing in the right skills for tomorrow's needs; investing in energy efficiency to create jobs and save energy; investing in clean technologies to boost sectors like construction and automobiles in the low-carbon markets of the future; and investing in infrastructure and inter-connection to promote efficiency and innovation. At the same time, the ten Actions for Recovery included in the Plan would help Member States to put the right social and economic levers in place to meet today's challenge: to open up new finance for SMEs, cut administrative burdens and kick-start investment to modernise infrastructure. Like the EC stated, it would drive a competitive Europe ready for the low-carbon economy.

In 2010, the EU launched the **Europe 2020 strategy**, a strategy for smart, sustainable and inclusive growth. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion. The Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy.

Smart growth means improving the EU's performance in education, research/innovation and digital society. The "Innovation Union" flagship initiative aims to refocus R&D and innovation policy on major challenges for the society like climate change, energy and resource efficiency, health and demographic change.

Sustainable growth means building a more competitive low-carbon economy that makes efficient, sustainable use of resources; protecting the environment, reducing emissions and preventing biodiversity loss; capitalising on Europe's leadership in developing new green technologies and production methods; introducing efficient smart electricity grids; harnessing EU-scale networks to give our businesses (especially small manufacturing firms) an additional competitive advantage; improving the business environment, in particular for SMEs; and helping consumers make well-informed choices. The EU targets for sustainable growth include i) reducing greenhouse gas emissions at least by 20% compared to 1990 levels by 2020; ii) increasing the share of renewables in final energy consumption to 20%; and moving towards a 20% increase in energy efficiency.

The EU will boost sustainable growth through two main flagship initiatives. The flagship *initiative for a resource-efficient Europe* under the Europe 2020 strategy supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. It provides a long-term framework for actions in many policy areas, supporting policy agendas for climate change, energy, transport, industry, raw materials, agriculture, fisheries, biodiversity and regional development. This is to increase certainty for investment and innovation and to ensure that all relevant policies factor in resource efficiency in a balanced manner. It even includes a "Roadmap for moving to a competitive low-carbon economy in 2050". It sets out a plan to meet the long-term target of reducing domestic emissions by 80 to 95% by mid-century as agreed by European Heads of State and governments. It shows how the sectors responsible for Europe's emissions - power generation, industry, transport, buildings and construction, as well as agriculture - can make the transition to a low-carbon economy over the coming decades.

The other flagship initiative was launched through the Communication on *An integrated industrial policy for the globalization era* adopted by the European Commission in October 2010. It sets out a strategy that aims to boost growth and jobs by maintaining and supporting a strong, diversified and competitive industrial base in Europe offering well-paid jobs while becoming less carbon intensive. It reaffirms that Europe needs an approach that looks at the whole value chain, from infrastructure and raw materials to after-sales service. As part of the initiative, a new strategy on raw materials will be presented to create the right framework conditions for sustainable supply and management of domestic primary raw materials. According to the initiative, promoting the creation and growth of small and medium-sized enterprises has to be at the core of EU industrial policy. It highlights that the transition to a sustainable economy has to be seized as an opportunity to strengthen competitiveness. Only a European Industrial Policy targeting competitiveness and sustainability can muster the critical mass of change and coordination needed for success.

The third pillar of Europe's 2020 strategy on **inclusive growth** promotes a high-employment economy delivering economic, social and territorial cohesion. Inclusive growth means i) raising Europe's employment rate – more and better jobs, especially for women, young people and older workers; ii) helping people of all ages anticipate and manage change through investment in skills & training; iii) modernising labour markets and welfare systems; and iv) ensuring the benefits of growth reach all parts of the EU.

With its 2020 Strategy, the EU reaffirms that competitive, sustainable and inclusive growth are the fundament for a new and adjusted development pathway. The efforts of the EU to move its member states to a low carbon economy and to progressively integrate sustainable development in all policy sectors showcase that the Rio Principles are gaining momentum. These efforts show that structural change can only be accomplished when adjustments are done in a multitude of policy areas at the same time. The implementation of Europe's 2020 strategy will require massive technical assistance, building up a new generation of human resources and responsive institutions. This process provides an interesting learning opportunity for other regional multilateral and intergovernmental organizations.

There are other important initiatives which mutually reinforce the EU's commitment to create a low carbon and climate change resilient economy, focusing on eco-innovation and green industries, offering another good learning opportunity for its member states and beyond.

Eco-innovation Action Plan (EcoAp) launched by the DG Environment aims to help business to deliver green growth and environmental benefits. Eco-Innovation is framed as any form of innovation resulting in or aiming at significant and demonstrable progress towards the goal of sustainable development,

through reducing impacts on the environment, enhancing resilience to environmental pressures, or achieving a more efficient and responsible use of natural resources. The expected environmental, societal and commercial benefits of wide-spread adoption of eco-innovation can be considerable. European eco-industries are already a significant economic sector, with an estimated annual turnover of € 319 billion or about 2.5 % of the EU's gross domestic product¹³ (GDP). In the past two years 45% of European companies operating in manufacturing, agriculture, water and food services have eco-innovated and benefited from it. During 2012-2013, under current EU financing framework, EcoAP will support the introduction and scaling-up of environmental technologies in the market, in particular by supporting demonstration projects. This will pave the way for more comprehensive follow-up actions under the EU2020 Flagship Initiatives.

The Commission will foster key drivers for the market uptake of eco-innovation by: i) using environmental policy and legislation as a driver to promote eco-innovation (Action 1); ii) supporting demonstration projects and partnering to bring promising, smart and ambitious operational technologies to the market that have been suffering from low uptake (Action 2); iii) developing new standards boosting eco-innovation (Action 3); iv) mobilizing financial instruments and support services for SMEs (Action 4); v) promoting international cooperation (Action 5); vi) supporting the development of emerging skills and jobs and related training programmes to match the labour market needs (Action 6); and vii) promoting eco-innovation through the European Innovation Partnerships foreseen under the Innovation Union (Action 7).

The Commission, in cooperation with the Enterprise Europe Network, will expand the activities of the "environmental assistants for SMEs". The assistants will help SMEs seize the business opportunities created by eco-innovation. The scheme will consolidate environmental sound approaches in SMEs, raise their awareness and facilitate the acquisition of skills to stimulate eco-innovation. In 2012 the Commission will establish a European network of eco-innovation financiers and investors with a view to mobilizing them and defining better their policy needs in order to provide faster investment and finance. The Commission will also help eco-innovative European enterprises gain better access to global markets. The Enterprise Europe Network, European technology centres outside Europe and the EU Delegations will provide additional support for participation in trade fairs and trade visits, for links between SME support networks in Europe and elsewhere and for market intelligence and technology needs assessments.

The DG Enterprise and Industry launched the **Action Plan for Sustainable Consumption and Production** and Sustainable Industrial Policy. Identifying and addressing market failures and regulatory barriers that hinder the competitiveness of environmental industries and influence the uptake of more sustainable solutions by other industries is a key objective of the Action Plan.

All enterprises, including service enterprises, having energy and environment issues as the core source of income are considered part of eco-industries. Two broad categories of eco-industries can be considered, one of small and innovative companies acting in the field of, e.g. renewable energy, waste recycling, environmental auditing and consultancy; the other of more capital intensive enterprises providing goods and services in specific areas, e.g. waste, wastewater, transport. Different policy options are required to address the specificities of each of these categories. Consulting business and other stakeholders is important, notably regarding, the barriers that may hamper growth on the Internal Market; and the mechanisms and incentives to help SMEs to adopt more environmentally friendly and energy efficient solutions.

The Action Plan (16 July 2008) aims at ensuring EU continued leadership in environmental performance by i) creating a new sustainable product policy, in order to improve the environmental performance of products on the market and help consumers to buy more eco-friendly products; ii) encouraging eco-innovation so that EU businesses adapt to the markets of the future; iii) supporting the competitiveness of eco-industries; and iv) contributing to a low carbon economy internationally. The Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy entails following actions: i) Ecodesign standards for a wider range of products; ii) improved energy and environmental labelling; iii) incentives rewarding eco-friendly products, including green public procurement; iv) work with retailers; v) support to environmental industries; and vi) promotion of sustainable industry internationally.

The Mediterranean Action Plan (UNEP/MAP), Climate Change and Sustainable Development

Three of the BSEC Member States – Albania, Turkey and Greece - have adopted the Mediterranean Action Plan (MAP) and the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention). Turkey has furthermore ratified the Convention on the Protection of the Black Sea Against Pollution and is a member state of the the Black Sea Commission which is tasked to implement the provisions of the Convention and the Black Sea Strategic Action Plan. Although the initial focus of the MAP was on marine pollution control, experience confirmed that socio-economic trends, combined with inadequate development planning and management, were the root of many environmental problems. Consequently, the focus of MAP gradually shifted to include integrated coastal zone planning and management as the key tool through which solutions are being sought.

Seven Protocols addressing specific aspects of Mediterranean environmental conservation complete the MAP legal framework: i) Dumping Protocol (from ships and aircraft); ii) Prevention and Emergency Protocol (pollution from ships and emergency situations); iii) Land-based Sources and Activities Protocol; iv) Specially Protected Areas and Biological Diversity Protocol; v) Offshore Protocol (pollution from exploration and exploitation); vi) Hazardous Wastes Protocol; and the vii) Protocol on Integrated Coastal Zone Management (ICZM).

The **Mediterranean Commission on Sustainable Development** (MCSD) is an advisory body to the Contracting Parties. It has a unique structure of representatives of the 22 Contracting Parties as well as 15 rotating representatives from local authorities, business community and NGOs, forming, on equal footing, a think-tank on policies for promoting sustainable development in the Mediterranean Basin. The MCSD coordinated the preparation of the Mediterranean Strategy on Sustainable Development (MSSD), which was adopted by the Contracting Parties in 2005. The MCSD framework provides guidance for national decision makers to address sustainable development issues, implement international agreements and initiate partnerships. It is also a benchmark against which the entire Mediterranean community can monitor and assess its contribution to a common vision of a sustainable Mediterranean. The Strategy pursues four main directions: i) contribute to economic development while building on Mediterranean assets; ii) reduce social disparities and fulfill MDGs while strengthening diversity; iii) ensure sustainable management of natural resources and change consumption and production patterns; and iv) improve governance at local, national, regional levels. The MSSD identifies priority fields of action: water; energy; transport; tourism; agriculture; urban development, and; sea and coastal management. For each of these, orientations and possible actions are proposed. Since 2005, MAP supports technically and financially the formulation of national strategies for sustainable development.

During the 16th Meeting of the Contracting Parties to the Barcelona Convention and its Protocols held in Marrakesh in November 2009, adaptation to climate change in the Mediterranean coastal and marine

environments was identified as a priority issue requiring attention. Accordingly, climate change adaptation in the coastal zone has been incorporated into the “**Marrakesh Declaration**” and the Regional Activity Centers were further tasked to implement associated climate change activities within the framework of the Mediterranean Strategy on Sustainable Development.

Six MAP Regional Activity Centres (RACs) are based in Mediterranean countries, each offering its own environmental and developmental expertise for the benefit of the Mediterranean community in the implementation of MAP activities. Climate change and green economy was consequently introduced into the focus areas and multi-annual work programmes of the Regional Activity Centers.

Within the MAP umbrella, the specific objective of the **Priority Actions Programme/Regional Activity Centre (PAP/RAC)** is to contribute to sustainable development of coastal zones and sustainable use of their natural resources. In this respect, PAP/RAC’s mission is to carry out the tasks assigned to it in Article 32 of the Protocol on Integrated Coastal Zone Management in the Mediterranean (2008). In addition to its well-established role in supporting Integrated Coastal Zone Management in conjunction with Contracting Parties, the MAP is aware of the pressing need to address the impending impacts of changes in coastal climate and their implications for ongoing coastal resilience. In light of this, climate change adaptation has become an important new mandate of the PAP/RAC and has recently been adopted into its proposed five-year Programme of Work of UNEP/MAP.

Other Regional Activity Centers are increasingly incorporating climate change within the respective mandates advancing a number of research initiatives and pilot projects, especially the Blue Plan Regional Activity Centre and the Cleaner Production Regional Activity Centre. The **Blue Plan Regional Activity Centre (BP/RAC)** adopts a systemic and prospective approach to Mediterranean environment and development issues using observation and evaluation tools and generating indicators. Experts produce scenarios for reconciling the environment and the realities of socio-economic development in a drive to help Mediterranean countries make decisions with the future in mind. BP/RAC produced a number of climate change studies, on e.g. adaptation in the water sector; energy efficiency and buildings; impacts of climate change on the water resources of four major Mediterranean catchment basins; and evaluation of the economic impacts of extreme events. It also achieved to include a chapter on climate change in the report State of the Environment and Development in the Mediterranean (2009).

The **Cleaner Production Regional Activity Centre (CP/RAC)** promotes the reduction of industrial waste from the Mediterranean industrial sector and disseminates tried-and-tested cleaner production techniques. The centre also organizes training programmes, and promotes the exchange of experts, facilitating technology transfer within the region. CP/RAC initiated various pilot projects within the wider framework of green economy. It is the regional hub to move forward models of development that fit within the eco-system’s carrying capacity and are low-carbon as shifting to sustainable consumption and production and thus decoupling development from environmental degradation and resource depletion becomes an urgent need due to the pressure that the economic development of the 21 regional countries is exerting on the local environment.

The CP/RAC works to build capacity and contribute to the exchange of knowledge in such areas as i) Adopting cleaner production and pollution prevention as factors of competitiveness and economic performance for SMEs; ii) Reducing the generation of hazardous chemicals and their use by means of the best available techniques (BAT) and the best environmental practices (BEP); iii) Promoting initiatives for innovation and entrepreneurship that contribute to a healthier and more sustainable lifestyle for

citizens; iv) Introducing environmental criteria in the purchasing processes of public authorities (green public procurement); v) Introducing the concept of sustainability on university and business school curricula; and vi) Incorporating education on sustainable consumption and lifestyles into the work plans of civil society organisations.

The Regional Activity Centre for Cleaner Production (CP/RAC) in compliance with the tasks of the Mediterranean Action Plan (MAP) to support the Mediterranean Strategy for Sustainable Development (MSSD) and in line with the agenda of the UNEP Green Economy Initiative has decided to explore the opportunities green entrepreneurship presents to tackle environmental and social challenges and to promote sustainable lifestyles in the Mediterranean region. The RAC believes that developing an entrepreneurial green spirit, is not only strategic to deal with environmental, social and economic challenges but even to convert regular constraints into innovative opportunities to be scaled up for a more global impact.

In order to achieve these goals, CP/RAC has prepared a strategic action plan which means to implement through the following three phases: i) State of the Art on Green Entrepreneurship in the Mediterranean Countries: dissemination of a report and several business cases of green entrepreneurs of the entire region; ii) Awareness rising on governments, businesses and financial institutions: organization; iii) Technical assistance for pilot projects and support to green entrepreneurs. CP/RAC has collected business cases of green entrepreneurs from different sectors of the region, including seven from Turkey and Greece on topics such as organic food production and sustainable inclusive manufacturing, resource efficient service provision, sustainable agrotourism and renewable energy production (biofuels from olive pulp).

United Nations Conference on Sustainable Development (Rio+20)

An active role by governments in international processes can promote coherence and collaboration in the transition to a green economy. The United Nations Conference on Sustainable Development (Rio +20) summit in 2012 will provide an invaluable opportunity for the international community to promote green economy action given that one of the two themes for the summit is “a green economy in the context of sustainable development and poverty eradication.” The objective of the conference is to secure renewed political commitment for sustainable development, assess the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerging challenges. The seven critical issues to be discussed at the conference are green jobs, energy, cities, food, water, oceans and disasters. The conclusions of the conference will be taken up by policy makers, business, international organizations and the civil society around the world and will further accelerate action on sustainable development. It will be a need for the multilateral organizations in the Black Sea region to take up the conclusions of the conference and further promote its implementation on a regional level. In preparation for accelerating national-level green economy action, the United Nations Environmental Management Group is coordinating with 32 international organizations to develop an inter-agency assessment on how the expertise of the different UN agencies, funds and programmes can contribute directly to supporting countries in the transition to a green low-carbon economy.

BSEC, Sustainable Development and Green Economy

For green growth to succeed, a structural shift in policy making is needed and the implementation of a linked set of multiple actions on multiple fronts. It requires establishing sound regulatory frameworks, prioritizing government investment and spending in areas that stimulate the greening of economic sectors, limiting Government spending in areas that deplete natural capital, employing taxes and market-based instruments to promote green Investment and innovation, investing in capacity building and education as well as strengthening international governance. The IPCC is the prime example for the need to cooperate internationally and to achieve a binding global agreement to tackle climate change and to build up a low carbon and climate change resilient society in the long run. There is a growing interest from intergovernmental organizations and regional initiatives around the world to take up the topic of climate change and green economy and to use regional governance spaces for fighting transboundary related climate change threats, to incentivize transnational technology transfer, to establish common quality standards for green industries or to liberalize trade flows to enhance green trade. For example, and as highlighted above, the EU embarked with its Europe 2020 Strategy to move the region to smart, sustainable and inclusive growth. Cleaner production and consumption is also at the core of the UNEP/MAP and integral part of the sustainable development policy framework of the Barcelona Convention.

Green Economy is expected to experience a boost in the BSEC region, especially promoted through the BSEC regional initiatives and recently adopted declarations. The BSEC Green Energy Initiative has set up a Green Energy Task Force within the BSEC Working Group on Energy. The BSEC Working Group on SME adopted an Action Plan for the Black Sea Economic Cooperation focusing on green entrepreneurship and sustainability. The Black Sea Trade and Development Bank (BSTDB) is discussing the establishment of a multilateral Environmental Fund focusing on financing renewable energy and energy efficiency projects. The BSEC Business Council is creating a “Green Business Network in the BSEC Region” focusing on renewable energy sources. The International Center for Black Sea Studies (ICBSS) published a policy brief on greening the Black Sea economies, organized bilateral energy forums and networks and is embarking to launch a green trade project focusing on sustainable agriculture. Another important initiative was recently implemented by the Union of Black Sea and Caspian Confederation of Enterprises and funded GIZ. It enhanced the capacities of business support organizations in the Ukraine, Azerbaijan and Georgia to develop green business support strategies.

On 25 June 1992, the Heads of State and Government of eleven countries: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey and Ukraine signed in Istanbul the Summit Declaration and the Bosphorus Statement giving birth to the Black Sea Economic Cooperation (BSEC). It came into existence as a unique and promising model of multilateral political and economic initiative aimed at fostering interaction and harmony among the Member States, as well as to ensure peace, stability and prosperity encouraging friendly and good-neighbourly relations in the Black Sea region. The principal regular decision making organ of the Organization of the Black Sea Economic Cooperation is the Council of the Ministers of Foreign Affairs. The chairmanship-in-office is executed on a rotating basis for the duration of six month by the Member States (July-December 2010: Greece; January-June 2011: Romania; July-December 2011: Russia; January-June 2012: Serbia).

The BSEC Headquarters – the Permanent International Secretariat of the Organization of the Black Sea Economic Cooperation (BSEC PERMIS) – was established in March 1994, is located in Istanbul and accommodates the executive management units of the BSEC Working Groups. There are eighteen

Working Groups established, including on the following areas of cooperation: Banking and Finance; Energy; Emergency Assistance; Communications; Culture; Education; Science and Technology; Tourism; Trade and Economic Development; Agriculture and Agro-industry; SMEs; Customs Matters; Environmental Protection; Combating Crime; Health Care and Pharmaceuticals; and Institutional Renewal and Good Governance. Working Groups are in general guided by so-called joint ministerial declarations, comprised by focal points of the Member States and operate under an action plan or work programme coordinated by an executive manager.

BSEC furthermore consists of BSEC related bodies and BSEC affiliated centers. The BSEC related bodies that have their own budgets shall perform their functions in accordance with their basic instruments and with due respect to the principles of the BSEC set forth in the “Summit Declaration on Black Sea Economic Cooperation” of 25 June 1992 and in this Charter, e.g. Parliamentary Assembly of the Black Sea Economic Cooperation (PABSEC), the BSEC Business Council, the Black Sea Trade and Development Bank and the International Center for Black Sea Studies.

The Hellenic Chairmanship-in-Office initiated a new concept under the motto “The Black Sea turns Green”. Its aim was to promote green development and entrepreneurship in the BSEC Region. In accordance with the central theme, Greece undertook initiatives in the fields of green development and entrepreneurship. During the Greek Chairmanship the “Green Energy Development Initiative” was launched by the BSEC Ministers of Energy and the Council of Ministers of Foreign Affairs adopted a **Joint Declaration on Combating Climate Change in the wider Black Sea** (26 November 2010). The declaration recognizes the importance of developing and implementing regional approaches as appropriate for combating the negative impacts of climate change as well as for reversing continuing trends of biodiversity loss and ecosystem degradation. It acknowledges that environmental technologies and practices aiming at protecting the land and marine environment, biodiversity and natural resources can secure a future of welfare for the region. At the same time the declaration emphasizes that the response to climate change is an opportunity for promoting green economy, creating new prospects for enhanced regional cooperation and economic development in the region, by also focusing on a gradual turn towards new technologies, including cleaner energy and higher energy efficiency projects.

Through the declaration, the BSEC Council of Ministers of Foreign Affairs agreed to i) develop regional policy approaches on mitigating climate change with respect to the capabilities of the countries concerned and at the same time ensuring energy security and a sustainable development process providing for growth, employment and welfare; ii) strive to develop common approaches on climate change demonstrating leadership and strong commitment to action in the international arena, aiming at contributing to international and regional agreements through seeking the possibility of developing common policy positions, as well as project- based initiatives; and iii) to strengthen collaboration on addressing common challenges by elaborating shared plans and initiatives concerning the implementation of models of environmental risks assessment, especially early warning prediction models, with the aim of taking joint measures and increasing safety precautions against disasters in the wider Black Sea area.

The **Joint Declaration of the Ministers in Charge of Environmental Protection** of the BSEC Member States (Bucharest, 31 May 2011) acknowledges the global challenges in the 21st century, particularly the impacts of climate change which require regional concerted actions in the field of environmental protection and environmental risk management. *It underlines* the importance of an enhanced cooperation among the BSEC Member States, particularly by harmonizing the environmental approaches at the regional level, by promoting exchange of good practices and transfer of technical

know-how and by concrete measures and projects related to biodiversity conservation, integrated coastal zone and river management, tackling of pollution sources, as well as to environmental integration monitoring, research and eco-innovation activities. It *stresses* the need to improve the monitoring system using common indicators of the state of environment in our Member States which is essential for the establishment of further actions and measures required in order to protect and, if necessary, rehabilitate the environment. *It expresses* the determination to enhance the cooperation with EU in the field of environmental protection and to use Environment Partnership of the Black Sea Synergy as an opportunity for future development of environmental projects. BSEC intends to initiate and promote cooperation with other regional organizations, institutions and initiatives, such as the Commonwealth of Independent States (CIS), the Central European Initiative (CEI), the Council of Baltic Sea States (CBSS) and UNEP Mediterranean Action Plan (UNEP-MAP) to cooperate with BSEC in the development of concrete environment projects focused on common problems. BSEC aims to enhance further the co-operation between BSEC and the Commission on the Protection of the Black Sea against Pollution.

Furthermore, the **BSEC Action Plan on Environmental Protection** aims to support promoting the incorporation of environmentally important approaches in the economic and social development; developing a harmonized environmental legislation in the BSEC Member States, based on the best practice and experience existing in the Pan-European region, taking into account the legislative framework of the European Union; promoting the use of economic incentives and tools in the field of the environmental protection in order to ensure funding for projects of mutual interest; and promoting development of innovative, environmentally friendly and resource saving technologies. There is the intention to e.g. i) explore ways of developing an Ecotourism Network in the BSEC region in coordination with the Working Group on Cooperation in Tourism, and if appropriate with other BSEC Working Groups; ii) streamline the BSEC activities towards exploring investment programs directed at preservation of the region's environment, as well as the development of green technologies; iii) to seek ways of complementary cooperation with the Commission on the Protection of the Black Sea against Pollution; and iv) to provide the mechanisms of integrated management of the rivers' ecosystems of international importance which are covered by the sphere of BSEC activities.

The **Plan of Action of the Working Group on SMEs** was re-focused on green entrepreneurship and sustainable development. It reaffirms that sustainable development in the region will require to limit climate change consequences on SMEs, society and environment and turn to clean energy production; to ensure sustainable transport systems, to meet the economic, social and environmental needs; to improve conservation and management of natural resources; to develop of sustainable production (sustainable use of renewable energy, management of non-renewable materials, management of non-renewable energy sources and the maintenance or restoration of ecological systems and environmental burden from production processes); to create social and environmental consciousness with solidarity between and within generations aiming life quality; to create incentives for business development in accordance with the principles of sustainable development.

The Working Group aims to design and implement a systematic and substantial support of green entrepreneurship within the framework of an integrated plan in each BSEC member state. Objectives are as followed:

- Highlight the role of the state to promote green entrepreneurship and green economy.
- Adopt policies of energy saving and alternative energy resources.
- Contribute to the simplification and clarification of the existing institutional framework for new

areas and activities related to green entrepreneurship.

- Inform on incentives to develop expertise in areas such as management and energy conservation, waste management, recycling, and conservation of water etc.
- Rise awareness about reducing energy and especially the environmental footprint of manufacturing operations.
- Encourage the development and marketing of green products and services, producing environmentally friendly products.
- Adopt a systematic turn to green procurement in the public sector.
- Improve the environmental and social profile of the business and increase social acceptance for the manufacturing activities.
- Promote compliance of SMEs in the manufacturing sector with international environmental standards.
- Explore the possibility of financing action plans on green entrepreneurship by the EU.
- Cooperation between entrepreneurs from the member states as well as between agencies and organizations responsible for SME support.
- Develop environmental culture through networking.

The BSEC **Green Energy Initiative** has set up a Green Energy Development Initiative Task Force, within the BSEC Working Group on Energy, with the aim to identify common aspects of the green growth policies pursued by each Member State and specify relevant issues within which regional cooperation can be most effective. At its Bucharest Meeting, the Council also established a Green Energy Development Task Force within the BSEC Working Group on Energy by adopting its Terms of Reference. The said Task Force will promote innovative, environmentally friendly and resource saving technologies for achieving sustainable development, enhancing energy security and protecting and managing the natural resources and environment of the region. It was also agreed to encourage investments and support market based energy infrastructure by promoting environmentally sustainable and economically viable projects, to further diversify sources and routes and reinforce Green Growth.

Within the Yerevan **Declaration on Prospects of Cooperation in the Field of Transport in the BSEC Region** (27 March 2009) the BSEC Transport Ministers agreed to further exert joint efforts for promoting the sustainable and efficient transport operations based on mutually acceptable transport policies in the BSEC Member States. Through the Sofia Joint Declaration on Strengthening the Co-operation in the Field of Transport in the BSEC Region (15 April 2010) it was agreed to consult with competent national authorities to consider the possibility to elaborate an Integrated Maritime Policy in the field of Maritime Transport, Ports, Shipbuilding and Ship-repairing in the Region as an important factor for sustainable economic growth. They also agreed to make use of innovative transport solutions and intelligent transport systems (ITS). Furthermore, during the Romanian Chairmanship-in-Office the **Black Sea Regional Centre of Excellence on Renewable Energy** (BS-RCEREN) was set up in Bucharest with the aim to have a watchdog and advisory function regarding renewable energy sources, technology development and deployment potentials and investment opportunities in the Black Sea region as well as to act as a regional forum and learning platform for the region. The **Black Sea Regional Energy Centre** (BSREC) was inaugurated in 1995 following the Chalkidiki Ministerial Meeting, held in 1994 in Greece. The establishment of the Centre was a joint initiative of the European Commission, under its SYNERGY Programme, and the countries of the Black Sea region, i.e. Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey and Ukraine. Since 1999, the Former Yugoslav Republic of Macedonia, and since 2001, Serbia have become members of the BSREC as well. The Black Sea Regional Energy Centre acts as a focal point for energy related activities, aimed at developing the

co-operation between the Black Sea region countries and the EU in the energy field. Apart from its international activities, the BSREC is actively involved in the Bulgarian energy issues, acting as a Bulgarian energy society.

The BSEC Member States, by the “Agreement Establishing the **Black Sea Trade and Development Bank**” (BSTDB) done in Tbilisi on 30 June 1994, set up the BSTDB. The purpose of the Bank shall be to effectively contribute to the transition process of the Member States towards the economic prosperity of the people of the region and to finance and promote regional projects and provide other banking services to projects of the public and private sectors in the Member States and trade activities among the Member States in conformity with the provisions of the Agreement Establishing the BSTDB. The environmental mission of the Bank is to integrate environmental concerns into the assessment procedures of Bank financed operations and to be an effective intermediary and interlocutor for the provision of environmentally clean technologies in a cost-effective and economically feasible manner. The ultimate objective of the Bank is the promotion of sustainable development and the progression towards prosperity of member countries. The Bank will encourage prospective clients to undertake measures aimed at reducing energy intensity and promoting energy efficiency. The Bank will give special attention to preservation of natural conditions and pollution prevention of ground water, wetlands, coastal areas, natural parks and protected areas, forest resources, fisheries and wildlife, and in particular will seek to prevent any further pollution of the Black Sea. The Bank will ensure that at a minimum the projects financed by the Bank are environmentally neutral. In promoting environmental soundness and sustainable development BSTDB is guided by its Environmental Policy, which was approved by its Board of Directors in March 2001. The Policy document states the BSTDB’s mission and its general environmental principles, environmental standards it follows, technical cooperation, public consultation requirements, disclosure of information as well as Environmental Assessment details. Currently BSTDB is engaged in the review and update of its Environmental Policy and \ once approved by its Board of Directors it will replace the existing Policy document.

The **Union of Black Sea and Caspian Confederation of Enterprises** (UBCCE) recently finalized an important project which aimed to enhance the capacities of business support associations to develop green business support strategies. The Union of Black Sea and Caspian Confederation of Enterprises is an international union composed of central, private, voluntary, nationally representative, horizontal business organizations from the countries neighboring or having strong geographical ties with the Black Sea and Caspian Region. The Union, with its headquarters based in Istanbul, Turkey ensures permanent contacts in 19 business organizations from 16 countries, as of March 2011. The Hellenic Federation of Enterprises (SEV) runs the Presidency of the Union since March 2009, whereas Azerbaijan Turkey Business Association (ATIB) and Turkish Confederation of Employer Associations (TISK) run the Vice Presidencies.

The overall goal of the project was the elaboration of a business strategy that helps private sector associations and enterprises to respond to the multiple challenges and opportunities of climate change in an efficient and proactive manner. The strategy gave orientation to the business sector and addressed information needs, management issues, business opportunities, technology transfer and cooperation with a special focus on green business, climate-friendly technologies, energy and resource efficiency. The project assumption stated that the private sector organizations like chambers and associations are not yet prepared to cover the respective information and training needs of their members. So far, a broad lack of awareness for climate-relevant topics has to be stated among companies and decision-makers. In addition, there is insufficient exchange of information, experiences and know how, particularly with regard of climate and environment-friendly technologies. This is not only true within

the business sector of the Black Sea and Caspian region but also with respect to exchange with according European associations. Therefore UBCCE identified the necessity to develop a comprehensive strategy, addressing climate change from a private sector perspective, taking into account the situation of the regional business community. The strategy includes both, promotion of climate-friendly production and the concerted enhancements of the national and regional environmental technology sectors. The project was piloted in the Ukraine, Azerbaijan and Georgia, where it prepared national green support strategies.

Conclusions

Green growth is acknowledged to be the instrument for turning the low-carbon and climate change resilient development vision into reality. It can shape strategies for a response to climate change by reducing carbon emission through the development, improvement and deployment of various renewable energy sources and efficient energy use. At the same time, it can stimulate economic growth and equip an economy with better tools to cope with rapid demographic changes by fostering green businesses and accompanying synergy effects, and generating green jobs. It can also help a society to tackle resource scarcity and improve the environment and natural assets, including ecosystems and biodiversity, through improved and enhanced natural asset and resource management.

Greening of economies is not generally a drag on growth but rather a new engine of growth, that it is a net generator of decent jobs, and that it is also a vital strategy for the elimination of persistent poverty. Sustainable agriculture, fisheries, water, forestry, renewable energies, manufacturing, buildings, transport and sustainable tourism are considered the sectors with the greatest potentials for contributing to a sustainable economy, as sources of employment and income as well in terms of greenhousegas emission and use of natural resources for raw material. The global market for environmental products and services is projected to double from \$1,370 billion per year at present (2009) to \$2,740 billion by 2020.

The rapid growth of capital markets, the growing green orientation of these markets, the evolution of emerging market instruments such as carbon finance and microfinance, and the green stimulus funds established in response to the economic slowdown of recent years, are opening up the space for large-scale financing for a global green economic transformation. The development finance institutions at international and national levels will play a key role in supporting the green economy, like the Black Sea Trade and Investment Bank, or the National Investment Banks of Turkey and Bulgaria. The role of these financial institutions in supporting a green economy transformation needs to be strengthened further. They could, for instance, adopt the goal of supporting green economy development and link it to specific targets such as CO₂ emissions reduction, access to water and sanitation, biodiversity promotion, on top of poverty alleviation. They could also measure the net contribution of their activities to climate change, biodiversity loss and the green economy at large. Policies can be designed to improve the “green efficiency” of their portfolio, examining for example the carbon and ecological footprint of their investments. In addition, these institutions also influence the nature of investments and public financing through loans agreements and due diligence in their lending procedures.

Opportunities for sustainable lending are also prevalent for commercial banks and at the microlevel. An ever growing number of commercial banks develop in-house capacities for lending targeting green sectors, particularly for renewable energy sources. But disclosing environmental information of the banks’ operations becomes also increasingly part of corporate social responsibility practices.

Green trade is emerging as an important topic, as a source of technology transfer and because of its economic importance. Green Foreign Direct Investments (FDI) is an emerging concept of the green economy. It is FDI in the environmental goods and services sector and FDI in environmental-damage mitigation processes, i.e. use of cleaner and/or more energy-efficient technologies. This calls for national investment promotion agencies to re-adjust to capitalize on changing global trends. It is a growing need to enhance the capacity of investment promotion agencies to attract green FDI, for example in renewable energy, sustainable agriculture and more energy efficient production.

Green entrepreneurship is at the frontline of the green economy and a crucial tool for poverty reduction as well as to create an inclusive and innovative economy. Business models that create opportunities for the poor and help to mitigate or adapt to climate change are sure to see growing demand. Companies can provide essential goods and services to the poor that reduce carbon emissions and help the poor adapt to the effects of climate change. They can also procure low-carbon goods and services in their supply chain. Microenterprises are the backbone of the EU and most of the BSEC Member State's economy. More than 3 million SMEs are operating in the BSEC region employing more than 21 million workers. While 99% of the companies in the EU are SMEs, 90% of them are microenterprises with less than 10 employees. SMEs provide 53% of all jobs in the EU. Social economy enterprises represent 2 million enterprises (i.e. 10% of all European businesses) and employ over 11 million paid employees (the equivalent of 6% of the working population of the EU). Social economy enterprises are present in almost every sector of the economy, such as banking, insurance, agriculture, craft, various commercial services, health and social services, local development, tourism and environmental protection. There is the need to highlight the social economy potentials in the BSEC region and its contribution to green and inclusive growth.

There are a range of other "green" developments already happening in the BSEC region, a multitude of actors and initiatives are starting to seize green business opportunities, and green entrepreneurship best-practices are increasingly promoted. The GEF Small Grants Programme (SGP) has been working with communities around the world to combat the most critical environmental problems and is operating in most of the BSEC Member States. The World Business Council for Sustainable Development (WBCSD) is a CEO-led organization of around 200 transnational corporations who advocate for cooperation between business and government to balance economic and environmental interests. 5 of them are from the BSEC Region and in several BSEC Member States WBCSD regional networks were created, such as in the Ukraine, Greece, Russia and Turkey. Ashoka, the world leading organization supporting social entrepreneurship, has identified six green entrepreneurs in Turkey who became part of Ashoka's Environmental Innovations Initiative, operating in the fields of organic food production, nature conservation, sustainable fisheries and agriculture as well as water management. The UNDP Global Inclusive Market Initiative operates in Eastern Europe and Central Asia, with the global knowledge hub based in Istanbul, has identified and promoted inclusive and sustainable business models across the region.

Local UN Global Compact Networks were set-up in most countries of the BSEC region, usually spearheading national efforts for creating CSR infrastructure. Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Russia, Serbia, Turkey and Ukraine have already operating UNGC Networks and have developed a multitude of associated projects and spin-offs. These developments showcase that Corporate Social Responsibility (CSR) increasingly wins spaces in the region. For example, the Business Leaders Forums Serbia – launched in 2008 – is the first coalition of socially responsible companies in Serbia established with a mission to stimulate development of corporate social

responsibility and set a permanent and stable CSR practices in Serbian business sector.

Bilateral Agencies and International Organizations are an active force in advancing the CSR agenda as well as social and green economy initiatives. Main bilateral development agencies in the Balkan region for example – like USAID – actively promote CSR, renewable energies and sustainable entrepreneurship since several years through pilot initiatives. Traditional donors in Eastern Europe – like Austria and Sweden – phase out and shift the focus from development to business cooperation. UNIDO, UNDP or ILO are actively engaged in supporting national greener production centers, Global Compact Networks and sustainable business development programmes. The World Bank started to support countries in the region to develop green growth strategies, such as recently in Bulgaria. The European Commission supports CSR and social economy projects through the Instrument for Pre-Accession Assistance (IPA) and its Neighborhood Policy. Partnering with the private sector becomes a must for development. This spurs again the proliferation of innovative partnerships. A consultancy market is slowly emerging in countries in transition providing the essential services to support the transition of individual companies and organizations.

Because of the range of stakeholders involved in the process, innovative partnerships between the development world and banking, insurance and private business sectors are increasingly taking place to reach out for the bottom billion that represent a large, yet untapped, consumer group and who are the most vulnerable to climate change with the aim to including them in value chains as producers, entrepreneurs, employees or consumers, thus making them more resilient to outside shocks. Public-Private-Partnerships (PPP) are in general viewed as the future for renewable energy financing and for mobilizing the private sector for development.

International environmental agreements additionally facilitate and stimulate a transition to a green economy and initiate reforms of the regulatory framework. Multilateral environmental agreements (MEAs), which establish the legal and institutional frameworks for addressing global environmental challenges, can play a significant role promoting green economic activity. The MEA with the most potential to influence the transition to a green economy is the United Nations Framework Convention on Climate Change (UNFCCC). At the same time, the decisions taken at the 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) made it clear that country-led, regional and private sector climate action will become the main driver for the transition to resilient and low-carbon societies as an all-inclusive global legal deal won't be in force for the next eight years.

All countries of the region have signed the United Nations Framework Convention on Climate Change and the associated Kyoto Protocol. Parties to the Convention must submit national reports on implementation of the Convention to the Conference of the Parties (COP). Through the national communications, both Annex I and non-Annex I Parties, developed greenhouse gas inventories and vulnerability assessments, generated climate change projections, produced mitigation and adaptation action plans, integrated climate change into national development planning and conducted capacity building initiatives. Since two decades the United Nations has been also asking all countries to pursue strategic and co ordinate action for sustainable development through the creation of national sustainable development strategies. Most of BSEC Member States have developed or are in the process of developing National Sustainable Development Strategies, such as Romania, Greece, Moldova, Bulgaria, Serbia, Turkey, Armenia, Azerbaijan or Turkey. All National Sustainable Development Strategies emphasize the importance of SME's for the sustainable development of key economic sectors. Driven by international development actors such as the World Bank, countries of the region like Turkey or Bulgaria

are additionally starting to develop and implement green growth policies and strategies. It remains a challenge to integrate climate change, sustainable development and green growth strategies and action plans as well as to effectively link and coordinate them within the wider national policy development process.

The transposition of the EU climate change, energy and environmental legislation is being taken into account by Member States of BSEC and BSC. It provides a positive framework for accelerating climate change mitigation and adaptation in the region through directives on issues such as promotion of renewable energy, establishment of the EU ETS, reducing GHG emission from transport fuels, end-use energy efficiency and energy, environmental impact assessment, environmental liability, chemical waste management, integrated pollution prevention and control or integrated watershed management.

Bulgaria, Greece and Romania are EU Member States and therefore tied to the EU environmental acquis communautaire and the EU climate and energy policy. Albania and Serbia are potential candidate countries for EU accession and Turkey began full membership negotiations with the EU in 2005. Albania, Serbia, Moldova and Ukraine are part of the Energy Community, which intends to extend the EU internal energy market to South East Europe and beyond in line with the relevant acquis, including key EU legal acts in the area of electricity, gas, environment and renewable energy.

Furthermore, the EU started to re-shape its strategic development vision towards green growth and has based its Strategy 2020 on a green and inclusive foundation. This allows BSEC Member States to take advantage of the knowledge, technologies, networks and resources circulated by the EC, either as EU Member States, Accession Countries, or as beneficiaries of the European Neighborhood Policy process. In 2010, the EU launched the Europe 2020 strategy, a strategy for smart, sustainable and inclusive growth. The Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy. For example, the flagship *initiative for a resource-efficient Europe* under the Europe 2020 strategy supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. There are other important initiatives which mutually reinforce the EU's commitment to create a low carbon and climate change resilient economy, focusing on eco-innovation and green industries, offering another good learning and partnership building opportunity. Eco-innovation Action Plan (EcoAp) launched by the DG Environment aims to help business to deliver green growth and environmental benefits. The DG Enterprise and Industry launched the Action Plan for Sustainable Consumption and Production and Sustainable Industrial Policy. Identifying and addressing market failures and regulatory barriers that hinder the competitiveness of environmental industries and influence the uptake of more sustainable solutions by other industries is a key objective of the Action Plan.

Three of the BSEC Member States – Albania, Turkey and Greece - have adopted the Mediterranean Action Plan (MAP) and the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention). Turkey has furthermore ratified the Convention on the Protection of the Black Sea Against Pollution and is a member state of the the Black Sea Commission which is tasked to implement the provisions of the Convention and the Black Sea Strategic Action Plan. Although the initial focus of the MAP was on marine pollution control, it gradually adopted a holistic approach to cover key aspects of sustainable development. The Mediterranean Commission on Sustainable Development (MCSDD) framework provides guidance for national decision makers to address sustainable development issues, implement international agreements and initiate partnerships. It is also a benchmark against which the entire Mediterranean community can monitor and assess its contribution to a common vision

of a sustainable Mediterranean. Six MAP Regional Activity Centres (RACs) are based in Mediterranean countries, each offering its own environmental and developmental expertise for the benefit of the Mediterranean community in the implementation of MAP activities. Climate change and green economy was consequently introduced into the focus areas and multi-annual work programmes of the Regional Activity Centers. The Regional Activity Centre for Cleaner Production (CP/RAC) in compliance with the tasks of the Mediterranean Action Plan (MAP) to support the Mediterranean Strategy for Sustainable Development (MSSD) and in line with the agenda of the UNEP Green Economy Initiative decided to explore the opportunities green entrepreneurship presents to tackle environmental and social challenges and to promote sustainable lifestyles in the Mediterranean region.

The United Nations Conference on Sustainable Development (Rio +20) summit in 2012 will provide furthermore an invaluable opportunity for the international community to promote green economy action given that one of the two themes for the summit is “a green economy in the context of sustainable development and poverty eradication.

There is the opportunity for BSEC to utilize their mandate in order to support the low carbon and climate change resilient development agenda on the regional level by capitalizing on the already existing national experience. BSEC came into existence as a unique model of multilateral political and economic initiative aimed at fostering interaction and harmony among the Member States, as well as to ensure peace, stability and prosperity, moving progressively towards embracing the sustainable development paradigm. As key regional arenas promoting knowledge transfer, harmonized policies and joint initiatives in many areas important to a green economy, BSEC can act as important accelerators for the emergence of a regional green development paradigm.

BSEC already recognized its importance. Green Economy is expected to experience a boost in the region, especially promoted through the BSEC regional initiatives and recently adopted declarations. The BSEC Green Energy Initiative has set up a Green Energy Task Force within the BSEC Working Group on Energy. The BSEC Working Group on SME adopted an Action Plan for the Black Sea Economic Cooperation focusing on green entrepreneurship and sustainability. The Black Sea Trade and Development Bank (BSTDB) is discussing the establishment of a multilateral Environmental Fund focusing on financing renewable energy and energy efficiency projects. The BSEC Business Council is creating a “Green Business Network in the BSEC Region” focusing on renewable energy sources. The International Center for Black Sea Studies (ICBSS) published a policy brief on greening the Black Sea economies, organized bilateral energy forums and networks and is embarking to launch a green trade project focusing on sustainable agriculture.

Besides this first set of efforts, more hands-on regional green economy initiatives with real development impact are not yet in place. The strategic and programmatic link between green economy and climate change in the context of Rio+20 has not been promoted and fully understood yet. Much more needs to be done. Bottom-up approaches need to be developed to fertilize the emerging policy process. Hands-on initiatives that generate best-practices and innovative partnerships need to be implemented and widely promoted to showcase the validity of the low carbon and climate change resilient development pathway for the region. The UNDP Black Sea Trade and Investment Programme (BSTIP) is perfectly positioned to support the BSEC region in these efforts through strategic interventions in priority areas.