A Summary of the Conclusions

Investing just 2% of global GDP into ten key sectors can kick-start a transition towards a low-carbon, resource-efficient economy. The new UNEP report demonstrates that a transition to a green economy is possible by investing 2% of global GDP per year (currently about US $1.3 trillion) between now and 2050 in a green transformation of key sectors, including agriculture, buildings, energy, fisheries, forests, manufacturing, tourism, transport, water and waste management. However, such investments must be spurred by national and international policy reforms.

Conducted by global experts and institutions from both developed and developing countries, this timely report confirms that under a green economy scenario economic growth and environmental sustainability are not incompatible. On the contrary, a green economy creates jobs and economic progress, while at the same time avoiding considerable downside risks such as the effects of climate change, greater water scarcity and the loss of ecosystem services.

Greening the economy not only generates growth, and in particular gains in natural capital, but it also produces a higher growth in GDP and GDP per capita. Under the GER modeling exercise, a green investment scenario achieves higher annual growth rates than a business as usual scenario within 5-10 years. This economic growth is characterized by a significant decoupling from environmental impacts with the global ecological footprint to biocapacity ratio projected to decline from a current level of 1.5 to less than 1.2 by 2050 – much closer to a sustainable threshold value of 1 – as opposed to rising beyond a level of 2 under business as usual.

Global demand for energy rises somewhat but returns to current levels by 2050, which is about 40% less than what is expected under business as usual thanks to substantial advances in energy efficiency. A green investment scenario is projected to reduce energy-related CO$_2$ emissions by about one-third by 2050 compared to current levels. The atmospheric concentration of emissions should be held below 450 ppm by 2050, a level essential for having a chance to limit global warming to the 2°C threshold.

A green economy values and invests in natural capital. One-quarter of the green investments analyzed – 0.5% of GDP (US $325 billion) – is allocated to natural capital sectors: forestry, agriculture, freshwater and fisheries. Value added in the forest industry rises by about 20% in 2050 as compared to business as usual. Investments in green agriculture ranging from US $100-300 billion per year over 2010-2050 would lead over time to rising soil quality and increasing global yields for major crops, representing an improvement of 10% above what is possible with current investment strategies. Increased efficiency in agriculture, industrial and municipal sectors would reduce demand for water by about a fifth by 2050, as compared to projected trends, reducing pressure on groundwater and surface water in both the short and long term.

A green economy can contribute to poverty alleviation. There is an inextricable link between poverty alleviation and the wise management of natural resources and ecosystems, due to the benefit flows from natural capital that are received directly by the poor. It is particularly important in low income countries, where ecosystem goods and services are a large component of
the livelihoods of poor rural communities and provide a safety-net against natural disasters and economic shocks.

**In a transition to a green economy, new jobs will be created, which over time exceed the losses in “brown economy” jobs.** This is particularly notable in the agriculture, buildings, energy, forestry and transport sectors. However, in sectors whose capital is severely depleted, such as in fisheries, greening will necessitate the loss of jobs and income in the short and medium term in order to replenish natural stocks and prevent a permanent loss of income and jobs. It may also require an investment to re-skill and re-educate the workforce.

**Prioritizing government investment and spending in areas that stimulate the greening of economic sectors is on the critical path.** Reforming costly and harmful subsidies in all sectors will open fiscal space and free resources for a GE transition. Removing subsidies in energy, water, fisheries and agriculture sectors, alone, would save 1-2% of global GDP a year. Fisheries subsidies, for example, estimated at around US $27 billion a year, result in more damage than long-term gains to national economies and social welfare. Price and production subsidies for fossil fuels collectively exceeded US $650 billion in 2008, and this level of support discourages the transition to renewable energies.

Using instruments, such as taxes, incentives and tradable permits to promote green investment and innovation is also essential, but so is investing in capacity building, training and education. Strengthening international governance and global mechanisms that support a transition are important. The UN Conference on Sustainable Development (Rio+20 Summit) in 2012 will be an opportunity to set a new direction for a more sustainable, secure and just world.

**The scale of financing required for a green economy transition is substantial, but an order of magnitude smaller than annual global investment.** In this regard, it is worth noting that the 2% of global GDP modeled in the report is a fraction of total gross capital formation - about 22% of global GDP in 2009). This amount can be mobilized by smart public policy and innovative financing mechanisms. The rapid growth of capital markets, the market’s increasing interest in green initiatives and the evolution of alternative instruments, such as carbon finance and microfinance, are opening up the space for large-scale financing for a global economic transformation. However, these amounts are still small compared to total volumes required, and urgently need to be scaled up.

**The move towards a green economy is happening on a scale and at a speed never seen before.** For 2010, new investment in clean energy was expected to reach a record high of US$ 180-200 billion, up from US $162 billion in 2009 and US $173 billion in 2008. Growth is increasingly driven by non-OECD countries, whose share of global investment in renewables rose from 29% in 2007 to 40% in 2008, with Brazil, China, and India accounting for most of it.

It is expected to generate as much growth and employment – or more – compared to the current business as usual scenario, and it outperforms economic projections in the medium and long term, while yielding significantly more environmental and social benefits. However, such a transition to a green economy will not be without its risks and challenges – from “greening” traditional brown sectors to meeting rapidly changing market demands in a carbon-constrained world. Therefore, world leaders, civil society and leading businesses must engage collaboratively to rethink and redefine traditional measures of wealth, prosperity and well-being. What is clear is that the biggest risk of all would be to continue with the *status quo.*