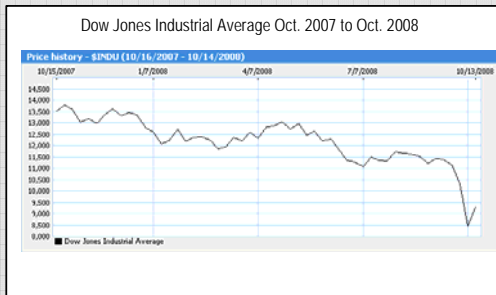


ECONOMIC CRISIS AND TROUBLED ASSETS

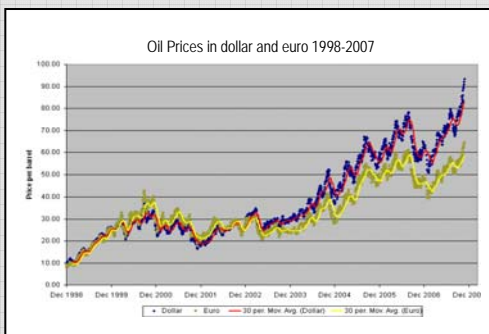
The United Nations Environment Programme (UNEP) and partners are launching a Green Economy initiative amidst the multi-dimensional global economic crisis characterised as the most significant since the Great Depression of the 1930s. This initiative is made possible through the support of the Norwegian Government.



Source: moneycentral.msn.com

The *financial* crisis, fomented in the U.S. subprime market, has brought down banking and insurance giants, is contaminating the entire sector, and is affecting businesses and jobs around the world.

The *fuel* crisis, reflected in the large fluctuations of the price for crude oil, is threatening the reliability, affordability, and security of energy supply.

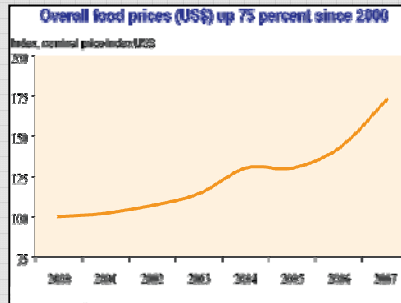


Source: Kim van der Linde

The *food* crisis, reflected in the dramatic increase in the prices of grains, is affecting the survival of hundreds of millions of people. This crisis cost developing countries \$324 billion in 2007 – the equivalent of three years worth of global aid.

Together, the food and fuel crises have put 950 million people

worldwide at risk of hunger and malnutrition.



Source: World Bank, DECPCG

These crises are taking place in a changing climate, aggravating the challenges faced by humanity, and collectively they are severely impacting our ability to achieve the Millennium Development Goals.

A common thread running through the three “F” crises is “investment”. *Financial* – too much investment has gone into housing bubbles and the underlying cheap credits, aided and abetted by financial derivatives without creating enough decent jobs for youth and for overcoming poverty. *Fuel* – investment in renewable energy capacity was \$160 billion in 2007, up 60% from 2006, which is encouraging but dwarfed by the annual \$300 billion subsidy mostly for carbon emitting fossil fuels. *Food* – the share of the World Bank’s development assistance which goes to agricultural development has fallen from 30% in 1980 to 8% today.

A CRISIS IS A TERRIBLE THING TO WASTE

The Green Economy initiative – with the sponsorship of the Norwegian Government - is to communicate a global plan for a green industrial revolution to be supported by strong and convincing evidence of income generated, decent jobs created, and poverty reduced through investing in a new generation of assets including:

- Ecosystems (or environmental infrastructure);
- Clean and efficient technology;
- Renewable energy;
- Biodiversity-based products and services (such as organic foods);

- Chemical and waste management and mitigation technologies;
- “Green Cities” – tomorrow’s habitat for humanity - with ecologically friendly buildings, construction, and transport systems.

The Green Economy initiative will make recommendations for greening national economies, for creating new green jobs and greening existing jobs, and for a just transition from a dirty to a green economy for enterprises and workers. The project will provide guidance to policymakers and other stakeholders on how to overcome these challenges, highlighting the important role of the government in the march towards a green economy.

In addition, the project will make and communicate a strong economic case for proactive investments and active labour market policies in such areas as water, forest, soil, and marine resource management, which are key components of ecosystem management, so as to preempt the environmental causes of conflicts, disasters, and poverty. In this regard, the initiative will be closely linked to another global initiative on “The Economics of Ecosystems and Biodiversity” (TEEB), sponsored by the European Commission and the German Ministry of the Environment.

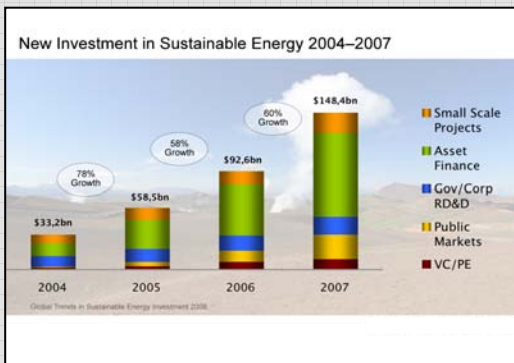
The Green Economy Initiative will encourage and enable economic, planning, finance, labour, environment, and other policymakers to support increased investments in environmental assets and green production while ensuring a fair and just transition towards a green economy.

Finally, the project will reinforce the work on environmental governance and the need for a long-term global climate change response, by showing commitments to, and enforcement of, the United Nations Framework Convention on Climate Change and other Multilateral Environmental Agreements. The initiative will focus on facilitating the continuous engagement with and capacity building for different stakeholders.

INSPIRATION FROM SMART INVESTMENTS

The Green Economy initiative is inspired by the growth of a unique class of investments anchored in assets that promise tangible and increasing values for societies and individuals over the next few decades.

Clean Technology: In 2008, the United Kingdom announced a £100 billion investment to build 4,000 onshore and 3,000 offshore wind turbines by 2020. The proposal is expected to provide 160,000 jobs and attract firms looking to invest in the renewable energy sector. The renewable energy sector generates significantly more jobs than the fossil fuel sector.



Source: New Energy Finance

Sustainable farming: Organic agriculture sustains the health of soils, ecosystems and people. China increased its allocation of land for organic production tenfold from 300,000 hectares (ha) in 2005 to 3.5 million ha in 2006.

Greener Cars: In April 2008, Thailand approved plans by Toyota Motor, Mitsubishi Motors and Tata Motors to build fuel-efficient eco-cars in the country. The projects meant a combined investment of US\$528.7 million.

Clean Technology: In 2006, Kleiner Perkins, the venture capital firm that supported the establishment of Google, Netscape, and Amazon.com, directed US\$100 million to new companies working on reducing CO₂ emissions. In China, Venture Capital investment is expected to increase from \$170 million in 2005 to over 720

million in 2008. The entire global environmental industry is estimated at US\$600 billion per year.

Renewable Energy: In October 2008, Norway announced that it intends to double its national research fund for renewable energy to US\$3.4 billion in its national budget for 2009. Norway, a major oil and gas exporter, gets most of its own electricity from clean hydroelectric power.

Venture Capital: The Top 10 Cleantech Regions in 2007



Region	Amount (\$M)	Percentage
US: West Coast	\$1,790	28.0%
Europe: Western	\$813	12.7%
US: Northeast	\$782	12.2%
US: Southwest	\$340	5.3%
China: Eastern	\$289	4.5%
Europe: Southern	\$273	4.3%
US: Southeast	\$270	4.2%
US: Northwest	\$261	4.1%
Canada: Eastern	\$247	3.9%
Europe: Northern	\$176	2.8%

Source: Nicholas Parker, CleanTech Group

THE VISIBLE AND INVISIBLE HANDS

These smart investments, however, do not typically take place automatically; they are driven by the invisible hand of the market including changes in consumer behaviors as well as the visible hand of government policy – protecting the common interest while fostering innovation and efficiency. For example, the demand for cleaner and more fuel-efficient cars has been fed by spiraling oil prices, more informed citizens, and official policies to reduce the amount of green-house gas emissions into the atmosphere.

Given the vested interests in the “economy of yesterday”, the transition towards a “green economy of tomorrow” is likely to run into hurdles along the way reflecting the political economy associated with any societal transformation. The potential barriers are:

- Subsidies that favour fossil fuels over renewable energy;
- Clean and environmental-friendly technologies have to prove their

reliability above traditional technologies;

- Lack of economically and politically favorable frameworks for long-term investment in low-carbon enterprises;
- Lack of knowledge about the possible diverse paths to achieve a sustainable and clean growth in all sectors and geographical areas; and
- Lack of informed policymakers, qualified entrepreneurs, and skilled workers to carry out the required measures.

There is a strong role for the government to play in addressing these barriers to the societal shift towards a green economy.

CALL FOR EVIDENCE

This Green Economy initiative will put earlier related researches into a macroeconomic and global perspective. It has already been integrated with the joint Poverty and Environment Initiative of UNEP and the United Nations Development Programme and the joint Green Jobs Initiative of UNEP, the International Labour Organisation (ILO), the International Trade Unions Confederation, and the International Organisation of Employers.

UNEP is seeking additional support from, and partnerships with governments, businesses, research institutes, non-government organizations, and civil society groups including local communities, women's groups, and other stakeholders.

UNEP is inviting contributions of cases, examples, analyses and inputs on the significance of environmental investments for economic growth, decent job creation, and poverty reduction.

All interested stakeholders are encouraged to get involved. For more information, please contact the Economics and Trade Branch, Division of Technology, Industry and Economics, United Nations Environment Programme, Geneva, Switzerland, tel: +41.22.917.8243, email: etb@unep.ch, web: www.unep.ch/etb.