

LEE MYUNG-BAK LOW CARBON, GREEN GROWTH

> HILDA SOLIS GREEN JOBS

GERARD KLEISTERLEE LIGHTING THE PATH

ANGEL GURRÍA DOUBLE DIVIDENDS



GREEN ECONOMY Making it work



Our Planet, the magazine of the United Nations Environment Programme (UNEP)

PO Box 30552, Nairobi, Kenya Tel: (254 20)7621 234 Fax: (254 20)7623 927 e-mail: uneppub@unep.org

To view current and past issues of this publication online, please visit

www.unep.org/ourplanet

ISSN 101 - 7394

Director of Publication : Satinder Bindra Editor : Geoffrey Lean Coordinator : Geoff Thompson Special Contributor : Nick Nuttall Distribution Manager : Manyahleshal Kebede Design : Amina Darani Produced by : UNEP Division of Communications and Public Information Printed by : Progress Press Distributed by : SMI Books

The contents of this magazine do not necessarily reflect the views or policies of UNEP or the editors, nor are they an official record. The designations employed and the presentation do not imply the expressions of any opinion whatsoever on the part of UNEP concerning the legal status of any country, territory or city or its authority or concerning the delimitation of its frontiers or boundaries.

* All dollar (\$) amounts refer to US dollars. Cover Photo: © Corbis

UNEP promotes environmentally sound practices globally and in its own activities. This magazine is printed on 100% recycled paper, using vegetable-based inks and other eco-friendly practices. Our distribution policy aims to reduce UNEP's carbon footprint.



PAGE 6

A viable solution: shifting paradigms to address climate change and make green technologies and industries drivers of growth.



HILDA L SOLIS : Green jobs

A new priority for a better future: building the economy while undoing environmental damage.



PAGE 12

GERARD KLEISTERLEE : Lighting the path Thinking differently to spur a green economic recovery.



PAGE 10

PAGE 14

PAVAN SUKHDEV : Natural Capital underlies everything What lies at the very foundation of economies and societies needs to be made economically visible.



- **ANGEL GURRÍA : Double dividends PAGE 18** A green recovery can both solve the jobs crisis and create sustainable growth.

PAGE 28

PAGE 22

ARMANDO MONTEIRO NETO : Uncoupling = sustainability Breaking the link between emissions and economic growth is the path to sustainable development.



PAGE 24





NEVA R. GOODWIN : Good business

A proposal for ensuring that corporations contribute to the development of a green economy.





EBBE SØNDERRIIS : Copenhagen – first climate-neutral capital Radical new plans by the City Council to reach carbon neutrality within 16 years.

PAGE 32





books

www.unep.org/publications



TEEB Report for National and International Policy Makers

This report is one of a series of reports prepared by The Economics of Ecosystems and Biodiversity (TEEB) initiative hosted by UNEP. This new report states that policymakers who factor the planet's multi-trillion dollar ecosystem services into their national and international investment strategies are likely to see far higher rates of return and stronger economic growth in the twenty-first century. It calls on policymakers to accelerate, scale-up and embed investments in the management and restoration of ecosystems. It also calls for more sophisticated cost-benefit analysis before policy decisions are made.

UNEP Year Book 2010

The UNEP Year Book 2010 reports on new environmental science and recent developments in our changing environment. It looks at: progress in environmental governance; the effects of continuing degradation and loss of the world's ecosystems; impacts on the atmosphere leading to continuing climate change; harmful substances and hazardous wastes that affect human health and the environment; environment-related disasters and conflicts; and unsustainable use of resources. The purpose of the *Year Book* is to strengthen the science-policy interface. It presents recent developments and new insights of particular interest to policymakers.

A Case for Climate Neutrality: Case Studies on Moving Towards a Low Carbon Economy

The publication presents case studies from within the UNEP-led Climate Neutral Network (CN Net) that showcase initiatives undertaken by diverse actors in a variety of sectors on moving towards climate neutrality. The publication presents the wealth of experiences by national and regional governments, city authorities, businesses, UN agencies and NGOs in reducing greenhouse gas emissions and moving towards a resource efficient, low-carbon green economy of the twenty-first century.

UNEP Annual Report

Providing an overview of UNEP's activities in 2009, this report looks at a broad range of activities carried out by the organization as it follows its mandate to provide environmental leadership and promote sustainable development. Taking the theme of "Seizing the Green Opportunity", the report provides an overview of UNEP's activities in 2009 through the green economy lens. Highlights of the year include the emergence of green growth initiatives around the world, the innovative approaches to address climate change and ecosystem loss, and the renewed efforts to strengthen international environmental governance.

Climate Action 2009/2010

This third annual edition of *Climate Action* is produced to encourage and assist governments and business to lower greenhouse gas (GHG) emissions. It features a range of articles that encourage the sharing of best practice and the development of new technologies and initiatives and illustrates the opportunities for business and governments to reduce costs and increase profits while tackling climate change. The articles cover topics such as human impact, policy, business and finance, technology, energy, transport, ecosystem services, built environment and a regional focus on Canada.



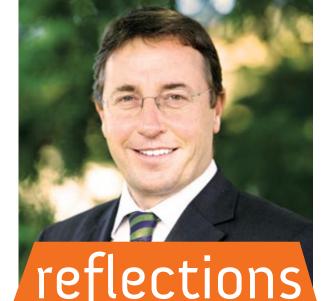
Powering the Green Economy The Feed-in Tariff Handbook

Miguel Mendonça, David Jacobs and Benjamin Sovacool (Earthscan)

Renewable energy is fundamental for creating greener economies, new jobs and industries, securing energy supplies and for protecting the climate and environment. This book focuses on feed-in tariffs as one of the most effective policy measures for encouraging the movement from planet-heating fossil fuels to safe, truly renewable energy. It shares many lessons on good and bad design and implementation, as well as discussing the challenges faced by policy, and renewable energy in general. Changing Climate, Changing Economy Edited by Jean-Philippe Touffut (Edward Elgar Publishing)

How did climate change become an economic issue? Why is economic discourse so influential on the public policy of climate change? How can it best contribute to the scientific and public debates? In *Changing Climate, Changing Economy*, nine eminent scholars with a variety of viewpoints explain both how economics has changed environmental understanding and how the study of climate change has modified the economy. The Three Secrets of Green Business Gareth Kane (Earthscan)

With the subtitle, Unlocking Competitive Advantage in a Low Carbon Economy, this book encourages businesses to look at the green agenda as an opportunity rather than a threat. For those who want to introduce sustainability into their business or organization quickly and effectively, this is an accessible, practical "how-to" guide that presents a comprehensive coverage of topics about making business green and increasing profits.



ACHIM STEINER

UN Under-Secretary-General and Executive Director, UNEP

Realizing national Green Economies will be a key cornerstone of UNEP's work over the coming year as countries, companies and communities wrestle with the multiple challenges but also multiple opportunities presented in the first decade of the twentieth century.

More than two dozen governments have requested assistance and down-to-earth advice on how best to tailor a transition to a low carbon, resource efficient economy within national development strategies and economic planning.

A Green Economy Initiative for Africa has been in preparation. Following the Third African Ministerial Conference on Financing for Development in Rwanda last May, a pilot project, involving six countries including Kenya, Rwanda and Senegal, will be launched shortly.

In China, UNEP is collaborating with the Ministry of the Environment and relevant institutions to produce a series of sectoral green economy studies, which will feed into the country's five-year development plan. A further study is underway in Eastern Europe, the Caucasus and Central Asia looking at the prospects for promoting organic agriculture, while research on priority areas for green economy programmes is advancing in Azerbaijan.

And priority sectors for catalysing a green economy in West Asia have emerged following discussions in countries from Bahrain, Dubai and Jordan to Kuwait, Lebanon and Saudi Arabia. A regional environment work programme on the theme is likely to be adopted for the region in 2010.

These exciting opportunities dovetail with this year's acceleration of Technology Needs Assessments, supported by the Global Environment Facility under the framework of the UN Framework Convention on Climate Change. Up to 45 countries will be helped to prioritize technologies for mitigating and adapting to climate change, and to pinpoint and overcome legal, financial, policy and other barriers to taking them up. The first wave of 15 countries have been selected, including Cote D'Ivoire and Mali in Africa; Bangladesh, Cambodia and Indonesia in Asia; Argentina and Guatemala in Latin America; and Georgia in Europe.

How best to bring these multi-trillion dollar services of ecological infrastructures into the engine room of national and regional economies will also form an important pillar of this work. It builds on the UNEP-hosted Economics of Ecosystems and Biodiversity study that will publish its final report later this year in support of the UN's International Year of Biodiversity and the Convention on Biological Diversity's meeting in Japan in October.

Few could have imagined that the Global Green New Deal/ Green Economy Initiative launched during the unfolding financial and economic crisis of late 2008, would have gained such rapid traction. Around 15 per cent of the more than \$3 trillion-worth of stimulus funds worldwide are estimated to be green — rising to around 80 per cent in the Republic of Korea. Terms like Green Economy and Green Growth have rapidly become common parlance in many capital cities and at key international gatherings, including last year's G8 and G20 summits and the ministerial session of the OECD.

The Green Economy Initiative, the logical extension of the Global Green New Deal, will also be a key feature of UNEP's annual gathering of environment ministers in Bali, Indonesia, as governments take stock of how far such a shift towards sustainable consumption and production is happening, and of the lessons learnt so far.

The urgency of the challenges facing all economies, from climate change to ecological losses become more apparent with every passing year as does the need to deliver growth, overcome poverty and generate decent employment.

Twentieth century economic models are unlikely to serve us well on a planet of 6 billion people, rising to 9 billion by 2050. The global public is looking to its leaders and policymakers for solutions.

The Green Economy Initiative represents one potent answer to this request for transformative action. Indeed it is emerging as a powerful and practical opportunity for countering persistent and emerging threats. And it is demonstrating how intelligent policy choices, combined with supportive market mechanisms, can perhaps provide a comprehensive route to sustainable development that has so far eluded humankind.



President of the Republic of Korea

LOW CARBON, GREEN GROWTH

Without doubt the low-carbon growth strategy is emerging as the viable solution for today's global environmental challenge.

With the world's population expected to reach 9 billion by 2050 and the changing climatic system threatening our one and only habitat, it is imperative that we find a way to satisfy both economic growth and address climate change. That is why we have to make a paradigm shift. This is the choice I made when I declared "Low Carbon, Green Growth" as Korea's national vision on 15 August 2008.

For years, those who believed that addressing climate change would be a burden on the economy have dominated the debate in Korea. Most business and government leaders argued that we must delay taking action to combat it in order to "ensure global competitiveness" — as though inaction, in the long run, would be in Korea's interests.

I felt a new paradigm of thinking was needed to break this deadlock. If a new road to growth was unavoidable, we should not resist it, but rather embrace it wholeheartedly. This is the philosophy behind the Low Carbon, Green Growth strategy. Green growth is about addressing climate change in an aggressive manner while, at the same time, making the green technologies and industries needed to combat it the driver of national economic growth. But it is also much more than that. It entails a new social and civilizational paradigm shift away from the business assumptions and lifestyles of the industrial age to a new path that satisfies the need for economic growth, social and corporate responsibility, and the integrity of the environment. It is a shift in thinking that no longer pits "green" against "growth".

"To trigger action, there needs to be knowledge. So any discussion on climate change must encompass not only "how much" we will reduce, but "how" we will get there. All countries must find their unique strategy to achieve green growth. And because there is no clear map to follow, we must help each other as we go along."



In order to make "green" and "growth" compatible, there are three key requirements.

First, there needs to be strong political will and leadership to make the transition to a new paradigm. In Korea, I established a presidential committee to oversee integration of the green growth vision in all sectors of society, from central to local governments to businesses to civic groups. In order to ensure that the vision has priority over all relevant policies, the National Assembly passed the Basic Act on Green Growth with cross-party support. As part of the Government's five-year greengrowth plan, we are spending 2 per cent of our gross domestic product

per year to push the policies forward — higher than what was recommended by UNEP.

Second, the public needs to embrace the new paradigm and discard old habits of thinking and acting. A new civic-mindedness and an institutional commitment to innovation must replace narrow self-interest and slavish adherence to the status quo. From a policy standpoint, this requires measures to raise awareness of green growth and provide proper incentives and disincentives - such as carbon pricing and taxation — to help the public make the right decisions. To that end, the Korean government is adopting stringent goals and measures to promote energy saving "It is a shift in thinking that no longer pits green against growth."

in public buildings. The public is also becoming involved through schemes, such as the carbon-point system, where those who are willing to make the change are being financially rewarded.

Last but not least, there needs to be a technological revolution to support the first two requirements. Breakthroughs in technology are what will enable the path to green growth and allow the public truly to transform its lifestyle. The Major Economies Forum on Energy and Climate identified 10 areas of transformational technologies to combat global climate change, where Korea is



must encompass not only "how much" we will reduce, but "how" we will get there.

All countries must find their unique strategy to achieve green growth. And because there is no clear map to follow, we must help each other as we go along.

This is why I announced the creation of the Global Green Growth Institute to serve as

key role as the steward for green growth. So I welcome, and continue to support, its Green Economy Initiative which has made a huge impact on encouraging countries to make the transition to a green growth paradigm.

Korea will play an active role by adopting what I have called a "me first" approach. Too often in the past, the need to mobilize

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5_10197

