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Guest article: Sovereign wealth funds and sustainable development

By Sony Kapoor

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The world, as alarming headlines show, is facing several challenges at the same time. This article suggests how it may be possible to at least partially address three of them—climate change & environmental degradation, persistent poverty and economic stagnation. It shows how redirecting investments, particularly by sovereign wealth funds, to green infrastructure in emerging and developing economies can help enhance financial returns while simultaneously addressing developmental and environmental challenges.

Context

Today's world faces multiple challenges. First, climate change is upon us in the form of global warming, with global temperatures breaking new records. This has also upset the water cycle in the world, intensifying both droughts and floods. Accompanying this is the rising degradation of soil, deforestation and an alarming fall in the water table. Second, despite great progress made both in technology and life expectancy globally, a significant proportion of

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Who we are

The [Green Fiscal Policy Network](#) is a partnership between UNEP, the IMF and GIZ which aims to facilitate knowledge sharing, learning and dialogue on fiscal policies to support the green economy.

The Network is supported by the International Climate Initiative (IKI) and the German Federal Ministry for the Environment, Nature Conservation Building and Nuclear Safety (BMUB).

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the world's population still has no access to electricity, drinking water, proper sewage and other basic developmental needs. Third, economic growth is stagnating. This is felt the most in OECD countries, where returns on financial investments, particularly bonds, have fallen to record lows and are moving increasingly into negative territory.

How do these problems relate to each other? How can they be addressed simultaneously? And what role can sovereign wealth funds play in all of this?

As levels of greenhouse gases in the atmosphere continue to rise, action to mitigate climate change and global warming has never been more urgent. In addition to tackling legacy sources of emissions, such as fossil fuel-based power plants and transport systems, this means that developing countries, which are at an earlier stage of development should first and foremost invest in renewable sources of energy and focus on building other forms of green infrastructure that increases resource productivity and helps tackle environmental degradation. In many countries such as India, where more than a third of the population has no access to electricity, the need to build energy and power infrastructure, for example, is a core development need. For these investments to be compatible with tackling climate change and sustainability, they need to be green. Similarly, it is clear that other basic developmental needs, including access to clean water, etc., cannot be met unless they are sustainably delivered as short term solutions, such as overexploiting ground water simply store up problems for the future.

Thus, for the most part the sustainable development and the climate change agendas both point in the same direction: a huge increase in investments in providing green infrastructure, particularly in developing and emerging economies and in greening the existing "brown" infrastructure across the world. Both require substantial financial resources.

The finance challenge

It has been estimated that \$3 - \$4 trillion of investments are needed annually in low and middle-income economies to meet the sustainable development goals. Almost 80% of these, according to the New Climate Economy project, are needed in infrastructure, of which green infrastructure and renewable energy generation in particular, is the largest component. While domestic resources do exist to partially fund these needs, they need to be supplemented by external sources if international commitments to sustainable development and tackling climate change adopted in late 2015 are to be met. Getting the specific policies and carbon price signals right is necessary in order to attract external resources, particularly from the private sector, but where might these funds come from? This is where the over \$80 trillion of capital held by long-term investors such as pension funds, insurance firms and sovereign wealth funds comes in.

Both pension funds and insurance firms have long liabilities often stretching out to 20-30 years, so are well-suited to investing in infrastructure and other illiquid assets. However, many face regulatory restrictions that limit the amounts they can invest in developing economies. Most originate in rich OECD economies and demonstrate a significant home and familiarity bias so are disproportionately deployed within OECD economies. Many are suffering heavily from the secular stagnation and related low interest rate environment now endemic in OECD economies and are undershooting their return targets. This is increasing pension deficits and threatening the viability of insurance firms. Hence, many funds are increasing their allocation to emerging economies and infrastructure in a bid to spruce up returns.

Of the \$80 trillion of capital held by long-term investors, around \$7 - \$10 trillion is held by sovereign wealth funds (SWFs) - savings vehicles most commonly used to share the revenue bonanza from natural resource extraction, often oil and gas, across generations. Unlike pension

GIZ Environment and Climate Change

Upcoming events

4th Green Growth Knowledge Platform Annual Conference - 'Transforming Development through Inclusive Green Growth'
6-7 September, Jeju Island, Republic of Korea

Parallel sessions will examine fiscal reform for inclusive green growth among other issues.

17th Global Conference on Environmental Taxation - 'Smart Instrument Mixes in a Green Economy'
22-23 September, Groningen, The Netherlands

Sessions on the political dynamics of green fiscal reforms will be organised by the Green Fiscal Policy Network with UN ECLAC and Green Budget Europe.

PAGE Academy on the Green Economy
3 - 14 October, Turin, Italy

Electives will focus on fiscal policies for an inclusive green economy among other issues.

funds and insurance firms, SWFs are not subject to financial regulations and because of their inter-generational nature, often have even longer investment horizons. Despite this, many SWFs are also over-invested in OECD economies and are, like the Norwegian SWF, undershooting their target returns. Could investing in developing economy green infrastructure help increase the sclerotic returns for these long-term investors?

Why emerging markets look so attractive

In the aftermath of the 2008 financial crisis, OECD countries have mostly been unable to regain their pre-crisis verve. As a result, public and private debt burdens have built up, often to record levels. Poor growth and stagnating incomes have given rise to a populist political backlash, which has substantially increased political risk across most of the developed world. These factors, combined with the OECD countries' ageing demographics and their place close to the technological frontier, have led to a fall in financial returns, exacerbated by the ultra-loose monetary policy that has been unable to normalise after the crisis. At present, the yield on all outstanding Swiss government bonds, a part of many investor portfolios, has fallen into negative territory. German government ten-year bonds have also, for the first time, gone into negative yield territory. The political shock of the UK's Brexit vote is most likely to trigger another round of monetary easing. This means even lower returns for longer.

Take the low financial returns on offer in the developed world and add to that the fact that most OECD economies have very high levels of financial and economic inter-linkages while simultaneously facing many of the above-mentioned structural challenges, and large chunks of investments in OECD country assets start to look highly imprudent. The maxim finance follows is supposed to be one of maximising return while minimising risk through diversification. OECD focussed investors have done the opposite, locked in low returns for high levels of correlated risk.

What these funds need is a large-scale reallocation of investments away from low-yield, OECD country assets towards emerging and developing economy assets that also generate higher returns, given the typically faster growth rates in these economies. These assets are also, typically, less correlated than OECD country assets so can help increase returns while simultaneously diversifying away risk.

The debt levels in many emerging and developing economies are lower than in most OECD economies, their demographic profiles more favourable, and they are further away from the technological frontier. Hence, they have high catch-up growth potential. The much-feared political risk in many emerging and developing countries is also much lower now than in previous decades.

A triple kill, then, is the opportunity that exists for these long-term investors to substantially increase their exposure to developing and emerging economies, particularly by investing in green infrastructure assets, which will simultaneously help tackle climate change and deliver on the developmental needs of citizens, while both reducing exposure to concentrated risk for the investors and increasing returns.

The particular role of sovereign wealth funds

This creates a perfect synergy between the recipient economies and long-term investors, which are both set to benefit, provided suitable intermediation channels are found to direct the investment into projects. Within the group of long-term investors, SWFs should be regarded as the investors of first resort because of their special characteristics.

First, many SWFs are funded by revenues from extractive industries, most frequently oil and natural gas. This means that future revenues are excessively exposed to fossil fuels – a sunset industry - and other non-replenishable sources of revenue. Mining and drilling that generate revenues also often cause environmental damage. Prioritising putting money into renewable energy and green infrastructure provides not only financial risk diversification and exposure to a sunrise industry, namely renewable energy, but also helps offset their negative environmental footprint.

Second, most SWFs have an inter-generational wealth sharing objective which gives them a longer-term investment horizon than what pension funds or insurance firms typically have. They are also not subject to the same stringent regulations as many other investors, so consequently

they have the freedom to invest in a much wider range of asset classes. Illiquid infrastructure is especially suitable for the kind of long investment horizon SWFs have.

Third, a fall in financial returns available in the traditional asset classes of OECD country liquid bonds and equities has meant that infrastructure investments, particularly in emerging economies, have become more attractive on a relative basis. The fact that far too many investors, with both long and short horizons are heavy owners of listed liquid assets makes such assets overvalued and depresses return. The long lock-in periods for green-field infrastructure gives SWFs a competitive edge in such investments, so they are able to get a superior risk-return mix from increasing exposure to such asset classes.

Last but not least, the large size of SWFs often means that they have the financial scale needed to invest in large infrastructure projects both domestically and internationally and the capacity to build relevant human expertise and partnerships with other SWFs, private sector funds and international financial institutions to help facilitate and manage such investments.

Seldom have emerging market green infrastructure investments looked more financially attractive for oil and gas funded SWFs, given that these are currently overexposed to fossil fuel price risk (for future inflows) and poorly performing highly correlated OECD country liquid assets. Partly for this reason, the traditional view that SWFs should be forbidden from investing domestically is also changing. Buying negative yielding German government bonds often makes less sense than investing domestically in strategic infrastructure. More than twenty SWFs are now allowed to invest domestically. As we look ahead, expect more of the same with SWFs from all over the world increasingly investing in green infrastructure in emerging and developing economies. Pension funds and insurance firms are also moving in this direction, albeit more cautiously.

What's new on the Network?

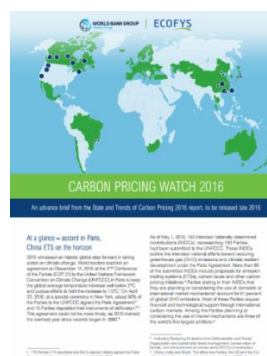
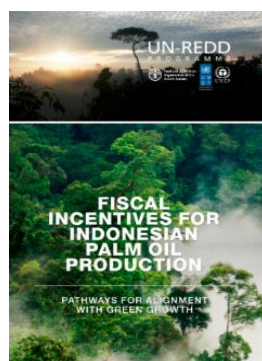
Insights from Network members

Read the latest blog posts and articles by Network members on green fiscal policies.

- Countries Are Signing Up for Sizeable Carbon Prices** (IMF Direct)
- Role of fiscal policy and carbon pricing in combating 'climate variability'** (UNEP)
- What Can You Afford in a Year Without Fuel Subsidies?**(IISD/GSI)
- New initiatives needed to redress green tax decrease** (GBE)

Publications

A number of new publications have been added to the Network website. This includes some of the latest reports and insights on green fiscal policy reforms from the IMF, UNEP, IISD, GBE, UN-REDD Programme, Chatham House, and the World Bank. To review the latest publications, visit the **Policy Insights** and **Case Studies** pages of the website.



Country profiles

The Network website includes profiles of green fiscal reforms in more than 30 countries around the world. These profiles provide an overview of the fiscal, social and environmental situation in each country and information on green fiscal measures in each country. Please visit the [Country Profiles](#) pages for more details.



Recent Events

Highlights

Making Paris Happen: The role of fiscal policies for a low-carbon, inclusive green economy - Green Fiscal Policy Network

31 May 2016, Brussels, Belgium

The Network in cooperation with **Green Budget Germany** organised a side-event at the 2016 EU **Green Week** to explore how fiscal policies can support implementation of the Paris Climate Agreement. A **keynote speech** by Hans Eichel (Former Finance Minister, Germany 1999-2005) was followed by a high-level panel discussion with European, international and national experts. Discussions focused on current approaches to carbon pricing at EU and national level, challenges faced and the need for further action on all fronts to meet the Paris targets.



Photo credit: GIZ

Other events

Agreement on ending harmful fishing subsidies adopted at UNCTAD 14 - UN Conference for Trade and Development (UNCTAD), Food and Agriculture Organization (FAO) and UNEP

21 July 2016 - Nairobi, Kenya

Almost 90 countries signed up to a UNCTAD-FAO-UNEP initiative to end harmful fisheries subsidies by the next WTO Ministerial Conference in 2017. The adopted roadmap features a four-point plan that requires countries to provide information on what subsidies they currently provide, prohibit subsidies which contribute to overfishing and illegal fishing, introduce new policies to deter the introduction of harmful subsidies, and provide special and differential treatment to developing countries. The roadmap is also backed by civil society organizations, including WWF, Oceana, CUTS International and the IISD. The agreement was signed at the fourteenth session of UNCTAD in Nairobi, Kenya held from 17-22 July.



Photo credit: UNCTAD

Tackling air pollution from diesel cars through tax: options for the UK - GBE and UCL

30 June 2016 - London, England

Green Budget Europe and University College London's (UCL) Institute for Sustainable Resources organised a roundtable event to launch a new report on "Tackling air pollution from diesel cars through tax: options for the UK." The event was hosted by *Prospect Magazine* and involved a number of members of civil society, academia and policymakers. The discussions centred on the main findings of the report including the potential effectiveness of taxing diesel cars according to their NOx emissions and the feasibility of implementing an additional tax reform with a vehicle excise duty in the UK.

The Politics of Fossil Fuel Subsidies and Their Reform - Lund University and Stockholm Environment Institute (SEI)

16-17 June 2016 - Stockholm, Sweden

A workshop organised by Lund University and SEI on 16–17 June explored perspectives from multiple countries on fossil fuel subsidies. The workshop focused on the political implications of fuel subsidies and opportunities for reform. The workshop brought together social scientists and produced a series of webcasts and blog posts on [Egypt's energy reforms](#), [lessons from Indonesia's fuel subsidy reform](#) and [how women can benefit from fuel subsidy reform](#).

How a minimum carbon price commitment might help to internalize the global warming externality - LSE Grantham Research Institute

17 June 2016 - London, England

This seminar hosted by the Grantham Research Institute examined how a single internationally-binding minimum carbon price (the proceeds from which are domestically retained) can help address the global warming free-rider externality problem.

High-Level Forum on Carbon Pricing - CPLC

10 June 2016 - Paris, France

More than 200 government, business and civil society leaders gathered in Paris on 10 June for a High Level Forum on Carbon Pricing that focused on the practicalities of achieving carbon pricing after the 2015 Paris Agreements. Following a speech by President of COP21 and Co-Chair of the Carbon Pricing Leadership Coalition (CPLC) High-Level Assembly, Ségolène Royal, sessions examined practical steps to translate the concept of carbon pricing into concrete action.

Carbon Pricing Breakfast Partners' Strategy Session - CPLC

26 May 2016 - Cologne, Germany

The CPLC held a partners' strategy session as a side-event to the annual Carbon Expo in Cologne, Germany. During the session, partners agreed that communication is key and that the message regarding carbon pricing needs to be synthesized and delivered in a targeted way to leaders and decision makers. The partners also agreed on the importance of involving youth and agreed to develop a number of policy briefs to share knowledge on carbon pricing and revenue recycling.

After Paris: How can Carbon Pricing Facilitate the Implementation of NDCs? - CPLC and World Bank Partnership for Market Readiness

25 May 2016 - Cologne, Germany

The CPLC and the World Bank Partnership for Market Readiness organised a plenary session at the Carbon Expo on carbon pricing and market readiness.

UNFCCC SB 44 Side Event: Financing Adaptation and Resilience through Fossil Fuel Subsidy Reform and Fuel Duty - IISD/GSI, NAP Global Network, FFSR

24 May 2016 - Bonn, Germany

The Friends of FFSR and IISD, alongside NAP Global Network, hosted a side event at the UNFCCC SB44 which explored how to increase domestic financing for adaptation by using savings from

fossil fuel subsidy reform and revenues from fuel duties. Discussions were chaired by Ambassador Mark Sinclair of New Zealand (member of the FFFSR) who raised the FFFSR Communiqué as an opportunity for countries to show support for fossil fuel subsidy reform

Talking Energy Subsidy Reform - Friends of Fossil Fuel Subsidy Reform, IISD/GSI, United States and the World Bank

15 April 2016 - Washington, DC

This high-level event, organised by the Friends of Fossil Fuel Subsidy Reform (FFFSR) and supported by the Global Subsidies Initiative (GSI), the United States and the World Bank, took place during the IMF-World Bank Spring Meeting in Washington, DC. The high-level discussion aimed to share recent efforts to reform fossil fuel subsidies among panellists including Finance Ministers from Indonesia and Malaysia, alongside Ukraine's former Finance Minister and the Chief Economic Advisor of India.



Photo credit: GSI/IISD

Inaugural High-Level Assembly of the Carbon Pricing Leadership Coalition (CPLC) - CPLC

15 April 2016 - Washington, DC

The CPLC held its first high-level assembly (HLA) in Washington during the World Bank-IMF Spring Meeting. At the HLA, the CPLC stepped up its work to promote and share experiences with successful carbon pricing mechanisms, pushed for greater business support of carbon pricing policies, and called for further regional summits and other leadership dialogues to advance the use of carbon pricing.

Clean energy subsidies and the global trading system - The Graduate Institute Geneva and the Green Growth Knowledge Platform

15 April 2016 - Geneva, Switzerland

The Graduate Institute Geneva and the Green Growth Knowledge Platform hosted a lecture and discussion on clean energy subsidies and the global trading system. Discussions explored subsidies for green technology diffusion, a common practice that is beginning to raise suspicions within the framework of the World Trade Organization (WTO), and new insights on the strategic use of clean energy subsidies within international trade law.

Carbon pricing: Sustaining the momentum after COP21 - World Bank Group, Swiss Federal Department of Foreign Affairs (FDFA), the Swiss State Secretariat for Economic Affairs (SECO)

8-11 March 2016 - Zurich, Switzerland

This workshop, organized by the World Bank Group and the Swiss government examined the implications of the Paris Climate Agreements and how to best move forward with carbon pricing.



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