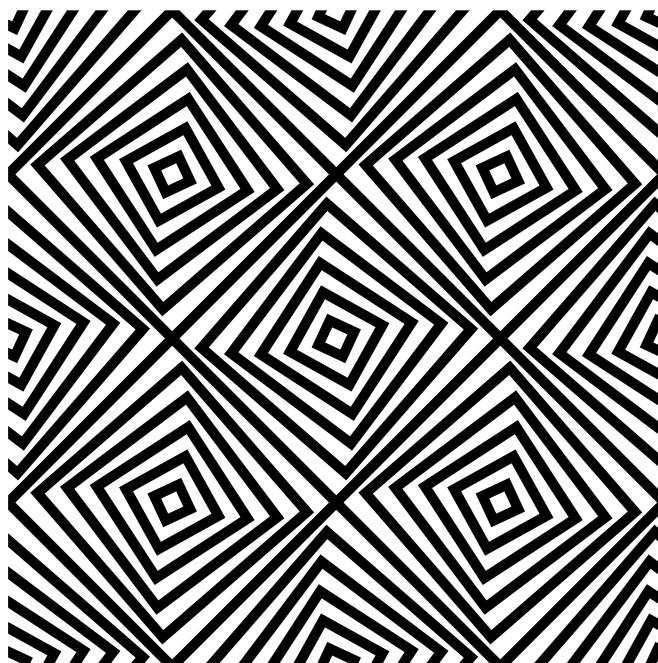




# ALIGNING

THE FINANCIAL  
SYSTEM WITH  
SUSTAINABLE  
DEVELOPMENT

**INSIGHTS** *from practice*



SECOND UPDATE BRIEFING

## The Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to deliver a step change in the financial system's effectiveness in mobilizing capital towards a green and inclusive economy – in other words, sustainable development. Established in early 2014, it will publish its final report in the second half of 2015.

More information on the Inquiry is at: [www.unep.org/inquiry/](http://www.unep.org/inquiry/) or from:

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## This Paper

This paper has been prepared by the Inquiry team as the second progress report on the Inquiry's ongoing work. It is a follow up to the first update 'An Invitation' which is available to download (in English and Mandarin, with summaries in French, Spanish, Arabic, and Russian) from [www.unep.org/inquiry/Knowledge/Reports/](http://www.unep.org/inquiry/Knowledge/Reports/)

The report draws on work of many others, including Council Members, Special Advisors and Participant-Observers, country partners and wider networks, commissioned work and publications cited in the text, as well as interview participants in the Inquiry's scenarios work. Quotes from Council Members in the text are drawn from the 2nd Advisory Council Meeting held in New York on September 26<sup>th</sup>.

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## Acknowledgements

The Inquiry Secretariat would like to thank the many individuals who have contributed to our work and understanding, and so have directly or indirectly provided inputs to this briefing. In addition to the Advisory Council are international advisors and observers, John Fullerton, Mark Halle, Sony Kapoor, Wally Turbeville, Anne Simpson and Angela Wilkinson. The Inquiry benefits from contributions numerous staff members of UNEP, UNEPFI and the UN PRI including Charles Anderson, Elliot Harris and Ligia Noronha as Council observers. Particular thanks also to our growing network of country partners including the Bangladesh Bank, Council on Economic Policies, The Brazilian Banking Federation FEBRABAN, the Centre of Sustainability Studies of FGC-EAESSP(GVces), Finance Institute of the Development Research Centre of the State Council of China, International Institute for Sustainable Development, People's Bank of China, 2 Degrees Initiative, HSBC India, Federation of Indian Chambers of Commerce and Industry and the Global Green Growth Initiative.

Errors and omissions remain the responsibility of the Inquiry.

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Программа Организации Объединенных Наций по окружающей среде

برنامج الأمم المتحدة للبيئة

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Financing remains one of the greatest challenges in advancing sustainable development. Hundreds of trillions of dollars need to be invested over the coming decades to drive economic progress. The challenge will be ensuring that this investment is consistent with and supportive of sustainable development.

UNEP is active alongside other parts of the UN and many other partners in creating the conditions to meet this challenge. It contributes to the development of national environmental policies and international agreements including, economic measures that steer sustainable production and consumption. Such measures range from engagement in macroeconomic planning, to fiscal action and public procurement, support to small and medium sized enterprises, research and development and technology deployment.

The Inquiry into the Design of a Sustainable Financial System was initiated in early 2014 to develop policy options for better aligning the financial system to the long-term needs of a healthy economy, which requires it to deliver inclusive prosperity within environmental boundaries. With its focus on the rules governing the financial system – financial and monetary policies, financial regulations and standards, and financial market-facing fiscal measures and policy-guided investment institutions - the Inquiry's work complements and builds on UNEP's on-going finance work.

Designing a robust and efficient financial system has been the topic of much policy debate and action following the 2008 financial crisis. Financial sector development, furthermore, is a key focus of many emerging and developing economies in ensuring that adequate finance is available to support their development ambitions. There is, perhaps, a unique window of opportunity today in advancing the place of environmental and social considerations in these developments.

The Inquiry, which will complete its work in the second half of 2015, is operating in the specific context of several key international developments. A new set of Sustainable Development Goals will be agreed in 2015, and the international climate negotiations will reach their next milestone in Paris in late 2015. Finance is a keystone of these and other international and national processes, recognised in findings of the Intergovernmental Expert Committee on Sustainable Development Financing. The Inquiry is seeking to contribute to these processes on an on-going basis, as well as by providing its ultimate conclusions and design options as an input to the processes.

Currently the Inquiry is partway through its work and it is now working with partners in more than a dozen countries, initiating and participating in many international initiatives, as well as engaging with key international institutions. The championing by Advisory Council members of the Inquiry's investigations has also been much appreciated. In addition, the Inquiry continues to receive many thoughtful and productive contributions in response to its published, open Invitation. This high level of open-debate and innovation is providing the energy, ambition and technical basis for the Inquiry's productive endeavours, and hopefully, success.

Achim Steiner

Under-Secretary-General

Executive Director, UNEP





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## Highlights

**Achieving sustainable development depends on mobilising sufficient capital to finance the long-term health of the real economy.** Concerns are mounting that recovery and growth are being held back not only by the current debt overhang and reduced risk appetite but also by structural factors (including within the financial system). Despite of the increasing competitiveness of many clean technologies, and concern over the valuation and market volatility risks of carbon-intensive assets, there remains a structural under-investment in sustainable assets and an overinvestment in resource-intensive assets.

**Even with strong real economy policies to correct market failures and deploy public capital, some interventions in the financial system will be needed to realise sustainability ambitions.** Inadequate information, misaligned incentives, ill-defined responsibilities and over-discounting of future risks and returns are among the factors that constrain the efficient deployment of capital for long-term value creation, taking full account of environmental and social factors.

**Key cross-country policy themes are emerging including:**

- (i) Improving the pricing of **sustainability risks**
- (ii) Harnessing **institutional capital** for sustainability in the developing world
- (iii) **Rebalancing debt capital** allocation and
- (iv) Realising the **strategic potential of central banks**

# INSIGHTS from practice

*The Inquiry is working over 2014-2015 to explore how the rules that govern the financial system – standards, metrics, incentives and regulations – can better mobilize capital for sustainable development.*

**Diverse perspectives are shaping the debate about financial system futures.**

The Inquiry is working with the OECD's Strategic Foresight Counsellor developing scenarios to assist in policy dialogue.

**Countries are developing policy innovations to improve the sustainability performance of the financial system.**

The Inquiry has on-going and planned partnerships in 12 countries, exploring experience with a range of partners including central banks, business associations & think tanks.

**The international momentum for further financial policy innovation is set to intensify in 2015.**

The Inquiry is working on crystallizing lessons from country experience, clarifying core theoretical issues and deepening dialogue and collaboration with key international institutions.

## **BANGLADESH**

The Central Bank is acting on sustainable development objectives, targeting funds towards SMEs and green infrastructure.

## **EUROPEAN UNION**

The traditional focus on disclosure is moving onto the critical question of mobilizing long-term capital for a sustainable recovery.

## **BRAZIL**

New central bank requirements on environmental and social risk in the banking sector have evolved out of a long national dialogue.

## **SOUTH AFRICA**

The Financial Charter delivered a new social contract for post-Apartheid transformation and sustainable development.

## **CHINA**

A system-wide focus on green finance is taking shape, involving banking, insurance and capital markets.

## **USA**

New research on the economic risks of climate change provides extra impetus to make disclosure on sustainability factors routine in capital markets.



# THE INQUIRY'S MISSION AND APPROACH

The Inquiry into the Design of a Sustainable Financial System aims to advance policy options that would deliver a step change in the financial system's effectiveness in mobilizing capital towards a green and inclusive economy – in other words, sustainable development.

## THE INQUIRY'S THREE CORE QUESTIONS

**Why** and under what circumstances should the rules governing the financial system be deployed in pursuit of sustainable development outcomes ?

**What** rules governing the financial system have been, or could be, deployed for achieving sustainable development ?

**How** can rules be most effectively deployed for sustainable development, given the complexities and competitiveness concerns of financial actors ?

The Inquiry's approach is to crystallize relevant experience and proposals into a coherent framework to support and encourage action by those responsible for setting the rules governing the financial system. This includes central banks, financial regulators, finance ministries and financial market standard setters, such as accounting standards, credit rating and indexes and voluntary initiatives. Such a framework might enable:

- 1 Resetting the broader purpose, mandate and scope of key governing institutions.
- 2 Establishing a viable policy innovation portfolio based on experience.

- 3 Increasing the effective development of capacity and transfer of experience.
- 4 Assessing progress of financial centres in adopting aspects of the portfolio.
- 5 Encouraging key international institutions to embrace the vision of a sustainable financial system and encourage action towards that end.

*“We are struggling to address the fundamental challenges of mobilising massive investment in the countries that are growing and retrofitting the countries that are developed. Can we do that while safeguarding clean water, clean air and a resilient environment?”<sup>33</sup>*

*“For South Africa, we are particularly concerned with financial inclusion. Sustainability doesn't start and end with green. It is about the long-term survivability of a country.”<sup>33</sup>*

The Inquiry is running over two years, and has operationalized its approach over its initial eight months through country-level and international engagement and research. Currently, it is implementing an ambitious program that includes:

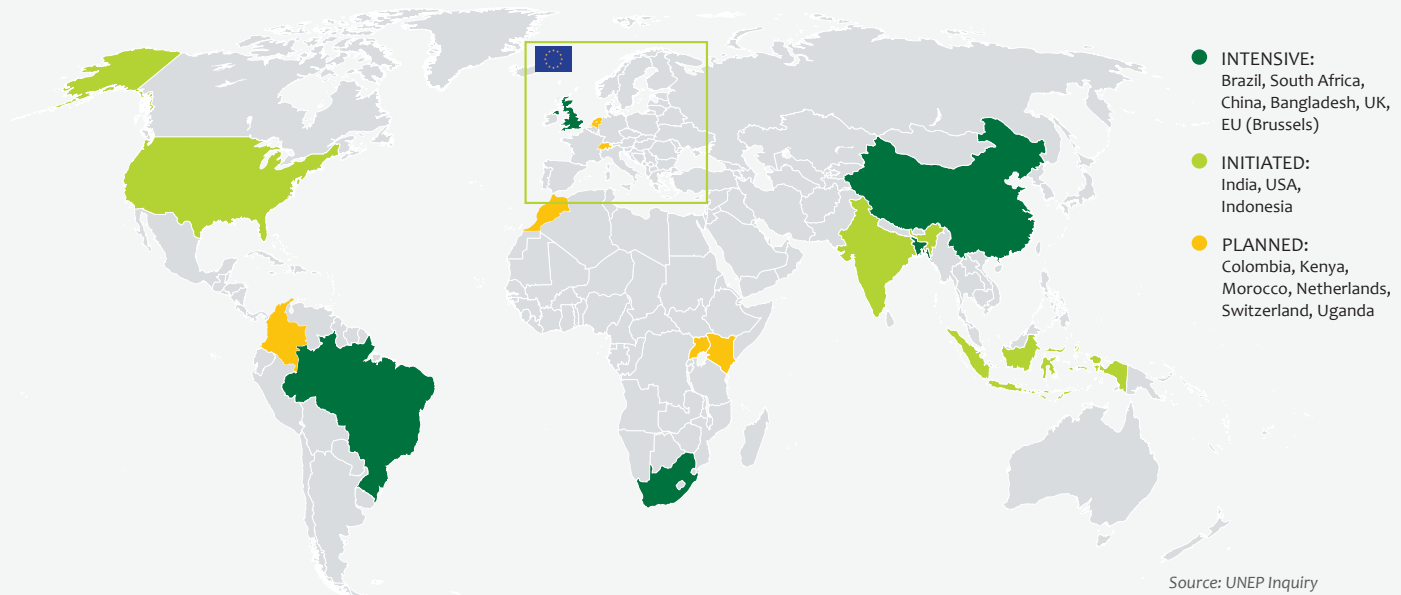
- 1 **Country partnerships** involving intensive research and engagement across a dozen countries.
- 2 **International collaborations and engagements**, including with the International Finance Corporation and the World Bank, other parts of the United Nations including the International Labour Organization, the UNEP Finance Initiative, and Principles for Responsible Investment and Principles for Sustainable Insurance.



3 **Extensive country-level and international dialogue**, including participation in consultative meetings of the Intergovernmental Expert Committee on Sustainable Development Financing (ICESDF), briefings with the IMF and the OECD, interaction with civil society orga-

nizations convened by the Green Economy Coalition, and discussions with international groupings and institutions such as the G20 and the Bank of International Settlements as well as financial sector institutions such as the International Institute of Finance (IIF).

## THE INQUIRY'S COUNTRY ENGAGEMENTS



Overall, the Inquiry's work has helped to catalyse and knit together a growing informal, international network of institutions working on design aspects of a sustainable financial system.

## THE INQUIRY'S EMERGING KNOWLEDGE NETWORKS



Source: UNEP Inquiry

The Inquiry's Advisory Council oversees its activities and champions many aspects of its work. The Advisory Council comprises leading financial system experts, policy makers and regulators,

and practitioners from around the world. Several country engagements are being championed by specific members, notably in Bangladesh, Brazil, India, South Africa, Uganda and the UK.

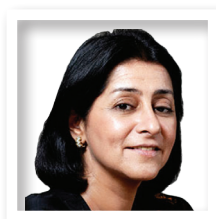
## ADVISORY COUNCIL



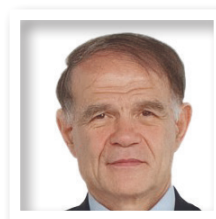
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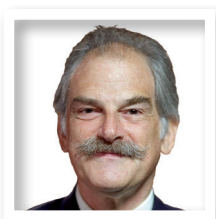
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PRESIDENT, BRAZILIAN BANKERS  
FEDERATION



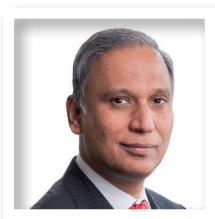
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FORMER CHAIR, FINANCIAL  
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# MOBILISING FINANCE FOR SUSTAINABLE DEVELOPMENT

*To place the global economy onto a sustainable development pathway requires an unprecedented shift in technology and business models, public policies and institutions, as well as individual values, attitudes and competencies. It also requires a willingness to invest our accumulated financial resources in securing tomorrow's sustainable livelihoods and prosperity.*

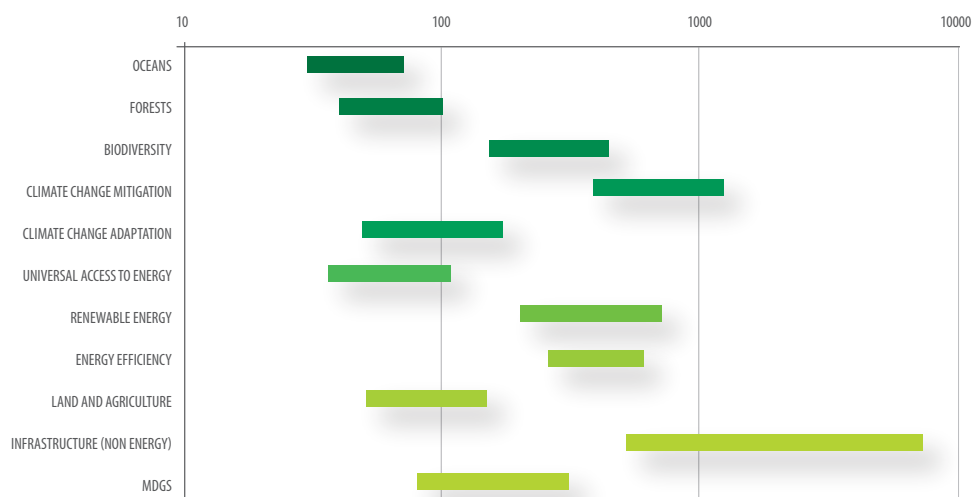
**The forthcoming Sustainable Development Goals (SDGs), to be agreed at the United Nations in 2015, provide a crucial lens through which the financial system's role in allocating capital to solve critical problems and meet needs can be viewed.** Substantial financing is needed to deliver these SDGs.

## FINANCING NEEDS FOR SUSTAINABLE DEVELOPMENT

Based on historic trends and economic growth projections, gross capital formation between now and 2030 has been estimated to be of the order of US\$400 trillion, or over US\$25 trillion.<sup>1</sup> Within this, investments in infrastructure make up a large part of the specific financing need.

The UN Intergovernmental Committee of Experts on Sustainable Development Financing (ICESDF) has made estimates, drawing on existing data and analysis, of the financial resources needed to deliver on the broader set of SDGs, including infrastructure investment for resilient energy, agriculture, transport, water; basic needs for healthcare and education, access to energy and gender equality and global public goods such as biodiversity and climate change mitigation. They also highlight the importance of finance for small and medium sized enterprise and R&D, principally technology.<sup>2</sup>

Infrastructure investment needs at around US\$6 trillion a year are the largest portion of these estimates. Recent work by the Global Commission for the New Climate Economy estimates that around 4% additional investment is needed for infrastructure to be low carbon.<sup>3</sup> These numbers are broadly comparable with other authoritative estimates of low carbon infrastructure investment requirements, such as from the International Energy Agency, UNCTAD and the World Economic Forum, although the latter's projections suggests a higher incremental investment requirement of about 14%.<sup>4</sup>



Source: UNTT Working Group on Sustainable Development Financing Chapter 1



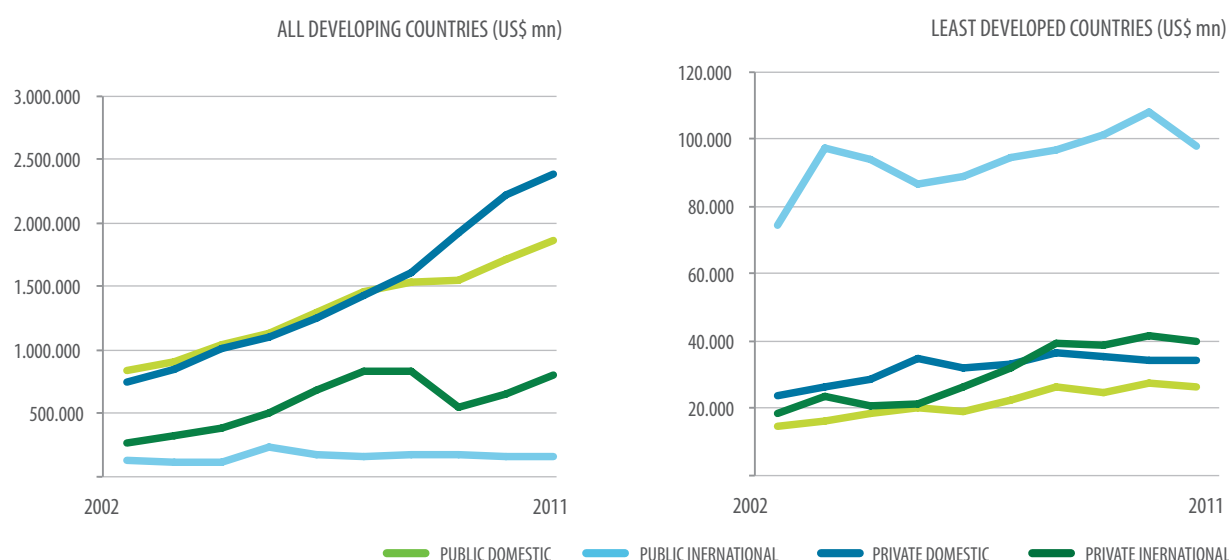
It is clear that the investment needs associated with the Sustainable Development Goals will require a step change in the levels of investment in developing countries.<sup>5</sup> However within this group, the growth and mix of financing sources, and the maturity of the financial system varies significantly.

“In Uganda we have money in banks, but it is short term. We need to get over distrust of stock markets and build a more mature financial system. At the same time we need to show that green can be profitable, that creating employment can be profitable”<sup>33</sup>

## FINANCING IN DIVERSE DEVELOPMENT CONTEXTS

While large emerging economies have increasingly well developed financial systems, financial systems in many smaller and low-income developing countries tend to be focused on banks (a mix of private, state-owned, and foreign subsidiaries). For these countries the main route for international private investment is through foreign direct investment. Many developing countries are developing stock exchanges and nascent debt markets, however concessional finance through official development assistance and other official flows remains significant as a source of capital, particularly for the least developed countries (LDCs).

### FINANCE FOR DEVELOPMENT



Source: Intergovernmental Committee of Experts on Sustainable Development Financing Report, based on OECD and World Bank data

The low and middle income small-island developing states (SIDS) face particular development and associated financing challenges, highlighted in the Inquiry's preparatory work for the recent UN Conference on Small Island Developing States. Small markets and populations combined with often considerable economic disadvantages associated with physical distances leave many unattractive for private investors, save for tourism or natural resource extraction opportunities.

There is no overall scarcity of financial resources seeking investment opportunities. Existing global financial assets amount to around US\$273 trillion,<sup>6</sup> with annual savings estimated in 2012 as US\$17 trillion, with 46% coming from developing countries.<sup>7</sup> However the Intergovernmental Committee of Experts on Sustainable Development Financing

concludes that 'current financing and investment patterns will not deliver sustainable development'. The problem has three interconnected aspects:

- 1 **Long-term investment in general is too low to drive balanced global growth and achieve full employment.** The G30 Group estimate

a US\$7 trillion a year long-term investment gap in the major economies of Brazil, China, France, Germany, India, Japan, Mexico, the UK and the USA.<sup>8</sup> Even negative real interest rates in many OECD countries have not encouraged adequate investment to kick-start the real economy, leading some to argue that the developed world is entering a period of “secular stagnation”, driven by technology shifts, demographics, growing inequality and the long-term public debt overhang of the economic recession.<sup>9</sup>

- 2 **Specific investment gaps** in key areas related to sustainable development, such as infrastructure and basic needs. UNCTAD estimates that there is a US\$2.5 trillion annual investment gap in developing countries alone to meet post-2015 development goals.<sup>10</sup>
- 3 **Financial resources are being under invested in sustainable development and over-invested in an unsustainable economy.**<sup>11</sup> Natural resource and carbon-intensive investments continue to rise despite a growing signs that of value-at-risk in the face of technology, policy, catastrophic weather events and citizens’ choices. Renewable energy development increased dramatically over the last decade, in value but even more so in volume given declining unit costs.<sup>12</sup> Yet overall, less than 0.01% of the global bond market is made up of ‘green bonds’.<sup>13</sup>

Investment shortfalls have been widely analysed, with causes ranging from an inadequate and uncertain policy environment for long-term investment, to structural shifts in underlying economic conditions.

**Missing or perverse policies and price signals in the real economy clearly play an important part in driving both under - and over - investment.** Market failures in the real economy include fossil fuel subsidies of over US\$0.5 trillion annually,<sup>14</sup> under-priced pollutants such as carbon, inadequate environmental enforcement in many countries and weak positive incentives for example to undertake full life cycle costs into account in public procurement. That said, the cost disadvantage of many green technologies

compared to more environmental damaging alternatives is increasingly being closed by technology developments and business innovation. This shift is particularly pronounced when assessed over the full life cycle of an asset, where clean technologies often have higher capital but lower operating costs.<sup>15</sup>

*“There is an alignment between economic objectives and long term stability of natural resources. Transparency is a key condition that the market is working well. It is critical that prices internalise the costs and benefits.”<sup>33</sup>*

**There is an increasing view that structural weaknesses in the financial system are constraining long-term productive investment, preventing capital allocation to innovation and to small and medium sized businesses.** Correcting market and policy failures in the real economy is essential, but many believe that on their own these are insufficient.<sup>16</sup>

*“The permanent process of reforming regulations creates uncertainty itself. Investors don’t know what the rules will be in two years time. So they sit on their cash and wait.”<sup>33</sup>*

**In the case of climate change, for example, even with broad-based carbon pricing, it is likely that further action within the financial system would be needed to ensure that capital flows at sufficient speed and scale to support the low-carbon transition.** While some of this can and will take place through public investment, increasing attention is being paid to inadequate information flows, misaligned incentives, incomplete risk management, ill-defined responsibilities and over-discounting of future risks and returns create bottlenecks in the financial system.

*“This is not between whether you reform the finance system or carbon prices. We have to do both - We have to get the finance system to do its job of getting capital from where it is and where it needs to be.”<sup>33</sup>*





“I think there is a strong argument in favour of measures to encourage lending to the real, sustainable economy. This could be through banking regulation - central banks adjusting their capital weights, through overt subsidies or through a sponsored green investment bank or other public bank. If central banks and regulators are to have a role they will do it to meet real economy goals, not because of a threat to macroeconomic stability.”<sup>33</sup>

“We see no way of meeting our financial obligation for the next decades unless the social agenda and environmental agendas are addressed. We don’t think these are separate from prudential issues, because they are not separate from risk.”<sup>33</sup>

## FINANCING SUSTAINABLE DEVELOPMENT - A QUESTION OF TIME

Sustainable development is often equated with the long-term. Although an over-simplification, it is reasonable to conclude that investors with longer-term time horizons will tend to take a broader array of issues that could effect their investment into account, including many environmental and social factors.

However, there is a growing trend towards short-termism in financial markets. Trading to profit from price volatility, rather than investing to profit from the return on real investment is a dominant feature of markets for publicly traded equities. High frequency trading is an extreme aspect of this trend, with concern that it plays little or indeed a negative role in improving market efficiency. Financial innovation in relation to other asset classes is also providing new routes for intra-financial sector trading, while corporate balance sheets are being used for acquisitions and share buy-backs, rather than investments in long-term value creation opportunities.

Incentives shape investment behaviour, and there is concern that today’s financial market incentives are aligned to short-term performance. These include fees linked to portfolio churn and the requirement on the part of most asset managers to track closely to existing benchmarks and indexes. The relatively short time-horizons over which credit risk is assessed by rating agencies also ignore longer-term risks.

Policy and regulatory action to improve the resilience of the financial system in the wake of the financial crisis have increased the value placed on short-term liquidity, and made the holding of longer term, relatively illiquid assets more costly for banks and insurance companies.

Lower interest rates, the price paid to borrow financial capital, should promote extended time horizons and so better align investment with sustainable development. Yet today’s historically low and often negative real interest rates has not catalysed longer-term investment. Risk appetite across much of the OECD, still the home to most of today’s store of global financial capital, has declined substantially leading to concerns at the possibility of “secular stagnation”, i.e. a longer-term decline in OECD growth rates. This in turn exacerbates investor unwillingness, as does the uncertainty of medium term prospects in major emerging economies.

Shortening time horizons is a feature of today’s modern, technology-driven society, not just a peculiarity of the financial system. Reversing this macro-trend seems unlikely in the foreseeable future, leaving the options of either seeking to reinsert long-termism into a bounded part of the financial system, or else to align short-term interest and behaviour with long-term goals. A critical question for the Inquiry is to identify what mechanisms could be deployed by public authorities working with financial regulators to take advantage of historically low interest rates to lock in low capital costs for sustainable infrastructure.

# PERSPECTIVES

*Debate and practice as to whether, when and how to intervene in the financial system in pursuit of sustainable development is framed by varied perspectives about how the system does and should work. Such perspectives are of course informed by evidence, but also by deeply held convictions. Finally, such perspectives are shaped by different views of the future, and what solutions might be most suited to those futures*

## WHY INTERVENE?

**The Inquiry has identified four specific circumstances under which interventions in the financial system in pursuit of sustainability outcomes may be appropriate.** Systematic mispricing of environmental and social risks or miscommunication of such pricing, provide a primary cause for intervention, as would be circumstances where such mispricing threatens the stability of all or parts of

the financial system. Regulations and standards may be needed to underpin innovation in the financial system (such as the development of green bonds). Beyond this, interventions in the financial system may be appropriate to meet explicit policy goals such as employment, lending to SMEs and access to finance – and to ensure coherence between financial regulation and wider government policy, for example on climate change.

**There are equally many reasons for caution in intervening in the financial system.** Most obvious is the complexity of the financial system, creating risks that intervention will fail or create negative unintended consequences. One such consequence could be reduced competitiveness of financial institutions and potentially financial centres, even where interventions offer competitive advantage over the longer term. Beyond this is the oft-stated argument that real economy

### REASONS TO INTERVENE ...



### ... AND CAUTIONS



Source: UNEP Inquiry



interventions would be more effective, usually associated with a view that the financial system would adjust swiftly and effectively to changing real economy price and policy signals. Finally, two related cautions about financial system interventions are that it creates a “slippery slope” that can be used to justify intervention on many possible grounds, which in turn will drive an increased politicization of the architecture of the financial system.

**Whilst there is broad agreement that current economic signals and capital allocations are not aligned to sustainable development, there are diverse perspectives as to the relative importance of financial system failures in explaining the misalignment, and the implicit weight given to the cautions against intervention.** The diversity of views are represented in stylised form below:

**1 “The problem can be solved in the real economy”** (Q1) reflects a strongly held view that real economy problems need to be solved by changing policy and price signals in the real economy, and that the financial system will respond to such changes and so deliver the finance needed to realize sustainable development.

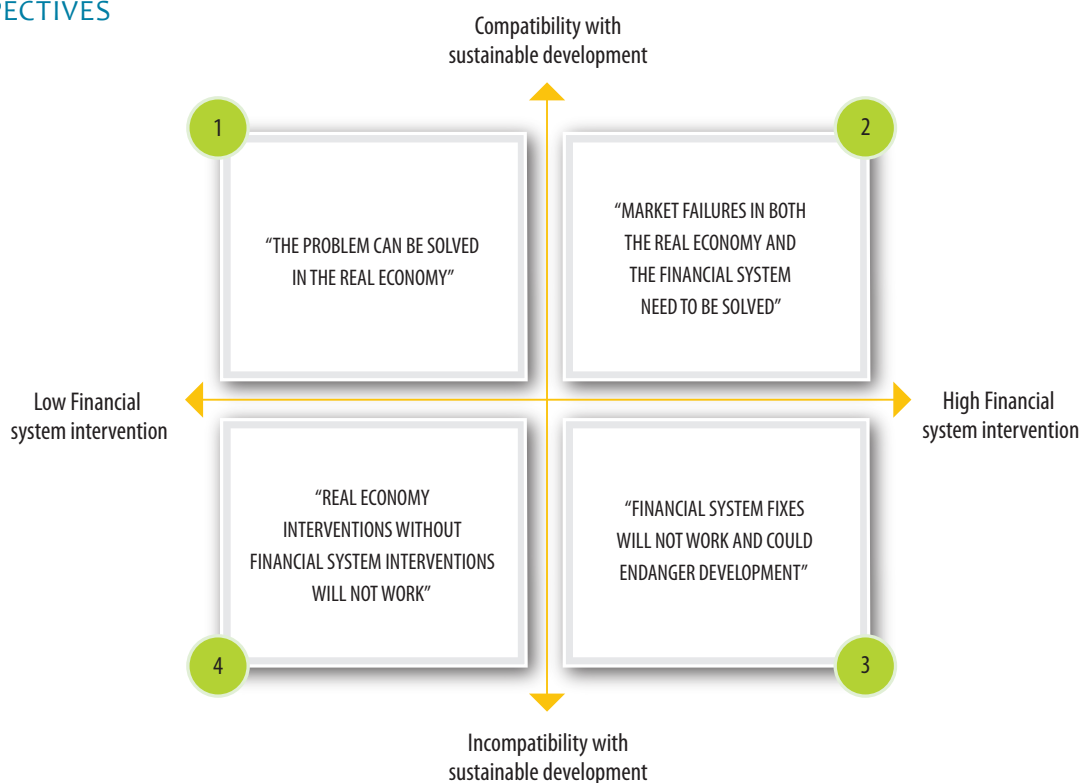
**2 “Solve market failures in both the financial system and the real economy”** (Q2) reflects the growing view, and already strong view in emerging economies, that realizing sustainable development requires a high level of intervention in the financial economy, for most as well as a high level of intervention in the real economy.

**3 “Financial system fixes will not work and could endanger development”** (Q3) reflects a view that a high level of intervention in the financial economy will not deliver sustainable development, and may even damage the will and capacity of the financial system to invest in sustainable development.

**4 “Real economy interventions without financial system interventions will not work”** (Q4) reflects the view that low levels of intervention into the financial economy will make it impossible to realise sustainable development, even with high levels of intervention in the real economy.

These are of course simplified versions of a diverse and nuanced perspectives noted in the Inquiry’s work to date.

## PERSPECTIVES



Source: UNEP Inquiry





## SCENARIOS FOR THE FUTURE

*The Inquiry is collaborating with the OECD's Strategic Foresight Counsellor in developing an understanding of these perspectives, and exploring possible scenarios for the future of the financial system. Scenarios are not forecasts based on past trends; rather they are attempts to consider possible developments and turning points. They help frame and shape policy debate and enable different perspectives on complex issues to be explored in a productive dialogue. Ultimately, the hope is that debate will move beyond the current polarisation in perspectives towards a greater degree of consensus as to when and how the financial system can become more aligned with sustainable development.*

*This initial scenario framework has been developed through a process of research and interviews, gathering perspectives from leaders and practitioners in public and private sectors and in civil society.<sup>17</sup>*

Four scenarios have been developed to their initial stages, and are presented below in brief.

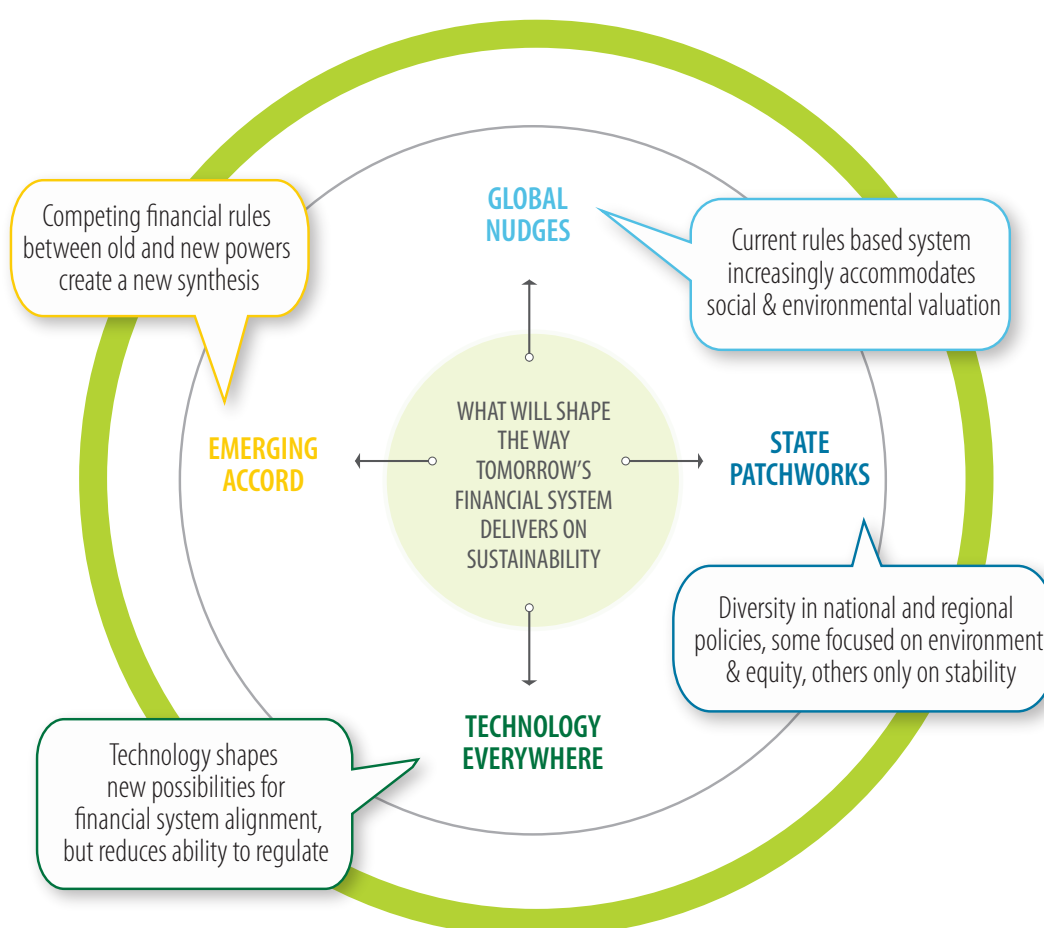
- **Global nudges** – In this scenario, governments and international bodies work together broadly within the current rules-based system, continuing to focus their efforts broadly on financial system stability and resilience, albeit with growing engagement in ensuring adequate pricing of environment and social-related risks.
- **State patchworks** – In this scenario, the current global consensus is weakened, and national and regional financial and monetary policies and regulations gain in importance. Some retain their focus on financial system stability and resilience whilst others extend their intervention in pursuit of sustainable growth goals.
- **Emerging accords** – In this scenario, the global financial system is increasingly influenced by two centres of gravity, one reflecting the current consensus and the second of increasing importance reflecting a distinct approach evolved across major emerging economies that favour higher levels of policy-guided intervention. For a time this creates competing financial system rules and might then begin to create a new emerging synthesis.
- **Technology edges** – In this scenario, new players and technologies within the financial system are the key disruptors, creating new possibilities for public good but also constraining the role and shape of policy and regulatory interventions in the face of faster, more fragmented and dynamic institutions. Transparency may increase but control decrease.

*“Humanity is tribal. When we are under stress we hunker down, we become more regional. Perhaps the breakthroughs that we need will come from the tribal instinct to protect. Then will see international moves and momentum. Global policy will catch up.”<sup>33</sup>*

The aim is not to choose one future as preferable over the other. Rather, the Inquiry's scenarios work at this stage are intended to consider the possibility of multiple futures within which the financial system might support sustainable development.

These scenarios, very much a work-in-progress, illuminate the different circumstances under which the system might be effectively aligned with the needs of sustainable development. The further development of these scenarios will allow policy options being considered by the Inquiry to be tested against these different futures, enabling a deepening in the quality of predictive analysis of their potential and risks.

*“There is something in all of them - which ones will we be influenced by, and which one do we want to influence. Global nudges is most difficult to move, but has the greatest potential for change. Technology is disintermediating finance in a very strong way. State patchwork will happen anyway, but my doubt is whether it has a scalable potential, or if in the end it will be drowned, if you don't have global nudge moving.”* <sup>33</sup>



Source: UNEP Inquiry



# INNOVATION IN PRACTICE

*The Inquiry is identifying innovative practices by financial sector rule-makers from around the world designed to improve the sustainability outcomes of the financial system.* We are working with country partners to gain insight into the experience in practice, and offer our unreserved appreciation to those who have made this possible, including individual members of the Advisory Council. These initiatives are only partly completed, so we offer these highlights as work in progress in the spirit of continued dialogue.

## BANGLADESH

**The Central Bank ('Bangladesh Bank')** promotes sustainability objectives as well as the more traditional role of promoting financial stability and broad economic growth. It targets financial inclusion and investment in SMEs, agriculture and renewable energy through measures including:

- ▶ **Concessional refinancing** to commercial banks and microfinance institutions at reduced interest rates for loans given to priority areas such as renewable energy. While this is a public subsidy it relies on the private sector as a gatekeeper in the allocation of capital. The default risk remains with the banking sector.
- ▶ **Directed credit requirements which oblige financial institutions to allocate portions of their loan portfolio to key sectors such as agriculture.** In September 2014, BB announced that as of 2016 every financial institution will be obliged to allocate at least 5% of its loan portfolio to green finance.
- ▶ **Banking license requirements that oblige commercial banks to open a rural branch for every new branch in urban areas,** and to offer "10 Taka accounts" – bank accounts that can be opened with the deposit of 10 BDT (0.13 US\$).

THE INQUIRY'S ENGAGEMENT IN BANGLADESH IS CARRIED OUT THROUGH A STRONG PARTNERSHIP WITH BANGLADESH BANK (BB), THE COUNTRY'S CENTRAL BANK, LED BY ADVISORY COUNCIL MEMBER, DR A. RAHMAN, GOVERNOR OF THE CENTRAL BANK OF BANGLADESH AND THE SWISS-BASED COUNCIL ON ECONOMIC POLICIES AS RESEARCH PARTNER.

# INNOVATION



## BRAZIL

Brazil has taken a number of steps to align its financial system with sustainable development. At the root of this lies the recognition that ‘there should be no trade-offs between the resilience of the financial system and resource allocation for sustainable development’.<sup>18</sup> Critical policy innovations and priorities include:

- ▶ **Regulating environmental & social risk:** The Brazilian Central Bank (BACEN) has incorporated sustainability factors into banking regulation since 2008. As part of the implementation of Basel III, in 2011, BACEN asked banks to demonstrate how they consider exposure to socio-environmental damage in the Internal Capital Adequacy and Assessment Process (ICAAP). In April 2014, BACEN issued a new resolution requiring banks to have an environmental & social risk management system.
- ▶ **Clarifying financial liabilities for environmental damage:** Brazil’s 1981 Environmental Law creates liability for those directly or indirectly involved in an environmental incident, with no need to prove negligence or causality. This has created an atmosphere of legal uncertainty, posing “a significant barrier to capital allocation to advance for sustainable development.”
- ▶ **Monitoring financial resources allocated to the green economy:** New estimates for Brazil suggest that around 12% of bank lending along with 62% of assets under management in the pension system are now covered by policies that require sustainability assessment. Standardising monitoring of financial flows is an important next step.

THE INQUIRY’S WORK IN BRAZIL IS BASED ON A PARTNERSHIP WITH THE BRAZILIAN BANKING FEDERATION, FEBRABAN, LED BY ADVISORY COUNCIL MEMBER AND FEBRABAN PRESIDENT, MURILO PORTUGAL. TO UNDERPIN THIS WORK, FEBRABAN AND THE INQUIRY COMMISSIONED THE CENTRE OF SUSTAINABILITY STUDIES OF FGC-EAESP (GVCES) TO BETTER UNDERSTAND THE CURRENT CONTEXT AND FUTURE PROSPECTS FOR A SUSTAINABLE FINANCIAL SYSTEM IN BRAZIL.

## CHINA

China is experiencing considerable negative direct effects of environmental problems on public health and the economy, and is developing and exploring action in the financial sector on several fronts:

- ▶ **Green Credit Guidelines were introduced by the China Banking Regulatory Commission,** initially on a voluntary basis, with estimated uptake covering 9% of the banking sector’s assets. Expectations are that coverage will now more rapidly increase and that the guidelines may become a licensing requirement.
- ▶ **The People’s Bank of China is exploring possible measures to green the country’s developing debt markets,** including through green bonds to advance green bonds, related securitization and developments in credit ratings.
- ▶ **Disclosure is improving,** notably for listed companies and for those with international listings or related aspirations. Sustainability-related disclosure is at an early stage, although the numbers of voluntary sustainability reports adhering to international standards has grown rapidly. The Shanghai Stock Exchange has mirrored international developments in requiring sustainability related disclosures, but these are not yet seen as impacting investor decisions.
- ▶ **The People’s Bank of China is considering whether and how environmental stress tests could be introduced for financial institutions.** More stringent environmental regulations are likely to result in ‘stranded assets’ on the balance sheets of Chinese banks that have lent to pollutant-intensive industries. This has the potential for destabilizing individual financial institutions or entire financial sub-sectors.

THE INQUIRY HAS SEVERAL SUBSTANTIVE ENGAGEMENTS IN CHINA, BEING A KEY PARTNER IN AN ON-GOING POLICY DEVELOPMENT INITIATIVE WITH THE FINANCE INSTITUTE OF THE DEVELOPMENT RESEARCH CENTER OF THE STATE COUNCIL, TOGETHER WITH THE INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, AND THROUGH ITS ROLE AS CO-CONVENER OF A GREEN FINANCE WORKING GROUP WITH THE PEOPLES BANK OF CHINA (PBOC) THAT IS CURRENTLY EXPLORING UPWARDS OF TWENTY SPECIFIC GREEN FINANCE TOPICS WITH A VIEW TO DEVELOPING POLICY AND REGULATORY RECOMMENDATIONS.

## EUROPEAN UNION

At the European Union level, improving the disclosure of environmental and social risks by corporations was part of the post-crisis financial reform package. Now building a 'capital markets union' that effectively directs funding for long-term enterprise lies at the heart of the new Commission's efforts to emerge from the financial crisis. Key themes include:

- ▶ **Modernising fiduciary duty** and improving the integration of environmental & social factors as part of the strategy for long-term finance.<sup>19</sup>
- ▶ **Introducing environmental stress testing**, for example, through the directive on Institutions for Occupational Retirement Provision (IORP).
- ▶ **Boosting the market for 'green bonds' for infrastructure and SMEs.** The European Central Bank's announcement that it will purchase asset backed securities and covered bonds has the potential to pump-prime a sustainable debt capital market, integrating sustainability factors into the specification process to stimulate finance for the real economy.<sup>20</sup>

Significant policy and market innovation is also taking place at the member state level. In the UK, for example, post-crisis innovations include:

- ▶ A Law Commission clarification of the positive **relationship between sustainability and fiduciary duty**.<sup>21</sup>
- ▶ Strengthened **stewardship responsibilities** for institutional investors towards their ultimate clients and beneficiaries.
- ▶ A consultation on the links **insurance regulation and climate change**, led by the Prudential Regulatory Authority at the Bank of England.

WITHIN THE EU, THE INQUIRY IS DRAWING ON THE EXPERTISE OF ITS ADVISORY COUNCIL, INCLUDING JEAN-PIERRE LANDAU, DAVID PITT-WATSON, ADAIR TURNER AND PARTNERING WITH THE 2 DEGREES INITIATIVE.

## INDIA

India's central bank, the Reserve Bank of India (RBI) produced its first statement on the role of banks in financing sustainable development in 2007.<sup>22</sup> India's new government is now focusing heavily on delivering key sustainable development priorities such as financial inclusion, clean energy, clean water and access to sanitation. Key features of the discussion in India include:

- ▶ **Directed lending regulations:** Banks need to allocate 40% of loans to key sectors (such as agriculture); within this, distributed solar projects has recently been included.
- ▶ **Lending limits:** Proposals have been made to carve out renewable energy as a separate sector within banking exposure limits so that financing is not constrained by caps on lending to the overall power industry.<sup>23</sup>
- ▶ **Infrastructure bonds:** A new system of infrastructure bonds has been put forward which would enable banks to issue bonds outside of the normal reserve requirements; this could be a potential platform for the issuance of green bonds in India.
- ▶ **Sustainability risk:** Leading banks are also exploring the need for a common approach to environmental and social risk to establish a level playing field in credit appraisal.

IN INDIA, THE INQUIRY'S WORK IS BEING DELIVERED WITH ADVISORY COUNCIL MEMBER, NAINA LAL KIDWAI, COUNTRY HEAD OF HSBC AND IN PARTNERSHIP WITH THE FEDERATION OF INDIAN CHAMBERS OF COMMERCE AND INDUSTRY.



## SOUTH AFRICA

**South Africa's post-apartheid goals include an economic transition that matches the vision and success of its political transformation.** There are a cluster of governance innovations focused on integrating environmental, social and governance factors into the financial system, including:

- ▶ **The King III Corporate Governance Code** applies to all listed companies in South Africa, and requires an integrated approach to financial and sustainability risk management and reporting.
- ▶ **Regulation 28 of the Pensions Act** has clarified the pension industry's fiduciary duties, such that "prudent investing should give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an environmental, social and governance character". Alongside this is the voluntary Code on Responsible Investment in South Africa (CRISA).
- ▶ **Industry charter for black economic empowerment.** The government, labour, civil society and the financial sector together developed a Financial Services Charter and Financial Services Code representing a formal commitment to prioritise financing into transformational infrastructure, low-cost housing, SMEs, and agriculture, as well as improving access to financial services. Compliance with the charter is incentivised by the procurement criteria for awarding of government contracts.

Government carbon reduction targets, combined with rising energy prices, will pressure the country's energy intensive sectors. Discussions with the Reserve Bank of South Africa has raised the question as to whether in combination these factors should be considered from a macro-prudential perspective, an issue being taken forward at the research level by the Inquiry and partners.

THE INQUIRY IS PARTNERING WITH THE PRETORIA-BASED, REGIONAL OFFICE OF THE GLOBAL GREEN GROWTH INSTITUTE.

## USA

**How the US financial system manages the threat of climate change has risen up the agenda following the publication of the Risky Business report by a consortium of eminent political leaders and financiers.** The report translated the science of climate change into core financial terms, arguing 'in some ways, climate change is like an interest-only loan we are putting on the backs of future generations: They will be stuck paying off the cumulative interest on the emissions we're putting into the atmosphere now, with no possibility of actually paying down that "emissions principal"'.<sup>24</sup>

Key steps that have been taken in the US to date include:

- ▶ **Climate reporting** - the Securities and Exchange Commission (SEC) issued Interpretive Guidance on climate disclosure, giving companies some idea of how to consider their "material" risks from climate change. As of 2013, over 40% of companies listed on the Standard & Poor's 500 Index were still not voluntarily disclosing climate risks. There is now discussion of making reporting mandatory.<sup>25</sup>
- ▶ **Green bonds** - Its well - developed capital markets means that the USA has been at the forefront of the 'green bond' movement, including the launch of the voluntary Green Bond Principles in January 2014. What has been particularly notable has been the range of issuers and instruments involved, including solar securitisations (Solar City), corporate bonds (Bank of America) and the beginnings of 'green munis' from California and Massachusetts.

THE INQUIRY'S DIALOGUE WITH KEY GROUPS IN THE USA, INCLUDING BANKS, INVESTORS, POLICYMAKERS AND THINK-TANKS, HAS REVEALED A WILLINGNESS TO TAKE FORWARD THE SUSTAINABLE FINANCIAL SYSTEM AGENDA, MAKING LINKS TO INTERNATIONAL PRACTICE AND FRAMEWORKS.



# LESSONS FROM THE INQUIRY'S WORK-IN-PROGRESS

The Inquiry's work at the country level is at an interim stage, with half of its country programmes underway and half in various stages of commencement. This early review of experience reveals a diverse set of approaches and measures, ranging from those focused on specific issues such as climate change and financial inclusion, to those addressing a wider range of social and environmental risks. A number of cross-country themes are starting to emerge, including:

## Improving the reporting and use of sustainability data

A critical first step in many countries have been stock market, investor and regulatory initiatives to encourage and require better disclosure of sustainability factors to investors. Much progress has been achieved and a range of national and international initiatives are working to take this further – including the Sustainable Stock Exchange Initiative and the International Integrated Reporting Council. Concerns remain that companies are still not being rewarded by investors for enhanced transparency and governance. In addition, the focus is shifting onto the accountability of financial players such as institutional investors for their own sustainability performance.<sup>26</sup>

## Pricing sustainability risks

There are concerns that sustainability factors have the potential to impair financial assets and trigger a disorderly market response. Stress tests are already used by regulators to assess the resilience of financial institutions in the face of 'unlikely but plausible' scenarios. This approach could be extended to environmental factors to encourage financial institutions to enable better anticipation of the risks posed by climate, pollution, energy and water stress and associated policies.<sup>27</sup> National practice need to be enabled by global frameworks – such as Basel

III.<sup>28</sup> This could include pricing environmental externalities in capital requirements, for example.

*“We need to have a global discussion about the need to allocate capital to cover for environmental risk. This already exists in Brazil but could be discussed more globally, we need a global system.”<sup>33</sup>*

## Harnessing institutional capital for long-term sustainable development

Institutional investors control the largest pool of assets for capital allocation. Individual institutions have been incorporating sustainability factors into their operations in some cases for decades, and a substantial portion of institutional investors support the UN-backed Principles for Responsible Investment (PRI). However current financial policy frameworks remain insufficient to mobilise a sufficient flow of funds towards long-term sustainable development.

*“The insurance industry is increasingly assessing climate risks; embedding risk management into everyday underwriting decision increases the premia for those risks and sends signals for people to take them seriously. But we need to bring that core competency into investor side. Risk management needs to be embraced by all of the players.”<sup>33</sup>*

Many of the issues that are coming to the fore are not new: classic incentive problems around externalities and interpretations of fiduciary duty. Critically in the post-crisis landscape, long-term investors have also recognized that core financial regulations – such as Solvency II and derivatives reform – can profoundly impact long-term strategies for sustainable value creation. What appears to be missing is a process to bring together the converging threads around financial reform,



institutional investment and sustainable development, specifically as it relates to the needs of developing countries.<sup>29</sup>

## Re-balancing debt capital markets

The spotlight is growing even brighter on the world's largest asset class – the US\$100 trillion bond market, which provides financing for governments and corporates to fund long-term investment. Green bonds which raise ring-fenced financing for investments in clean energy and resource efficiency are growing rapidly, with US\$24 billion issued so far in 2014 compared with US\$11 billion for the whole of 2013. A policy agenda is starting to emerge, tackling four key priorities: first, the measures need to ensure market integrity (for example through principles and standards); second, refinement of existing regulations to scale up the use of asset backed securities and covered bonds; third, tax incentives to encourage inflows; and fourth, credit enhancement to enable institutional allocations – all themes raised in the Inquiry's country engagement to date in Brazil, China, the European Union and India and the USA.

*“A lot of effort needs to go into how to get disclosure of risks. There are substantial risks embedded in balance sheets. If the information is there, the market reacts to it. The more we can get this disclosure, the more will get capital flow in right way.”<sup>33</sup>*

Equally important is the slow, but accelerating incorporation of sustainability factors into the routine assessment of creditworthiness by credit rating agencies. This trend has involved market leaders such as S&P, which has published research highlighting the investment implications of carbon and climate risks for sovereigns as well as key corporate sectors. In addition, a number of the market entrants that have emerged since the crisis have made sustainability factors a core part of their assessment framework, such as Riskenergy with a focus on energy resilience.<sup>30</sup> Extending time horizons will be key to effectively capturing the long-term nature of many sustainability risks.<sup>31</sup>

## The evolving role of central banks

Central banks have become more prominent worldwide in the wake of the financial crisis.

Alongside this, a growing number of central banks are also taking diverse measures to address sustainability across their differing mandates.

*“Bangladesh Bank is emerging as a developmental central bank- it has a multi-mandate for price stabilisation, financial system stability, growth for public interest, not a single mandate”<sup>33</sup>*

*“Central banks are the regulator and guardian of the financial system. But they are not all alike, they don't all have the same place in society. Some have broad mandates, some have limited mandates. you cannot generalise. It would not be democratic to take on additional mandates. Nevertheless they have huge interest in financial markets working well, and a huge interest in investors pricing long-term risk and in credit flowing to the economy. There is a lot of overlap with the financing for sustainable development agenda.”<sup>33</sup>*

Brazil's central bank has taken a micro-prudential focus of environmental and social risk management at the banks it regulates. Bangladesh's Central Bank has set targets for banks to allocate loans that encourage financial inclusion, support to small and medium sized enterprises and environmental stewardship. The Bank of England is exploring the implications of climate change for its core prudential mandate to ensure 'safe and sound insurers'. The Peoples Bank of China, together with the Inquiry, is leading a working group on options for financial market interventions to encourage green finance. At a much earlier stage of development is the possible role for unconventional monetary policy to support the transition to a green economy.<sup>32</sup>

At this early stage in the policy life cycle, developing a common agenda on the scope for central bank action for sustainability in the differing economic and legal contexts across the globe looks increasingly imperative, along with the identification of specific tools that can be deployed with both prudence and impact.

These themes are by no means exhaustive – and in its next phase of work, the Inquiry will pursue these and other cross-country priorities, such as financial liability as well as the joint development of principles to guide financial measures in relation to sustainable development goals and risks.



# WHAT WILL THE INQUIRY DO NEXT?

*The Inquiry's initial work highlights both an abundance of relevant experience and significant challenges that need to be overcome to better align the financial system to sustainable development.*

**There is increasing evidence of cross-border learning as well as desire for further articulation of common frameworks, both to share good practice and also to prevent barriers to national innovation.** This includes examples of growing South-South collaboration, such as the Sustainable Banking Network for regulators that was founded on the back of interest in China's Green Credit Guidelines experience with the support of the International Finance Corporation.

**There remain significant methodological challenges in understanding the impacts of specific financial system interventions.** This includes inadequate data or mechanisms to assess effectiveness and impact. It is worth noting that this challenge is not specific to those with sustainability-focused goals but is equally true for all financial sector interventions. Furthermore, real questions of how to measure cost and competitiveness implications also need to be addressed.

**Desire for fresh approaches to policy design that enables decision-makers to identify blind spots and potential missed opportunities is growing,** a theme that will be taken forward in the next phase of the Inquiry's scenarios work.

**The breadth of financial policy innovations and the diversity of economic conditions across the world suggest strongly against a single model for a sustainable financial system.** A common framework that identifies where and how financial policy innovation may be relevant for differing circumstances could, however, be useful.

**The Inquiry is seeking to make progress on all of these fronts, although it can only prepare the ground for more in-depth work after to its two-year lifespan.** Critical elements of the next phase of its work programme include:

- 1 *Crystallizing lessons from country-level experience, by extending and deepening work in a number of countries, and through a major multi-country convening in late October co-hosted with the Rockefeller Brothers Fund.*
- 2 *Clarifying core theoretical issues and extending the empirical basis of the work, through continued review of a rapidly evolving literature and the results of commissioning a series of academic papers to be considered at a Research Symposium in early December in association with the Center for International Governance Innovation.*
- 3 *Developing a focused package of work on policy frameworks for key financial sectors, including partnerships on institutional investment (notably with CalPERS, the IFC, the Principles for Responsible Investment and UNEP Financial Initiative), as well as a consultation on insurance policy & sustainability with the Principles for Sustainable Insurance.*
- 4 *Deepening engagement with key international institutions and platforms, including the B20 and the G20, the Bank of International Settlements and the Financial Stability Board, the International Monetary Fund and the World Bank Group, as well as the OECD, to share experience and to identify specific possible interventions.*

**In 2015, the momentum for further financial policy innovation is set to intensify.** National imperatives to scale up financing for inclusive, resource- and fiscally-efficient recovery will con-



tinue. In addition, at least four major international policy processes are touching on how best to harness the financial system: the Hyogo framework for disaster risk reduction, the Financing for Development summit, the new Sustainable Development Goals, and the finalisation of a new climate change agreement under the UNFCCC.

**Ultimately, the Inquiry's aim is to develop a portfolio of policy options - tools, instruments, and pathways.** Although the Inquiry is only partway through its two-year mandate, it seems likely that this portfolio will include some of the policy and regulatory clusters being explored through the current work programme. This portfolio would need to be relevant at the national level to financial regulators, central banks and finance ministries, but also to a wider international policy debate, notably through the G20. Furthermore, for such a

portfolio to be authoritative and pragmatic would require it to be intensively debated by financial sector institutions and other stakeholders, including civil society and labour organizations. Some of this can be done by and through the Inquiry itself, but clearly needed is a growing engagement by a wider network of actors, drawing on many of today's existing platforms, some specific to the financial sector and others with broader mandate and perspectives.

**As a result, the Inquiry is committed to an open-source approach to understanding perspectives, experiences and options these and other areas.** To that end, it will continue to invest in the development of an international network of experts, policy makers, practitioners and concerned stakeholders, and maintain a flow of publicly available information arising from its work and that of its partners.

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