



Inquiry: Design of a
Sustainable Financial System



ALIGNING

THE FINANCIAL
SYSTEM WITH
SUSTAINABLE
DEVELOPMENT



AN INVITATION

JUNE 24, 2014

An Invitation

This paper has been produced by the Inquiry's Secretariat as an invitation to engage in its activities. It summarises the case for linking the development of the financial system with green and inclusive policy objectives, highlights emerging innovation across the world, and offers a set of questions and themes to frame inputs and feedback to the Inquiry's work.

This paper is based on an initial mapping of existing efforts to align the rules that govern the financial system with a green and inclusive economy, as well as inputs from the Inquiry's Advisory Council and dialogue with policymakers, financial institutions and civil society organisations. It is complemented by a longer background briefing that presents the Inquiry's approach and reflections in more detail.

Comments or questions about the paper, or general enquiries, can be addressed to:

Simon Zadek, Co-Director, simon.zadek@unep.org

Nick Robins, Co-Director, nick.robins@unep.org

Acknowledgements

The Inquiry would like to acknowledge the contributions of the many individuals and organizations which have already contributed to its development, and to the framing and substance of its work set out in this paper. Advisory Council members have all contributed collectively and individually, as have numerous staff members of UNEP and in particular UNEPFI as well as the UN-supported Principles for Responsible Investment Initiative. Initial mapping by several research organizations provided important inputs, including the Frankfurt School of Finance and Management, the New Economics Foundation and the Smith School of Enterprise and Environment. Thanks also to our Special Advisors and Council Observers, and to our growing network of country partners, including the Central Bank of Bangladesh, China's Development Research Centre of the State Council, the Federação Brasileira de Bancos, and the Global Green Growth Institute in South Africa.

Errors and omissions in this paper are the responsibility of the Inquiry.

The Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance design options that would deliver a step change in the financial system's effectiveness in mobilizing capital towards a green and inclusive economy.

Established in January 2014, it will publish its final report in the second half of 2015.

More information on the Inquiry is at: <http://www.unep.org/greeneconomy/financialinquiry> or from:

Mahenau Agha, Director of Outreach, mahenau.gha@unep.org

Copyright © United Nations Environment Programme, 2014

Disclaimer

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.



UNITED NATIONS ENVIRONMENT PROGRAMME

Programme des Nations Unies pour l'environnement

Programa de las Naciones Unidas para el Medio Ambiente

Программа Организации Объединенных Наций по окружающей среде

برنامج الأمم المتحدة للبيئة

联合国环境规划署



In order to effectively steward the environment we must get the economics right. At UNEP, we have for many years engaged on economics with governments, business and civil society. Our ground-breaking report, *Towards a Green Economy*, released in 2011, made the case for accelerating the transition to a green, inclusive economy, since when we have worked with many governments to translate potential into practice.

Financing remains one of the greatest challenges in advancing sustainable development. UNEP has long recognized the need to attract private capital as well as public finance to the challenge of creating green and inclusive economies. The UNEP Finance Initiative was established in 1992 as a means of engaging banks, institutional investors and insurance companies, and since then, has supported them in incorporating environmental, social and governance issues into their management.

Today, there has been much progress, but not enough to prevent growing local and global environmental stresses. Finance for the green economy remains inadequate, and the natural resource and carbon intensity of most private capital markets is still increasing. It is clear that individual investors, however large, can only do so much in bucking this trend. Crucially, the recent economic crisis has highlighted the importance of the overall functioning of the financial system in determining what it does, and does not, invest in.

UNEP has therefore taken a next step in supporting the transition to a green economy. In January 2014, we established an Inquiry to explore and develop policy options for better aligning the financial system to the needs of sustainable development, focusing on financial and monetary policies, regulations, standards and norms and fiscal measures. This Inquiry will carry out its work over the next 18 months, submitting its reports in the second half of 2015.

The Inquiry's approach is to focus on existing policy innovations, engaging widely at the country and international levels, as well as commissioning policy analysis and technical research. Over its life, it will widely solicit opinion and proposals, as well as making full use of a high-level Advisory Council established to guide its work. In this spirit, this initial publication is intended as an invitation to those with experience, knowledge, and interests, to come forward and engage with the Inquiry's secretariat and open process in offering learning, insights and proposals.

It is a moment in time where ambition and focus is needed to advance the green economy to the next level of scale and relevance. At UNEP, we hope that the Inquiry can be one contribution to that end.

Achim Steiner

Under-Secretary-General

Executive Director, UNEP

Aligning the **FINANCIAL SYSTEM** with **SUSTAINABLE DEVELOPMENT**

Highlights

Considerable finance is needed to drive the transition to a green, inclusive economy. A “clean trillion” of additional investment is needed annually up to 2030 to enable new infrastructure to be made green. More broadly is the need to reshape the financial system to extend its time horizons, reduce its appetite to invest in natural resource and carbon intensive assets, and to make investments that create livelihoods and jobs for all.

Private capital is needed to finance this transition, complemented by public expenditure, but is currently being channelled into an unsustainable economy. Traded financial capital globally amounts to US\$225 trillion, but little of this is being used to power the transition to a green and inclusive economy. Aligning the financial system to enable the long-term health of the real economy may require changes to its architecture, the ‘rules’ governing how it operates.

Never in modern times has there been so great a consensus that the financial system is not fit for purpose. The recent financial crisis, reinforced by the failure of today’s global economy to deliver the jobs needed and steward the natural environment, has eroded trust in the financial system’s capacity to serve its intended beneficiaries and the long-term interests of the real economy. Aligning the financial system to the needs of a green and inclusive economy is a pre-condition for achieving sustainable development, complementing policy and private action in the real economy.

UNEP has established the ‘Inquiry into the Design of a Sustainable Financial System’ to address this high-potential policy arena. Building on UNEP’s green economy initiative and two decades of work of the UNEP Finance Initiative, the Inquiry is being guided by a high-level Advisory Panel, and involves wide-reaching engagement and research at the national and international levels.

The Inquiry aims to accelerate and scale emergent policy innovations that better align the financial system to sustainable development. Growing numbers of central banks, financial regulators and private standards agencies, particularly from emerging economies, are advancing measures explicitly focused on green and equity goals. Broader policy debates, from concerns about short-termism and financial sector remuneration to housing finance have implications for aligning capital allocation to green and inclusive outcomes.

Success of the Inquiry would establish the centrality of creating a sustainable financial system as an enabler of the transition to a green and inclusive economy, and policy options for achieving it. Key is to place sustainability on the agenda of those who shape the financial system. This requires a portfolio of practical policy options, which might include new accounting standards, ways of addressing short-termism, integrating green factors into credit risk, new approaches to fiduciary responsibilities and more extensive mandates for central banks and financial regulators.

The Inquiry’s approach to knowledge development is to draw on current practice, existing methods and analysis, leadership opinion, and forward-looking scenarios and policy proposals. Building on the initial mapping and associated analysis and reflections, the Inquiry proposes to advance three workstreams focused on country experience, cross-cutting aspects of the financial system, and an enabling framework of scenarios, principles and assessment methods.

The Inquiry will take an open approach that allows anyone to submit relevant learning, insights and ideas. This will be enabled through its engagement in a number of countries, expert and stakeholder convenings, joint research and publications. This paper is an open invitation for those with expertise, interests and insights to contribute to the Inquiry’s work and outcomes.

Green Inclusive Economy

“...improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.”

THE INQUIRY'S MISSION

Considerable finance is needed to drive the transition to a green, inclusive economy. Estimates indicate that around US\$1 trillion of additional investment is needed annually to 2030 to green new infrastructure in energy, transport, buildings and industry.¹ Such an amount, reasonably modest at roughly 1.5% of today's global GDP, sits alongside the underlying need to mobilize US\$5 trillion a year for the underlying investment. This excludes, furthermore, finance needed for the “softer” investments in health and education, and to overcome the challenges to vulnerable communities of adaptation to climate change, to ensure that all citizens can participate fully and benefit from tomorrow's economy.²

Governments will play a critical role in ensuring that such investments are made. Public expenditure will play a crucial role, as it has historically, in ensuring long-term investment to build today's developed nations. Privately-held financial capital, equally, will need to be a major part of the solution, requiring that the investment logic of this capital can be aligned to the needs of the real economy.³

The financial system is the means by which we can channel society's collective financial assets to productive use. Financially traded assets are valued at US\$225 trillion with further non-traded assets, such as real estate and businesses that are owned by individuals, communities and nations influenced by the financial system. This capital, whilst largely privately owned, represents societies' overall resource for investing in long-term development and well-being. It is now clear that the long-term health of the economy depends on underlying social and environmental systems, while the economy's 'footprint' on these areas is in turn shaped by the dynamics of the financial system.⁴

Much of this capital is today invested in delivering the US\$70 trillion annual output from a global economy which is resource, carbon and pollution-intensive. Clean energy investment in 2012 was about US\$250 billion, up four-fold since 2004⁵, but barely one third of the US\$674 billion invested in fossil fuel exploitation. The carbon intensity of the world's leading stock exchanges continues to increase, for London and New York stock exchanges by 7 and 37 per cent respectively over the last 2 years.⁶

ALIGNING THE FINANCIAL SYSTEM TO SUSTAINABLE DEVELOPMENT

Little of the global financial system's hundreds of trillions of dollars has to date been harnessed for the transition to a green and inclusive economy.

Aligning the financial system to the long-term health of the real economy, requires a focus on the 'rules' that govern the financial system itself – the policies, regulations, norms and standards that drive financial decision-making.

Individuals and financial institutions face an array of possible opportunities to allocate capital - and prefer to buy assets that they understand, and can sell easily. Long-term infrastructure investments, particularly where it involves new technology or is located in places perceived to have policy or other instabilities, exemplify what investors tend to be cautious about. A key role of financial institutions and financial instruments such



as bonds and equities is to transform the maturity of such long-term investment to make them an investable proposition. However misaligned incentives can drive investment to pursue short-term market movements rather than long-term value creation.⁷

Actions to build a green and inclusive economy are growing across the world, but these have generally not included the rules governing the financial system that impact these investment decisions.

Such rules include financial and monetary policies, financial regulations, standards and norms, and also fiscal measures that influence the allocation of capital. These rules profoundly shape risk-return analysis. Capital requirements for banks established under Basel III, for example, could limit the appetite for long-term infrastructure.⁸ Likewise, fossil fuel intensive benchmarks disincentivize investors from moving towards carbon-light portfolios.⁹

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. Launched in January 2014, the two-year Inquiry is guided by a high-level Advisory Council comprised of financial policy makers and regulators, private standard

setters and executives of leading financial institutions. Its philosophy and practical approach is to consult widely with those involved in, and those impacted by the financial system, including civil society, financial institutions, governments, and international organizations, as well as learning from and contributing to key UN initiatives and agencies.

ENGAGING WITH KEY UN INITIATIVES

- Intergovernmental Committee of Experts on Sustainable Development Financing: linked to the post-2015 development agenda, co-Chaired by the Governments of Finland and Nigeria.
- UN Secretary General's Climate Leadership Summit: on the 23rd September 2014 in New York with a particular focus on mobilising finance for low-carbon, climate resilient development.
- UNEP Finance Initiative: guided by its membership of 200 leading financial institutions, including banks, insurance companies and investors.

The Inquiry's approach will address three core questions:

Why and under what circumstances should rules governing the financial system be deployed in pursuit of green and inclusive outcomes ?

What rules governing the financial system have been, or could be, deployed for achieving green and inclusivity outcomes ?

How can rules be most effectively deployed for green and inclusivity outcomes, given the complexities and competitiveness concerns of financial actors ?

THE ADVISORY COUNCIL



KUANDYK BISHIMBAYEV
DEPUTY MINISTER ECONOMIC
DEVELOPMENT & TRADE,
GOVERNMENT OF KAZAKHSTAN



NAINA KIDWAI
GROUP GENERAL MANAGER &
COUNTRY HEAD, HSBC
INDIA



MARIA KIWANUKA
MINISTER OF
FINANCE, GOVERNMENT
OF UGANDA



RACHEL KYTE
GROUP VICE PRESIDENT,
WORLD BANK



JEAN-PIERRE LANDAU
FORMER DEPUTY GOVERNOR,
BANQUE DE FRANCE



JOHN LIPSKY
FORMER DEPUTY MANAGING
DIRECTOR, IMF



MURIEL PORTUGAL
PRESIDENT, BRAZILIAN BANKERS
FEDERATION



NICKY NEWTON-KING
CHIEF EXECUTIVE,
JOHANNESBURG STOCK
EXCHANGE



DAVID PITT-WATSON
CO-CHAIR UNEPFI



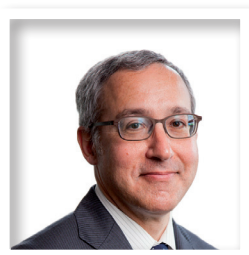
BRUNO OBERLE
SECRETARY OF THE SWISS
FEDERAL OFFICE FOR THE
ENVIRONMENT



ATIUR RAHMAN
GOVERNOR, CENTRAL BANK OF
BANGLADESH



NEERAJ SAHAI
PRESIDENT, S&P RATING SERVICES



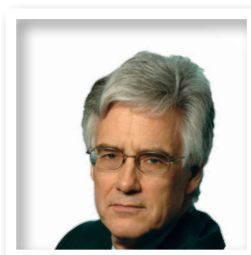
RICK SAMANS
MANAGING DIRECTOR, WORLD
ECONOMIC FORUM



ANDREW SHENG
PRESIDENT, FUNG GLOBAL
INSTITUTE



ANNE STAUSBOLL
CEO CALPERS



LORD ADAIR TURNER
FORMER CHAIR, FINANCIAL
SERVICES AUTHORITY, UK



A MOMENT IN TIME

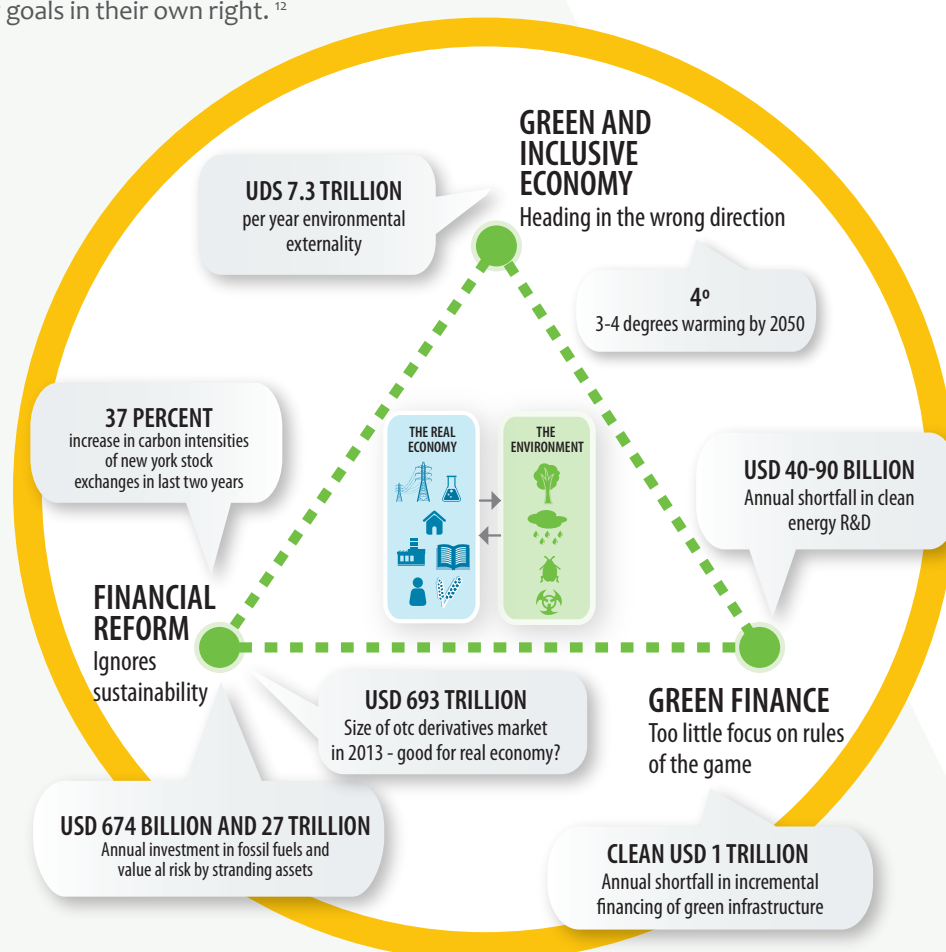
The Inquiry is working at the nexus of three hitherto largely disconnected agendas: the growing environmental and equity imperative, the financing needs of the inclusive, green economy, and the financial market development agenda.

- 1 **Environmental and social stresses** are increasing by almost any measure, with broader estimates of negative environmental externalities of over US\$7 trillion annually, and increasing inequalities and social discontent.¹⁰
- 2 **Green finance** has accelerated over the last decade, particularly in non-OECD countries, yet remains far below what is needed.¹¹
- 3 **Post-crisis financial market reform** efforts have rightly focused on restoring stability and integrity, but have not incorporated green and equity issues as underlying drivers of long-term stability or as policy goals in their own right.¹²

The purpose of the financial system is to invest in the long-term health of the real economy. As Christine Lagarde, Managing Director, International Monetary Fund recently argued,

“We can identify the true purpose of finance. Its goal is to put resources to productive use, to transform maturity, thereby contributing to the good of economic stability and full employment—and ultimately, to the wellbeing of people. In other words—to enrich society.”¹³

Never in modern times has there been so great a consensus that the financial system needs a major overhaul, that it is no longer fit to serve its purpose



FINANCIAL SYSTEM: NEED FOR CHANGE TO MEET PURPOSE

“WE MUST QUESTION THE PRE-
VAILING LOGIC OF ...A FINANCIAL
SYSTEM THAT ESSENTIALLY
REWARDS UNEMPLOYMENT AND
CONSOLIDATES A NOTION OF JOB-
LESS GROWTH... THAT REWARDS
RAMPANT OVER-CONSUMPTION
RATHER THAN GRAPPLING WITH
THE MORE COMPLEX CHALLENGE
OF SUSTAINABLE DEVELOPMENT.”

KUMI NAIDOO, EXECUTIVE DIRECTOR,
GREENPEACE INTERNATIONAL¹⁷

“THE BANK OF ENGLAND’S MISSION
‘TO PROMOTE THE GOOD OF THE
PEOPLE OF THE UK BY MAINTAINING
MONETARY AND FINANCIAL STABIL-
ITY’ SUGGESTS THAT CENTRAL
BANKS HAVE AN IMPORTANT ROLE
TO PLAY IN SUPPORTING SOCIAL
WELFARE.”

MARK CARNEY, GOVERNOR, BANK OF
ENGLAND¹⁸

“FINANCIAL REGULATORS
NEED TO LEAD. SOONER
RATHER THAN LATER, THEY
MUST ADDRESS THE SYS-
TEMIC RISK ASSOCIATED WITH
CARBON-INTENSIVE ACTIVI-
TIES IN THEIR ECONOMIES.”

JIM KIM, PRESIDENT OF THE
WORLD BANK¹⁵

“WHAT IS NEEDED IS NOT JUST MONEY.
WHAT IS REALLY NEEDED IS THE POLITI-
CAL WILL TO CORRECT MARKET FAILURE
BY RETHINKING PARTS OF THE FINANCIAL
SYSTEM...THE METRICS, INSTITUTIONS,
AND POLICIES THAT GOVERN HOW FINAN-
CIERS AND INVESTORS EVALUATE ECONOMIC
ACTIVITIES.”

MARK BURROWS, MANAGING DIRECTOR,
CREDIT SUISSE, ASIA PACIFIC¹⁶

“IN THIS AGE OF DIMINISHED TRUST, IT
IS THE FINANCIAL SECTOR THAT TAKES
LAST PLACE IN OPINION SURVEYS...
(BECAUSE ITS BEHAVIOUR)...HAS NOT
CHANGED FUNDAMENTALLY IN A NUMBER
OF DIMENSIONS SINCE THE CRISIS...THE
INDUSTRY STILL PRIZES SHORT-TERM
PROFIT OVER LONG-TERM PRUDENCE,
TODAY’S BONUS OVER TOMORROW’S
RELATIONSHIP”.

CHRISTINE LAGARDE, MANAGING
DIRECTOR, IMF¹⁴

Now, emerging from the financial and economic crisis, is a moment in time when change is possible.

Before the crisis, the need was less apparent, and throughout the crisis there was rightly a focus on re-stabilizing the financial system to avoid further immediate damage to the real economy¹⁹. Now, on the other hand, is a time in history when it is clear to all that the financial system is not fulfilling its core purpose, and that there is popular and policy appetite, as well as the voice of leadership from the financial markets, for deeper reflection and change.

Emerging economies are increasingly influential over the future of the global financial system, and have an opportunity to lead in aligning it to its underlying purpose.

Emerging economies will have greater influence over the next generation of rules governing the financial system, both given the increase in the scale and depth of their domestic financial markets and their increasing role in key international processes, platforms and institutions. Emerging economies will also be a source of policy innovations.



What is the Financial System?

The **Inquiry's** definition of the financial system takes as its starting point, the IMF's description as including "...banks, securities markets, pension and mutual funds, insurers, market infrastructures, central bank, as well as regulatory and supervisory authorities". For the Inquiry²⁰, this includes:

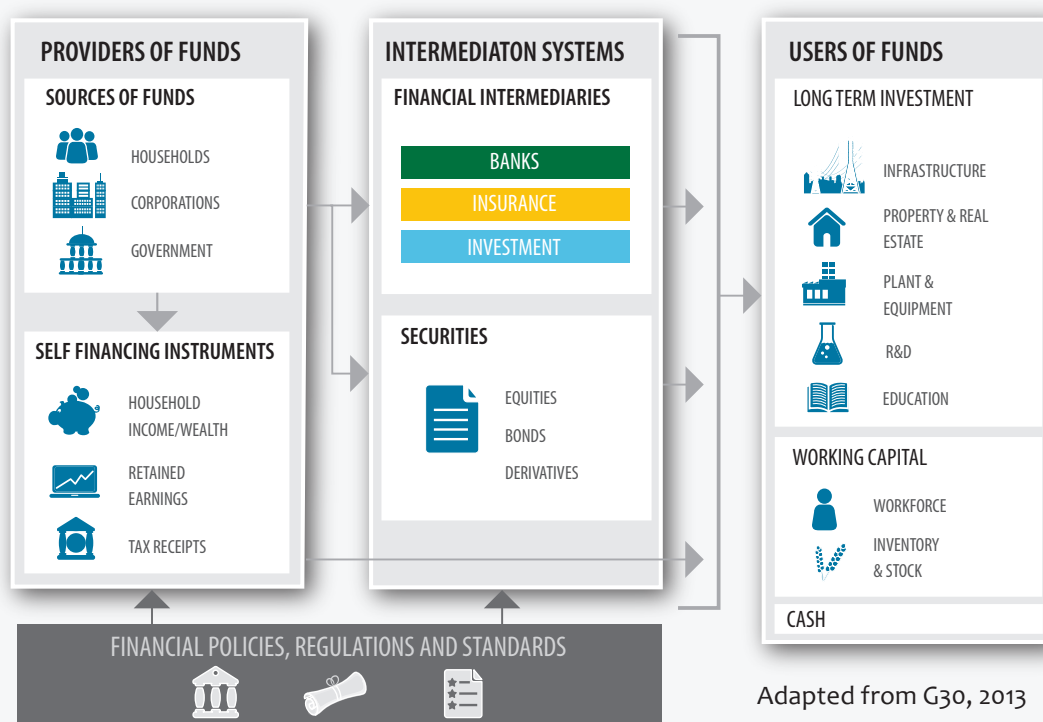
- 1 **Providers of funds** households, governments, corporations and banks in their credit creation role/
- 2 **Financial intermediaries including banks**, shadow banks and non-traditional platforms such as peer-to-peer lending, insurance and reinsurance, institutional asset managers including pension and mutual funds, alternative private equity and other specialist investment vehicles and state-owned or policy directed investors such as sovereign wealth funds and other state-owned or policy directed investment vehicles.
- 3 **Securities** covering market infrastructures and regulations for equities, bonds, derivatives and other

financial asset classes, players in trading markets including market makers and information traders and professionals concerned with sound information and analysis for these markets, including accounting and audit firms, equity and credit analysts, investment consultants, legal and other professional services.

- 4 **Policies, regulations and standards** including mandatory regulations and state guidelines, non-public rule setting, such as accounting, auditing and reporting standards and industry codes, international public and public interest institutions and platforms, such as the G20, the Financial Stability Board and the Bank of International Settlements. fiscal measures directed at influencing the financial system and monetary policy and the role of central banks.

Such a broad definition of the financial system does not of course require that every analysis deal with every aspect of the system. The means focus for the Inquiry is on leverage points that offer the potential for system innovation.

THE FINANCIAL SYSTEM: A BASIC VIEW



Adapted from G30, 2013

WHY CHANGE THE RULES GOVERNING FINANCIAL MARKETS?

Driving forward the transition to a green and inclusive economy requires profound changes in the real economy. Major shifts are needed in policy, institutional and governance, and market and individual behaviour to accomplish the changes needed in everything from energy and transport systems to agricultural practices and consumption patterns, as UNEP highlighted in its path-making *Towards a Green Economy* report in 2011 and has since operationalized with governments in over 30 countries.

Governments, acting in the wider public interest, have historically intervened in the financial system. Periodically, as recent decades demonstrate, governments have reshaped core aspects of the system, whether to enable private gains or in pursuit of the public interest, such as in response to major crises. The US Federal Reserve, for example, has a dual mandate with a clear goal to stimulate domestic employment, just as other central banks and regulators have pursued goals as diverse as ensuring financial services for low income communities and small businesses, promoting home ownership and black economic empowerment.

Not every problem or opportunity can or should be addressed through interventions in the financial system. More stringent and effectively enforced building standards, for example, are a priority to confront the continuing under-investment in energy efficient buildings. Likewise, effective carbon pricing in the real economy and eradicating perverse fossil fuel subsidies, are both critical steps to channel capital into low-carbon assets.²¹ But these may not be sufficient alone.

Three main circumstances may justify interventions in the financial system to complement classic policy options to drive capital reallocation for the green economy.

- Financial market inefficiencies could produce systematic biases in risk assessment that results in the misallocation of capital away from long-term green investments.
- Financial system rules could create unintended barriers to green investment, indicating a lack of broader policy coherence.
- Real economy objectives could be more effectively addressed, at least in part, through interventions in the financial system.

CAUTION IN INTERVENING IN THE FINANCIAL SYSTEM

- 1. Disproportionate impacts:** regulation can be a particular burden for smaller financial institutions and potentially stifle desired market diversity and innovation for the green economy.
- 2. Unintended consequences:** green economy policy innovation itself could have unintended consequences, for example, on loan quality.
- 3. Impact avoidance:** the system's dynamism and complexity means that vested interests can avoid the intended impact of any intervention, including through regulatory arbitrage.

FROM INCREMENTAL TO SYSTEM CHANGE

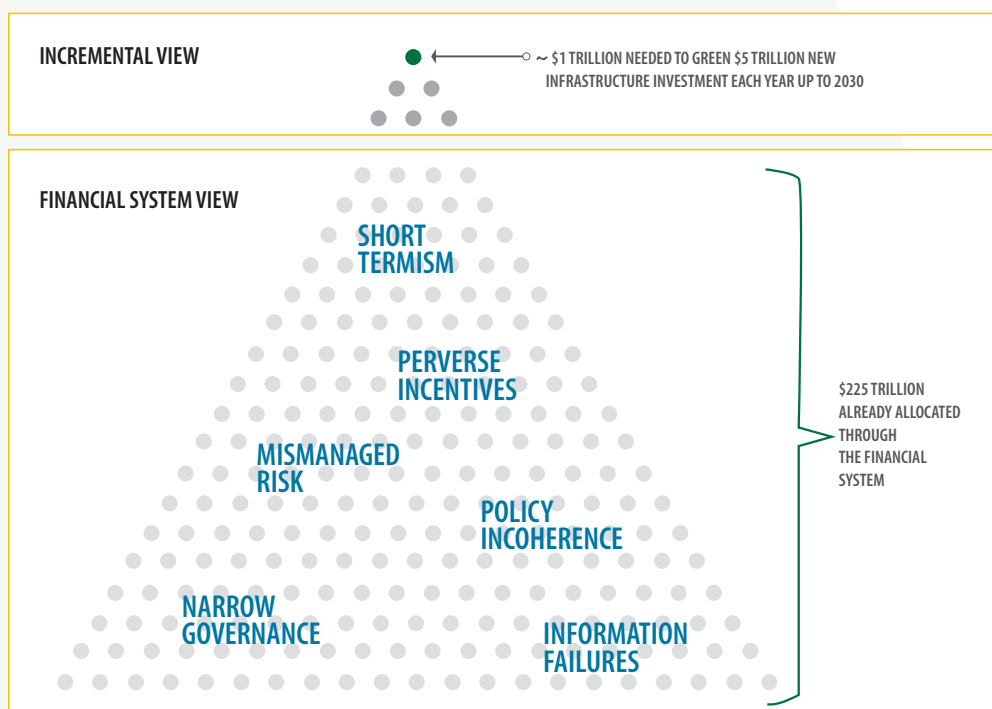
Financing sustainable development has often been expressed in terms of billions of dollars – for example, the US\$100 billion per annum by 2020 that rich countries have committed to mobilise for climate change adaptation and mitigation in developing countries, or the US\$190 billion a year that was estimated as needed to reach the Millennium Development Goals.

Yet the real scale of the transition is increasingly recognised as involving trillions of dollars of new investment annually, and the reallocation of many tens of trillions of dollars of existing assets that underpin today's unsustainable economy. The World Economic Forum, drawing on the work of the International Energy Agency, the OECD and many others, estimates that up to US\$6 trillion of investment is needed each a year, through to 2030, to build new transport, energy and buildings infrastructure which is cleaner and more resilient. Of this, US\$0.7 trillion are the incremental costs of 'greening' the investment, particularly because green technologies are characterized by high capital intensity (and

lower operating costs). This has subsequently been referred to as the 'clean trillion'.²²

A green incremental investment approach is unlikely to be effective without major changes to the broader financial system. There is a need to re-direct a major part of the US\$225 trillion of financial assets that currently continues to be allocated to unsustainable economic activities. Some of these assets may become stranded as policy and market signals lower the economic value of natural resource and carbon intensive investments. Accelerating this process in an orderly fashion is an important aspect of any serious reallocation of financial capital in favour of sustainable development.

Beyond this lie the dynamics of key financial markets, with trading volumes amounting to many trillions of dollars daily. To be sustainable, the financial system will not only need to be cleaner, but also extend its time horizons. Critical for the Inquiry is to link the agendas surrounding market short-termism, long-term finance and sustainable development.



[Data sources: WEF and McKinsey]

EMERGENT INNOVATIONS

A performance framework, rather than a blueprint, is needed to advance a sustainable financial system. Such a framework would allow the system to evolve through innovation and response to diverse interests and needs, but be guided by a clearer and widely-accepted appreciation of what it has to deliver. Whilst the classical functions of the system remain, such as effective intermediation, maturity transformation and risk sharing, sustainability implies a need for a wider stewardship through design. The recent evolution of thinking of macro-prudential roles takes us part of this way, but could need to be extended to deliver the required resource resilience and capital reallocation.

The Inquiry aims to identify, analyse, crystallize and communicate emergent innovations in the rules that shape system behaviour. Effective design options for a sustainable financial system will be based on emergent practice, rather than being formulated as a static, one-size-fits-all blueprint. There is a growing body of practice being developed by both financial sector actors and policymakers, including green credit guidelines in China, new pension rules in South Africa, and climate disclosure requirements for the insurance

sector in the USA. This practice is relatively new – but the trajectory is clearly pointing towards additional action. For the Inquiry, three dimensions of the financial system are of particular interest:

- 1 Green policy innovations:** market or policy-based innovations specifically aiming to achieve outcomes linked to green or equity issues that result in new rules governing aspects of the financial system to ensure integrity and enable scale.
- 2 System reform:** policy, regulatory and standards initiatives designed to impact other performance features of the financial system that indirectly may impact outcomes for environment and inclusivity, such as measures on remuneration, short-termism or new thinking around macro-prudential oversight.
- 3 Policy-embedded features:** embedded policy features of the financial system from which learning can be gained, such as strategic initiatives to embed black economic empowerment in the South African financial system, or home ownership as a core policy aspect of the UK financial system.

Bloomberg News

Climate Change to Hit Sovereign Credit worthiness, S&P Says

By Alex Morales | May 15, 2014

Financial Times

FTSE joins Blackrock to help investors avoid fossil fuel

April 28, 2014 11:38 pm

REUTERS

First energy-efficiency bonds sold to investors

BY ADAM TEMPKIN | Mar 7, 2014

Financial Times

May 20, 2014 2:04 pm

Bond markets join the green revolution

By Andrew Bolger

The corporate green bond market is forecast to reach \$20 bn this year, double the size of last year's issuance, according to Standard & Poor's.



Positively, there is a surge in market-based innovations in the rules governing the financial system to align capital allocation to green, inclusive outcomes. Green bond issuance is rising dramatically, to an estimated US\$11 billion in 2013, rising to potentially US\$40bn in 2014.²³ Standard & Poor's Rating Services has published the first systematic analysis of climate-related sovereign credit risk, and is building analytics and data sets enabling more effective assessment of corporate-level climate risk.²⁴ In equity markets, leading fund manager, Black-Rock, has joined with FTSE to launch a fossil fuel free tracker index. Moving from these individual examples of innovation to system change is likely to involve new market norms, standards and

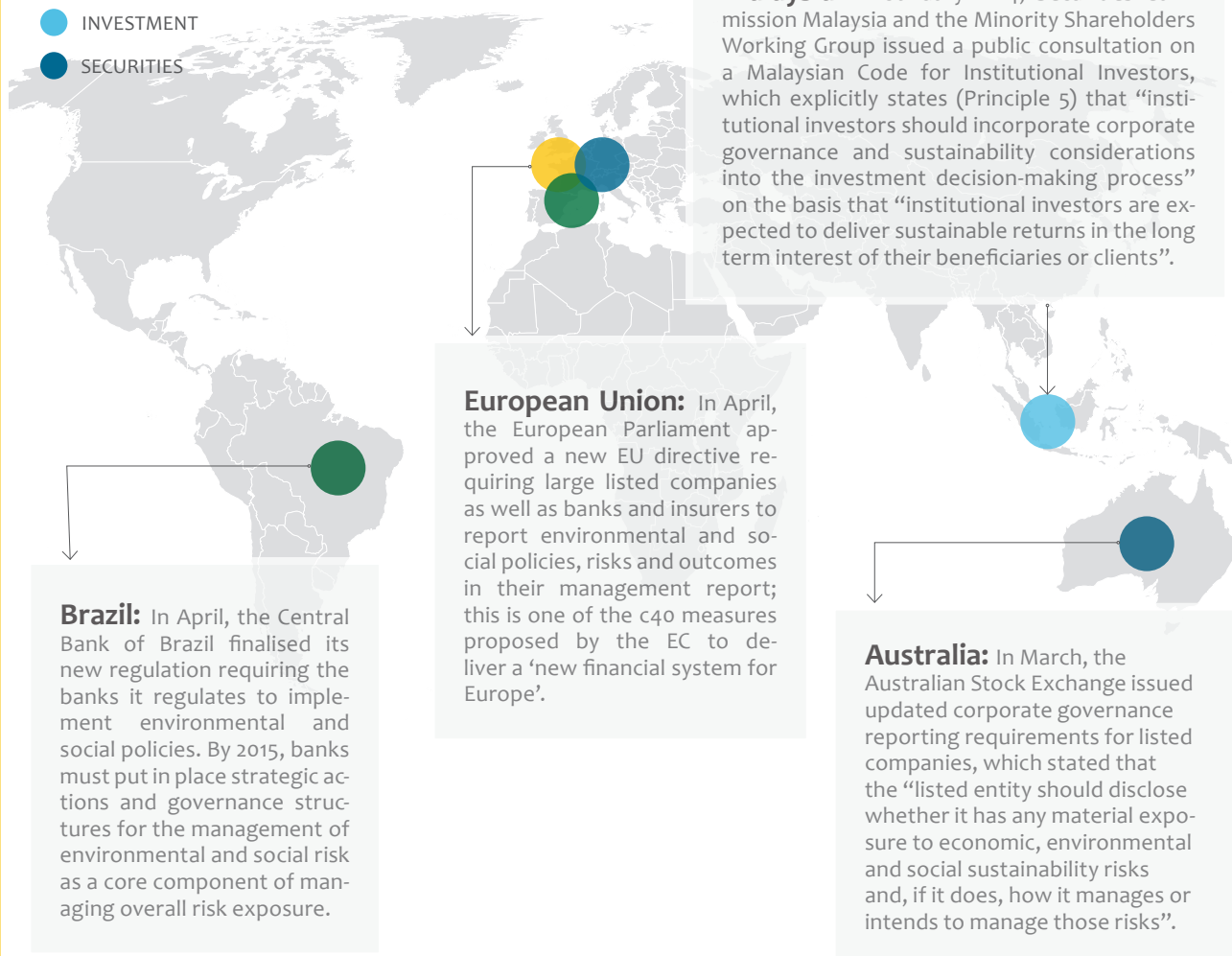
rules. Indeed, a new set of Green Bond Principles was launched in January 2014.²⁵

The Inquiry's initial mapping has also uncovered a new generation of financial policy innovation, which aim to marry financial practice with the green economy.²⁶ Looking across banking, capital markets, investment and insurance, there is a growing array of approaches to improve transparency, strengthen risk management, promote market integrity and direct capital towards the green economy. In 2014 alone, there has been a wide spectrum of new measures as well as policy signals highlighting the importance of the convergence of financial policy and the green economy.

INNOVATIONS IN GREEN FINANCIAL POLICY

– ON THE MOVE IN 2014

- BANKING
- INSURANCE
- INVESTMENT
- SECURITIES



Tomorrow's financial system:

the Inquiry needs to future-proof its focus by understanding the major trends shaping both tomorrow's global economy and its financial system. This needs to include technology-driven financial system disruptors such as disintermediation and peer-to-peer financial services, the growing importance of policy-directed finance and of emerging economies. In the real economy, this also needs to consider the transformative technology trends such as automation, intra-country inequality, and the implications of climate change and environmental degradation.

System governance: the Inquiry needs to understand the implications of advancing a sustainable financial system for national and international policy architecture. Current principles that guide the shape of financial policy and regulation do not routinely incorporate environmental and social factors. Nor do the mandates of the institutions that supervise the financial system (although many already have a wider real economy objectives such as growth, employment and inclusion) and nor do the frameworks for assessing financial policy performance and ensuring accountability. These principles, procedures and structures may need to change and evolve to deliver joined-up governance linking the policy institutions overseeing the financial system with those driving the transition to a green economy.

System horizons and risks: Discounting future value is a classic feature of financial decision-making, but one that can exclude long-term resilience as well as environmental and social factors that are not captured in prices. The Inquiry needs to understand the dynamic between short-termism, the mobilisation of capital for long-term green infrastructure and the imperatives of sustainability. How financial risk management will need to be rethought to serve a green economy with foresight is another critical dimension for the Inquiry's further exploration.

Steering financial institutions:

the Inquiry needs to explore how these high-level frameworks can be translated into practical measures that shape the actions of key financial institutions. This includes how sustainability factors relate to the fundamental responsibilities of private financial institutions, expressed for example in the concept of fiduciary duty, as well as the incentives that drive market behaviour, including remuneration of market actors and fiscal incentives that support savings, investment and pensions. Markets depend on information. Steady progress has been made in recent years to expand the quantity and quality of corporate sustainability reporting. Our interest is in the market conditions under which this data drives decisions.

KEY DIMENSIONS OF SYSTEM INNOVATION

INNOVATION



INQUIRY'S APPROACH

The Inquiry's approach to knowledge development is to draw on current practice, existing methods and analysis, leadership opinion, and forward-looking scenarios and policy proposals.

This network knowledge approach will include commissioned research, collaborative research and accessing the results of third-party research, as well as outreach, convenings and internally-generated research.

Building on the initial mapping and associated analysis and reflections, the Inquiry proposes to focus its efforts on three work streams - country engagement, design foundations and critical themes:

1 Country engagement: Policy innovation for a sustainable financial system is taking place primarily at the country level, and the Inquiry wants to understand in-depth, the driving imperatives behind innovations in specific locations, the lessons emerging and the potential for further developments. The Inquiry is planning to work with national institutions and partners, focusing initially on Bangladesh, Brazil, China, the EU, India, Indonesia, South Africa, Uganda, the UK and the USA. This work is critical to root the Inquiry's thinking in the diversity of country realities and needs.

2 Design foundations: alongside and drawing from the country engagement, the Inquiry is planning to deliver three pieces essential for a disciplined approach to a sustainable financial system.

- *Scenarios of financial system futures*, produced as forward-looking projections, which are designed to reveal blind spots

in conventional thinking and encourage an openness of mind to possible evolutions.

- *Principles* that could inform and guide the alignment and coherence of financial policy and the green economy.

- *Assessment framework* to evaluate the two-way impacts of conventional financial frameworks on the green economy.

3 Cross-cutting themes: the country work and foundation analysis will be matched by collaborative research and engagement on critical themes that cut across national boundaries. These include a focus on the specific rules of the game shaping the performance of key sectors, such as banking, capital markets, investment and insurance. In addition, there will be attention to issues that then cut across the sectors themselves such as the responsibilities of financial institutions, information and incentives.

INQUIRY'S POLICY INSTRUMENT FOCUS

- 1. Financial policy**, mainly set by Ministries of Finance or equivalent.
- 2. Financial regulation**, deployed mainly by financial regulators and supervisory bodies.
- 3. Monetary policy**, by Central Banks to manage credit creation and price stability.
- 4. Fiscal policy**, which influences financial market behaviour, such as subsidies for savings and investment.
- 5. Private standards**, including accounting and reporting, stock exchange listing requirements, credit ratings, and industry accords.
- 6. Policy directed lending** - including by sovereign wealth funds, development banks and export credit agencies.



SIGNS OF SUCCESS

The Inquiry aims to catalyse change towards a sustainable financial system. As a fixed-term initiative expected to last up to two years, it is focused on establishing the foundations for such a change, which it is hoped would subsequently take place over an extended period. Such foundations should include the following:

- 1 Establishing a credible vision that blends forward-looking ambition with robust analytics.** This will underpin credible policy options that in turn, can ensure that sustainability moves from being a rationale for ad hoc measures to becoming an embedded feature of any future design work on the financial system.
- 2 Placing sustainability on the right agendas of key institutions.** This includes national and international financial policy-makers, regulators and standard setters, but also financial actors and other stakeholders, who can help shape tomorrow's financial system.
- 3 Building a credible, practical portfolio of policy options based on emergent practice.** This might, include new accounting standards, ways of addressing short-termism, integrating green factors into credit risk, new approaches to fiduciary responsibilities and more extensive mandates for central banks and financial regulators.
- 4 Supporting the emergence of individual and collective leadership.** Such leadership, rooted in specific institutions and countries from both the public and private sectors, is a pre-condition for advancing ambitious change.

The Inquiry will produce a stream of outputs. Some outputs will be authored solely by the Inquiry, such as this paper and the final report due in the second half of 2015. Most, however, will be co-authored with other institutions and initiatives, resulting from collaborations led by the Inquiry, as well as many others involving the Inquiry as one of many partners.

It is hoped that the Inquiry will catalyse many other outputs beyond those in which it is directly involved; a growing number of publications, events and debates that amplify and deepen our collective understanding of the core topic, and so advance the Inquiry's goal beyond its own work and lifespan.

The success of the Inquiry depends on the participation of experts, actors and interested stakeholders in every aspect of its work and the broader agenda. The Inquiry is, therefore, making an open invitation to those with relevant experience, insights and interests to engage through one or more of the workstreams in-progress, whether at a country level, focused on specific themes and frameworks identified by the Inquiry, or that they might wish to initiate themselves.

AN INVITATION

INVITATION
to Contribute

POSSIBLE QUESTIONS

1. **Disruptions:** what are the key disruptive factors that could shape the prospects for a sustainable financial system to 2020 and beyond?
2. **Definitions:** what are the critical elements that need clarification and communication to facilitate the convergence of the financial system and a green and inclusive economy?
3. **Horizons:** how can the short- and long-term dynamics of the financial system be reconciled with a green and inclusive economy?
4. **Principles:** what are the essential principles that should guide policy options for a sustainable financial system?
5. **Architectures:** what are the leading experiences – and potential innovations – in the ways that different parts of government can work together to deliver a sustainable financial system?
6. **Responsibilities:** what are the different business models and governance arrangements that best embed environmental, social and governance factors into the routine operations of financial institutions, large and small, public and private?
7. **Incentives:** what are the critical incentives that currently enable or disable the effective participation of financial actors in the transition to a green and inclusive economy?
8. **Transparency:** how can the practice of disclosure by corporations, financial institutions and regulators evolve to strengthen market discipline for a sustainable financial system?
9. **Competitiveness:** how will further moves towards a sustainable financial system impact upon the competitiveness of nations and development of the world's financial centres?
10. **Accountability:** what are the factors and mechanisms that will deliver the necessary accountability for the sustainability performance of the financial system to its ultimate beneficiaries?
11. **Change pathways:** How best can financial policy and regulatory aimed at social and environmental outcomes be sequenced, how can trade-offs be understood and how can critical constituencies of support be mobilised?



Inquiry contact:

Mahenau Agha, Director of Outreach, mahenau.gha@unep.org

Nick Robins, Co-Director, nick.robins@unep.org

Simon Zadek, Co-Director, simon.zadek@unep.org

END NOTES

- 1 WEF (2013). *The Green Investment Report - The ways and means to unlock private finance for green growth*. Geneva: WEF.
- 2 UNEP (2014). *Eradicating poverty through an inclusive green economy, Post-2015 Note*, Nairobi: UNEP
- 3 Sukhdev, P. and Stone, S. (2010). *Driving a Green Economy Through Public Finance and Fiscal Policy Reform*. UNEP Green Economy Working Paper 1.0. Nairobi: UNEP, and UNFCCC (2013). *Report of the Outcomes of the extended work programme on long-term finance*, November 2013 Bonn: UNFCCC and World Bank (2012) *Inclusive green growth: the pathway to sustainable development*, Washington D.C: World Bank.
- 4 UNEP (2011). *Towards a Green Economy. Pathways to Sustainable Development and Poverty Eradication. A Synthesis for Policy Makers*. Nairobi: UNEP.
- 5 REN 21 (2014) *Renewables 2014 Global Status Report*. Paris: REN21/UNEP,
- 6 Leaton, J, Ranger, N. ,Ward, B., Sussams, L. and Brown, M. (2013) *Unburnable Carbon 2013: Wasted capital and stranded assets*. London: Carbon Tracker Initiative/Grantham Institute on Environment and Climate Change.
- 7 Kay, J (2013), *The Kay Review of UK Equity Markets and Long-Term Decision Making*, UK House of Commons: Business, Innovation and Skills Committee
- 8 Narbel, P. (2013). *The likely impact of Basel III on a bank's appetite for renewable energy financing*. Oslo: NorgesHandelshøyskole.
- 9 Dupré, S. and Chenet, H. (2012) *Connecting the Dots Between Climate Change Goals, Portfolio Allocation and Financial Regulation*. Paris: 2 Degrees Investing.
- 10 Trucost (2013). *Natural Capital at Risk: Top 100 Externalities*. Report for TEEB for Business Coalition.
- 11 Vivid Economics (2014). *Financing Green Growth*. London: Vivid Economics.
- 12 Hipwell, E. (2013). *Coordinating, Mandating, Monitoring What Can the Post-2015 Climate Regime Learn From Global Financial Governance?*, Paris: IDDRI.
- 13 Lagarde, C. (2014). *Economic Inclusion and Financial Integrity—an Address to the Conference on Inclusive Capitalism*, London, May 27, 2014.
- 14 Lagarde, C. (2014). *op cit*.
- 15 Kim, J. (2014). *Remarks at Davos Press Conference, Davos January 23 2014*.
- 16 Burrows, M. (2014). *Keynote speech at CIFOR Forests Asia Summit, Jakarta May 6 2014*
- 17 Naidoo, K. (2003). *Presidential Lecture, Delivered at the World Bank, Washington February 10, 2003*.
- 18 Carney, M. (2014). *Speech given at Conference on Inclusive Capitalism, London 27 May 2014*.
- 19 See for example, FSB (2014). *FSB Chair's Letter to G20 Ministers and Governors on financial reforms*. Basel: Financial Stability Board, FSB (2014). *Financial Reform – Progress and Challenges*, 17 February 2014. Basel: Financial Stability Board, G20 (2010). *Framework-strong-sustainable-balanced-growth and Spencer, T*.
- 20 *This framing draws on the G30 Consultative Group on International Economic and Monetary Affairs (2013). Long-Term Finance and Economic Growth*. Washington: G30.
- 21 See AfDB/OECD/UN/ World Bank (2013) *A Toolkit of Policy Options to Support Inclusive Green Growth for the G20 Development Working Group*.
- 22 WEF (2013) *op cit*.
- 23 *The Economist* (2014) *Spring in the air: Bonds tied to green investments are booming*, Mar 22nd 2014. London: Economist.
- 24 Wilkins, M. (2014) *Climate Change: Preparing For The Long-Term*, S&P Special Report, May 22 2014. Washington: Standard's and Poor's.
- 25 CERES (2014). *Green Bond Principles 2014: Voluntary Process Guidelines for Issuing Green Bonds*. Boston: CERES.
- 26 Frankfurt School of Finance & Management – UNEP Collaborating Centre for Climate & Sustainable Energy Finance (2014), *Delivering the green economy through financial policy*, forthcoming Technical Paper for the Inquiry. Frankfurt: FS; New Economics Foundation (2014), *Financial System Impact of Disruptive Innovation*, forthcoming Technical Paper for the Inquiry. London: NEF; Smith School of Enterprise and the Environment (2014) *Financial Dynamics of Natural Capital*, forthcoming technical paper for the Inquiry. Oxford: Smith School.



KEY REFERENCES

- Alliance for Financial Inclusion (2011). *G20 Principles for Innovative Financial Inclusion*.
- Asset Management Working Group (2009). *Fiduciary Responsibility: Legal and practical aspects of integrating environmental, social and governance issues into institutional investment*, UNEPFI.
- Bank for International Settlements (2009). *Issues in the Governance of Central Banks*. Basel: Bank for International Settlements.
- Basel Committee on Banking Supervision (2010). *Basel III: A global regulatory framework for more resilient bank and banking systems*. Basel: Bank for International Settlements.
- BNEF (2013), *Financial regulation biased against clean energy and energy infrastructure*. London: Bloomberg New Energy Finance.
- Buchner, B.K., Heller, T.C., Wilkinson, J. (2012). *Effective Green Financing: What have we learned so far?* Venice: Climate Policy Initiative
- Caldecott, B., Tilbury, J., Care, C. (2014). *Stranded Assets And Scenarios*. Discussion paper. Oxford: Smith School of Enterprise and the Environment.
- Carney, M., Tucker, P., Hildebrand, P., de Larosiere, J., Dudley, W., Turner, A., Ferguson Jr. R.W. (2011). *Regulatory Reforms and Remaining Challenges*. G30 Occasional Paper 81. Washington D.C.: Consultative Group on International and Monetary Affairs.
- Campiglio, E. (2014). *Beyond carbon pricing: The role of banking and monetary policy in financing the transition to a low-carbon economy*. London: Grantham Insititute/ LSE.
- Della croce, R., Stewart, F. and Yermo, J. (2011). *Promoting Long-Term Investment by Institutional Investors: Selected Issues and Policies*. OECD Journal, Financial Market Trends Volume 2011 – Issue 1. Paris: OECD Publishing.
- Dupré, S. and Chenet, H. (2012) *Connecting the Dots Between Climate Change Goals, Portfolio Allocation and Financial Regulation*. Paris: 2 Degrees Investing.
- Financial Stability Board (2013). *Financial regulatory factors affecting the availability of long-term investment finance*. Report to G20 Finance Ministers and Central Bank Governors. February 8, 2013. Basel: FSB.
- Fulton, M. and Capalino, R. (2014). *Investing in the Clean Trillion : Closing The Clean Energy Investment Gap*. Boston: CERES.
- G20/OECD (2012). *Policy Note on Pension Fund Financing for Green Infrastructure and Initiatives*.
- G20/OECD (2013). *High Level Principles of Long-Term Investment Financing by Institutional Investors*. Paris: OECD Publishing.
- Group of Thirty (2013). *Long Term Finance and Economic Growth, Twelfth Report of Session 2013-14. Volume 1*. Washington D.C.: Consultative Group on International and Monetary Affairs.
- Haldane, A., (2010). *The contribution of the financial sector – miracle or mirage?* Speech, at the LSE Future of Finance conference, London, 14 July 2010.

- Hermes EOS/ National Association of Pension Funds/ BT Pension Scheme/ RPMI Railpen Investments/ Universities Superannuation Scheme (2013). *Remuneration principles for building and reinforcing long-term business success*.
- Herring, J. and Schmidt, R. (2011). *The Economic Rationale for Financial Regulation Reconsidered: An Essay in Honor of David Llewellyn*. Policy Platform White Paper. Frankfurt: House of Finance Goethe University.
- IFC Financial Inclusion Experts Group (2010). *Scaling Up SME Access to Financial Services in the Developing World*. Washington D.C.: IFC.
- Inderst, G., Kaminker, C. and Stewart, F. (2012). *Defining and Measuring Green Investments: Implications for Institutional Investors' Asset Allocations*. OECD Working Papers on Finance, Insurance and Private Pensions, No. 24, Paris: OECD Publishing.
- IRRC Institute/Mercer (2010). *Investment horizons: Do managers do what they say?* New York: IRRC Institute.
- Kaminker, C. et al. (2013). *Institutional Investors and Green Infrastructure Investments: Selected Case Studies*. OECD Working Papers on Finance, Insurance and Private Pensions, No. 35. Paris: OECD Publishing.
- Kaminker, C., Stewart, F. (2012). *The Role Of Institutional Investors in Financing Clean Energy*. OECD Working Papers of Finance, Insurance and Private Pensions No 23. Paris: OECD Publishing.
- Kapoor, S., Oksnes, L. with Hogarth, R. (2011). *Funding the Green New Deal: Building a Green Financial System*. Policy Maker Report, Green New Deal Series volume 6. Brussels: Green European Foundation.
- Kay, J. (2013). *The Kay Review of UK Equity Markets and Long-Term Decision Making*. London: UK House of Commons Business, Innovation and Skills Committee.
- Leaton, J, Ranger, N., Ward, B., Sussams, L. and Brown, M. (2013) *Unburnable Carbon 2013: Wasted capital and stranded assets*. London: Carbon Tracker Initiative/Grantham Institute on Environment and Climate Change.
- Liebreich, M. (2013). *Financial Regulation – Biased Against Clean Energy and Green Infrastructure?* Clean Energy – Global Agenda Council on New Energy Architecture White Paper. Geneva: WEF.
- Ministry of Ecology, Sustainable Development and Energy, Government of France. (2013) *Livre blanc sur le financement de la transition écologique*. Paris: Ministry of Ecology, Sustainable Development and Energy.
- OECD (2010). *Policy Framework for Effective and Efficient Financial Regulation - General Guidance and High Level Checklist*. Paris: OECD Publishing.
- OECD (2013). *The Role of Banks, Equity Markets and Institutional Investors in Long-Term Financing for Growth and Development -Report for G20 Leaders*.
- Ostry, J.D., Berg, A., Tsangarides, C.G. (2014). *Redistribution, Inequality and Growth*. IMF Staff Discussion Note. SDN/14/02. Washington D.C.: IMF.
- Pisano U., Martinuzzi A. & Bruckner B. (2012). *The Financial Sector and Sustainable Development: Logics, principles and actors*. ESDN Quarterly Report No 27. European Sustainable Development Network.



- Shiller, R. (2013). *Finance and the Good Society*. Cambridge, MA: Harvard University Press.
- Spencer, T, Stevenson, J. (2013). *EU Low-Carbon Investment and New Financial Sector Regulation: What Impacts and What Policy Response?* IDDRI SciencesPo Working Paper No 513.
- Spencer, T. and Hipwell, E. (2013). *Coordinating, Mandating, Monitoring What Can the Post-2015 Climate Regime Learn From Global Financial Governance?* Paris: IDRI.
- The Finance Lab (2013). *Transforming Finance, A Charter for a New Financial System*.
- Turbeville, W. (2012). *Cracks in the Pipeline. Restoring Efficiency to Wall Street and Value to Main Street. Financial Pipeline Series*. London: Demos.
- Turner, A. (2009). *The Turner Review: a regulatory response to the global banking crisis*. London: Financial Services Authority.
- UKSIF (2009). Response to “Reforming Financial Markets” London: UKSIF.
- UNCTAD (2013). *Best practice guidance for policymakers and stock exchanges on sustainability reporting initiatives. Note prepared by the UNCTAD secretariat TD/B/C.II/ISAR/67*. Geneva: UNCTAD.
- UN (2009). Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Financial and Monetary System.
- UNEP (2010). *Driving a Green Economy Through Public Finance and Fiscal Policy Reform*. Nairobi: UNEP.
- UNEP (2011). *Green Economy Report: A Preview*. Nairobi: UNEP
- UNEP (2013). *A New Angle on Sovereign Credit Risk. E-RISC: Environmental Risk Integration in Sovereign Credit Analysis. Phase 1 Report*. UNEP Finance Initiative.
- UNEP (2013). *Overcoming strategic barriers to a sustainable financial system: A consultation with signatories on a new Principles for Responsible Investment work programme*.
- Waygood, S (2011). *How do the Capital Markets Undermine Sustainable Development? What can be done to correct this?* Journal of Sustainable Finance and Investment. 1:1, 81-87
- WEF (2013). *The Green Investment Report - The ways and means to unlock private finance for green growth*. Geneva: WEF
- Wooley, P. (Ed.) (2010). *The Future of Finance*. London: LSE.
- World Bank (2014). *Global Financial Development Report: Financial Inclusion*. Washington D.C.: World Bank Available at: http://siteresources.worldbank.org/EXTGLOBALFINREPORT/Resources/8816096-1361888425203/9062080-1364927957721/GFDR-2014_Complete_Report.pdf
- Yeandle, A. and Danev, N. (2013.) *The Global Financial Centres Index 14*. London: Long Finance Initiative.
- Zadek, S., Chenghui, Z., Thomas, J. (2014) *Greening China’s Financial System An Initial Exploration*. IISD/DRC



A graphic consisting of multiple concentric squares, creating a tunnel-like effect that draws the eye towards the center text.

ALIGNING

THE FINANCIAL
SYSTEM WITH
SUSTAINABLE
DEVELOPMENT



Inquiry: Design of a Sustainable Financial System

International Environment House

Chemin des Anémones 11-13

Geneva,

Switzerland

Tel.: +41 (0) 229178995

Website: www.unep.org/greeneconomy/financialinquiry

Email: inquiry@unep.org - Twitter: @FinInquiry