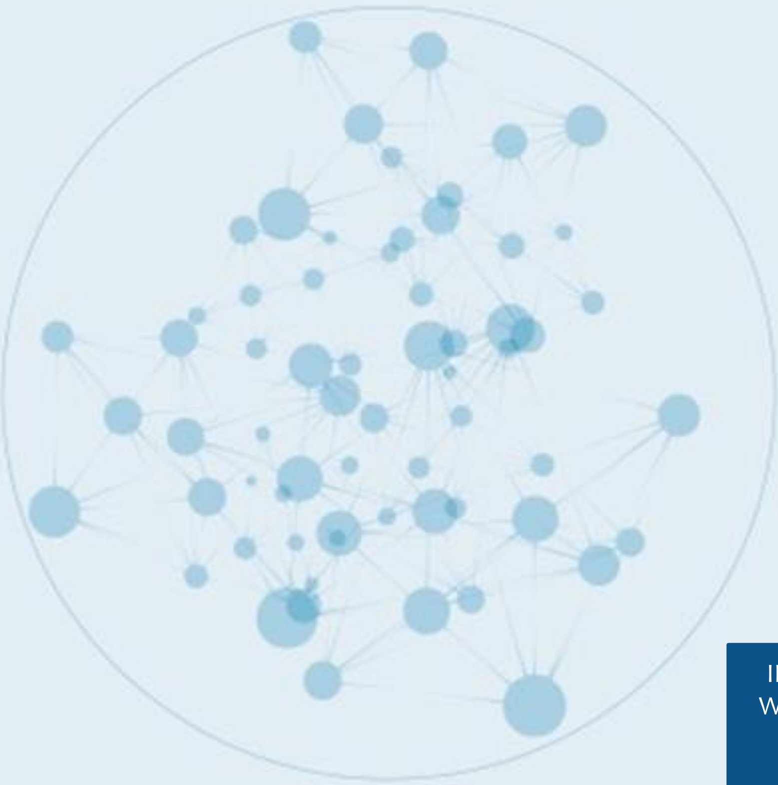
Inquiry: Design of a Sustainable Financial System

UN environment

GREENING THE RULES OF THE GAME

How Sustainability Factors Are Being Incorporated Into Financial Policy and Regulation



INQUIRY WORKING PAPER

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The UN Environment Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme (UN Environment) to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it published the first edition of 'The Financial System We Need' in October 2015, with the second edition launched in October 2016. Over its four year mandate, the Inquiry worked in more than 20 countries, partnered with more than 70 organizations and produced more than 120 reports on key dimensions of green and sustainable finance. The Inquiry completed its mandate in March 2018 and key activities have become embedded in the core work of UN Environment.

More information on the Inquiry is at: *www.unepinquiry.org* or from: Ms. Mahenau Agha, Director of Outreach *mahenau.agha@un.org*.

About this report

This report has been written by Jeremy McDaniels (Programme Manager) and Nick Robins (Co-Director) of the Inquiry. The report consolidates the work that the Inquiry has undertaken over a four year period to track the policy and measures taken to promote green and sustainable finance by a range of financial policy and regulatory authorities across the world. To do this, the authors would like to acknowledge the strong support of Keir Gray and Sarah Zaidi. We would also like to thank the following for their support in contributing to and review the database of policies and measures that underpins this report, including Butch Bacani, Nathan Fabian, Toby Heaps, Alyssa Heath, Will Martindale, Anthony Miller, Melanie Paty, Wei Yuan and Rong Zhang. The authors alone are responsible for the analysis contained in this report.

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Executive Summary

Over the past four years, the number of measures taken by financial policymakers and regulators to promote green and sustainable finance has significantly increased. This report is the first to chart this 'quiet revolution' and analyse this important new trend in terms of the geographical, sectoral and thematic spread of measures. Key findings include:

- **Globally, the number of sustainable finance measures has doubled**: Between the end of 2013 and the end of 2017, we estimate that the number of sub-national and national-level policy and regulatory measures doubled from 131 in 43 jurisdictions to 267 in 53 jurisdictions.
- **International measures to promote sustainable finance have quadrupled**: In 2013, there were just eight international measures to incorporate sustainability into the international rules of the game for finance. By the end of 2017, these had grown to 33, with notable examples including the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), the G20's Sustainable Finance Study Group and the Sustainable Insurance Forum (SIF).
- **Developed and developing countries have different priorities**: Developed countries have consistently accounted for the majority of measures, with just under two thirds in 2017. The different structures of respective financial systems are reflected in the measures that these countries adopt: in the developed world, the focus is on investment followed by securities, while in the developing world, banking is in the vanguard followed by securities.
- **Europe and Asia account for nearly two thirds of the measures**: Europe and Asia account for 62% of the measures introduced to date.
- **The sectoral pattern has changed significantly**: In 2013, measures taken in securities markets led the way with just under a third of the total, followed by investment, banking, insurance and system-wide actions (such as national roadmaps). By 2017, system-level measures had become the most significant at over a quarter of the total, up from just 10% in 2013.
- **Slightly less than half of measures (44%) are mandatory in nature**: Roughly half of the measures taken by developing countries are mandatory, with developed countries making 42% of their measures binding on affected financial institutions. These are followed by voluntary compliance, hybrid measures and measures without stipulations for compliance.

A clear trend can be identified in the growth of measures to link financial policy and regulation with sustainability factors. Looking at the current landscape, this is likely to continue and even accelerate into the future. But many gaps in understanding and practice remain. We identify five key priorities for future work in this area:

i. **Classifying interventions**: more work is needed to classify interventions so that these can be designed and evaluated in a consistent way.
ii. **Evaluating impact**: new tools are needed to assess the impact of these measures in terms of their effectiveness, efficiency and equity across sustainability and financial dimensions.
iii. **Policy and market linkages**: further work is needed to understand the linkages between real economy and financial system action on sustainability, and interplay with market leadership.
iv. **Cross-country comparisons**: it is important to better understand the transferability of measures across countries at different stages of development and with different financial systems.
v. **International norms**: further steps need to be undertaken to identify how best to incorporate sustainability factors into international standard-setting bodies and policy forums.

1 Introduction

1.1 Connecting the Financial Rules of the Game with Environmental Sustainability

Back in 2013, a sustainable financial system simply referred to one that was stable, resilient to shocks, and avoided the kind of turbulence exhibited in the global financial crisis. Now, a more positive and profound meaning is emerging, one that focuses on how the financial system can serve the transition to sustainable development.

Over the course of its work between 2014 and 2018, the UN Environment Inquiry uncovered a 'quiet revolution' in how financial regulators, central banks and governments around the world are working to align financial systems with sustainable development. This body of actions – considered here as "measures" – is broad in scope and focus, varied in terms of instruments and approaches, and diverse in terms of implementation and compliance structures.

This report sets out an initial quantitative analysis of these measures, providing a high-level view on design, characteristics, modalities and structures of policy and regulatory action on sustainable finance. This analysis is based upon a global database of measures related to sustainable financial systems, compiled over the course of the Inquiry's four-year work programme (see Section 1.3 below).

The primary objective of this report is to provide the first account of the evolution of policy and regulatory action in the financial system related to sustainable development. A basic analytical framework by geographic region, level of economic development, asset class and compliance structure is used to examine the growth of measures over time. A secondary objective is to stimulate debate, analysis and collaboration on how policy and regulatory action for sustainable finance should be considered, measured and evaluated in order to inform improved policy decision-making.

1.2 Scope of Analysis

This report focuses on policy and regulatory measures implemented by public sector bodies, including governments, central banks, financial regulators, supervisors and public financial institutions. Such measures include legislation, sectoral and system-level regulations, supervisory frameworks, fiscal support mechanisms, market codes and standards, guidance, guidelines and other activities, such as research assessments, reports and consultations. Hybrid measures – developed and implemented in partnership with multiple stakeholders, including private financial institutions – are considered as an independent category.

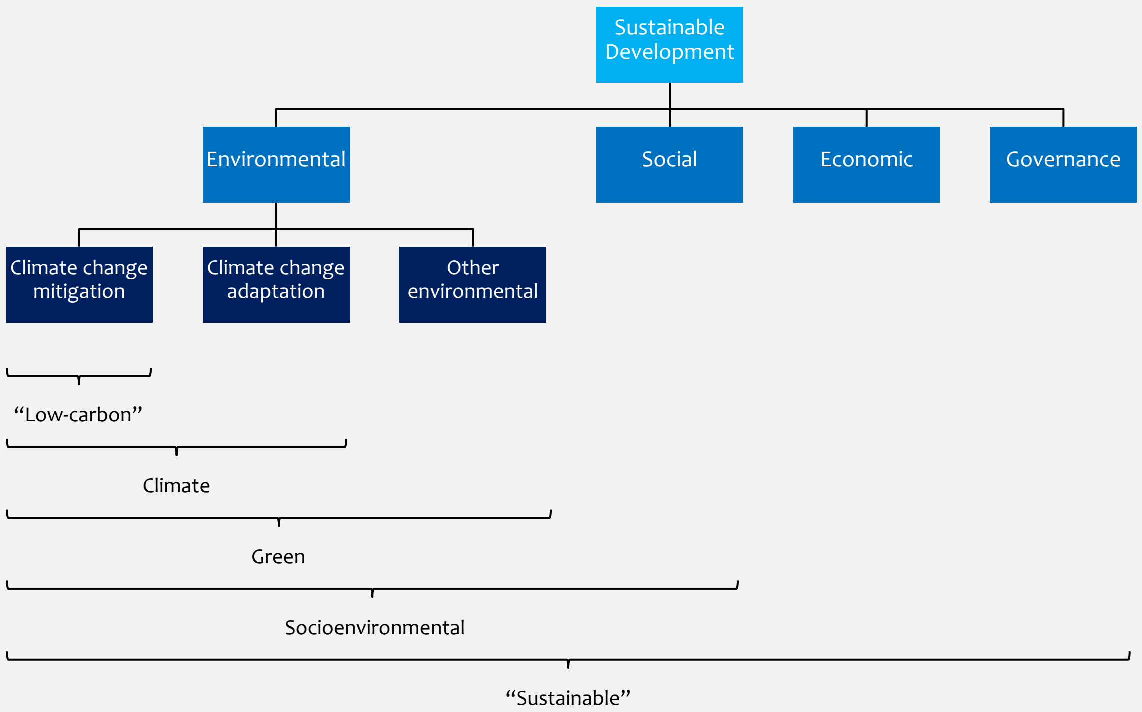
Policy and regulatory measures are implemented with varying compliance expectations and requirements, including mandatory compliance (such as regulatory requirements on firms), voluntary compliance (*i.e.* provision of best practice guidance), or hybrid structures (*i.e.* phased compliance). Other measures have no compliance structures.

These measures also relate to the use of public finance, including the provision of subsidies, incentives or other instruments to influence the behaviour of financial institutions. We consider the establishment of new public finance institutions with a dedicated focus on sustainable finance priorities, such as the establishment of green banks. We also take into account the implementation of specific sustainable finance programmes and initiatives implemented by major national and international public financial institutions, including where these aim to influence behaviour or engage policymakers and regulators. However, we do not count individual deals or transactions relating to sustainable finance, or catalogue the range of individual actions to integrate environmental, social and governance (ESG) factors into lending, investing and market activities.

Importantly, it should be noted that while these policy and regulatory measures are of a financial nature, they do not necessarily always target financial institutions. A significant amount of securities regulations target the treatment of sustainability factors in the financial reporting of corporations, for instance.

Box 1: Clarifying Sustainable Finance

For the purposes of this paper, "sustainable finance" refers to the financing of investments that provide environmental benefits in the broader context of environmentally sustainable development (green finance) as well as finance for education, social development, health and other aspects of sustainable development as defined by the 2030 Agenda and the SDGs.



This report focuses on the environmental dimension of sustainability, and therefore, considers social issues, human rights, gender equality, corruption, governance or other policies where they also make specific mention of environmental factors. Policy and regulatory measures relating to social or governance issues that do not make specific reference to environmental factors are not included. Others have looked at the broader range of ESG factors in specific sectors. For example, the Principles for Responsible Investment (PRI) has undertaken a global mapping of responsible investment policies, including policy and regulatory measures across environmental, social and corporate governance factors.[1]

The policy and regulatory measures covered here are largely implemented at the national level, but sub-national (*i.e.* state-level) measures are considered, alongside regional measures that promote sustainable finance across federated states (the European Union). International measures are covered as an independent category.

The policy and regulatory measures differ widely in terms of implementation. We focus on measures that have been fully implemented or where legislation has been passed (with regulatory or supervisory action to follow). We also include measures that have been formally announced, but where there is no clear implementation timeline or verification structure, such as high-level action plans. We include other actions – such as central bank research exercises on climate change risks – where they have been published or have been initiated yet not completed.

We have sought to give due consideration to the succession in regulatory frameworks (*i.e.* where one regulation has been implemented to replace another), as well as implementation hierarchies across institutions (*i.e.* between policymaking and regulatory bodies) to avoid double-counting of measures. By way of example, where a stock exchange has implemented new listing requirements on the basis of new legislation, the legislation is considered as the measure. Finally, it should be noted that policy packages, which may set out an action agenda of multiple measures to be implemented over time – like China's 2016 Guidelines for Establishing a Green Financial System[2] – are considered here as individual measures. This affects the quantification of omnibus measures, which consolidate other policy actions, as well as system-level measures like national policy roadmaps.

What is included	What is not included
• Measures implemented by public authorities (*i.e.* governments, central banks, regulators, supervisors) • All compliance requirements (mandatory, voluntary, hybrid, none) • Measures that explicitly reference the environmental dimension of sustainability • Measures implemented/with legislation/formally announced, and published research	• Measures implemented by private institutions • Individual deals or transactions relating to sustainable finance • Individual actions to integrate ESG factors in lending, investing and market activities • Measures that do not explicitly reference the environmental dimension of sustainability • Unpublished research

1.3 Data Sources and Boundary Conditions

The information compiled in the Inquiry's measures database was gathered from multiple sources, including the over 120 publications the Inquiry published during its operations. These include national and regional studies, applied policy studies and meeting input papers, research on thematic issues, and formal publications for the G20, G7 and other international platforms. Many of these publications were developed in partnership with other institutions, which have been a helpful source for information and have contributed to the process of validation and review.

The cut-off date for new measures was December 2017. For the purposes of comparison, our base year of analysis is the year 2000. Measures implemented in preceding years (*i.e.* 1980-2000) have been adjusted to this date. No measures implemented after 31 December 2017 have been included. Noting the significant expansion of measures in early 2018, further work should be undertaken to regularly update the data.

1.4 Potential Limitations

This is the first global analysis of policy and regulatory measures on sustainable finance, and as such, should be considered as a preliminary effort. We have taken care to ensure that the dataset and analysis are robust. However, there could be measures that we have not included, not least because of the rapid pace of change in this evolving space.

Similarly, the methodology developed to categorize these measures is new. A number of subjective choices have been taken on the part of the authors. We would encourage interested parties to review the data and comment on how this methodology could be improved.

Finally, it is important to note that the purpose of this exercise is not to rank the quality of implementation or the ultimate impact of the measures, but simply to provide a view on emerging practice and trends across jurisdictions. In doing so, it identifies a significant unexplored research agenda, with rich opportunities for future work. We set out avenues for further work in Section 4.

2 The Global Review

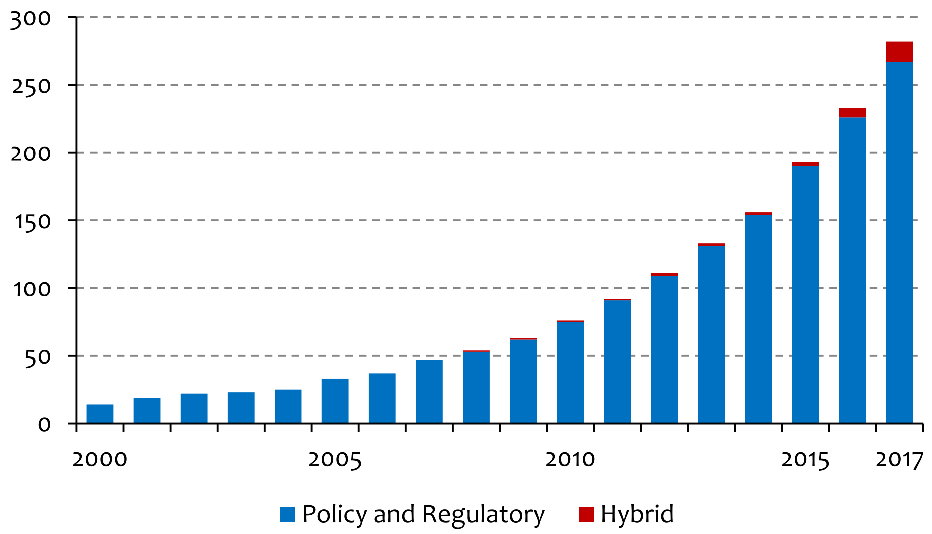
Market innovation has been fundamental to the evolution of sustainable finance. However, market action on its own is unlikely to overcome key barriers and market failures that prevent the expansion of sustainable finance to the level necessary for achieving the Sustainable Development Goals (SDGs) and the objectives of the Paris Agreement on climate change. Such obstacles include information asymmetries, misaligned incentives, insufficient access to finance, blocked innovation and financial instability. Here, actions on the part of public authorities – including policymaking and legislation, regulation, supervision, signalling and other interventions – are needed to orient the behaviour of financial institutions and markets with respect to critical sustainability issues. This is now recognized at the highest levels of financial policymaking, notably through the G20 Green Finance Study Group launched in 2016; now continuing as the Sustainable Finance Study Group under Argentina's presidency of the G20 in 2018.[3]

2.1 The Evolution of Financial Policy and Regulatory Measures for Sustainability

Policy and regulatory action linking finance and sustainability issues has a long history. The oldest measures that are still in place today are national-level public catastrophe insurance facilities: some authorities in disaster-prone countries date back as far as 1945. In the 1990s, public financing institutions (*i.e.* national development banks) began focusing specifically on investments with sustainability attributes, such as disaster-resilient infrastructure, community development and environmental infrastructure.

With the rise of sustainable and responsible investing in the 1990s, public authorities started to promote transparency in the ways that listed corporations and financial institutions, such as pension funds, were incorporating ESG factors into decision-making. From the early 2000s, environmental impact assessment and reporting requirements began to be integrated into banking, investment and securities regulation with varying compliance structures. At the same time, an increasing amount of public financial institutions – including state pension funds – were either required or independently introduced policies to consider ESG criteria in their decision-making.

Figure 1: Total Measures at Sub-national, National and Regional Levels, 2000-2017



Source: UN Environment Inquiry, 2018

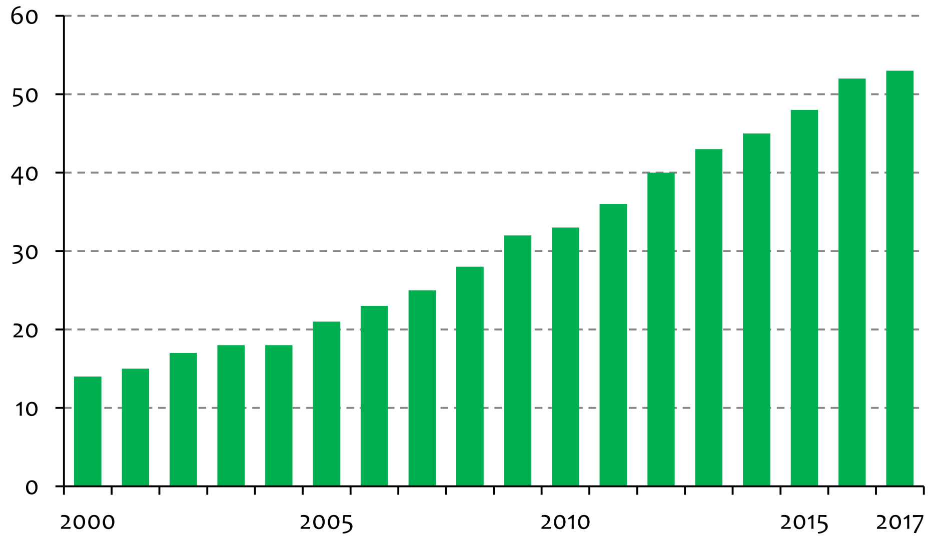
Up until the end of the 1990s, the large majority of policy and regulatory action on sustainable finance was confined to developed countries with large and sophisticated financial systems. In the 2000s, however, emerging economies such as Brazil, China, India and South Africa began introducing new policy packages targeting specific sustainability priorities, such as pollution abatement, access to finance and conservation.

Policy and regulatory action to align the financial system with sustainable development accelerated significantly starting in 2009. 78% of policy and regulatory measures to date were put in place between 2009 and 2017, with a compound annual growth rate (CAGR) of roughly 19% during this period.

Looking back over the last four years, there has been a marked increase in policy and regulatory action. At the end of 2013, there were a total of 131 sub-national, national-level policy and regulatory measures.[4]. By end-2017, the number of measures doubled to 267. In addition, there has been a recent increase in hybrid measures – which amounted to 15 globally as of end-2017.

These measures are being implemented in an increasing number of countries. As of 2017, 53 jurisdictions (52 plus the European Union) have implemented measures at sub-national, national or regional levels.

Figure 2: Number of Jurisdictions Implementing Policy and Regulatory Measures, 2000-2017



Source: UN Environment Inquiry, 2018

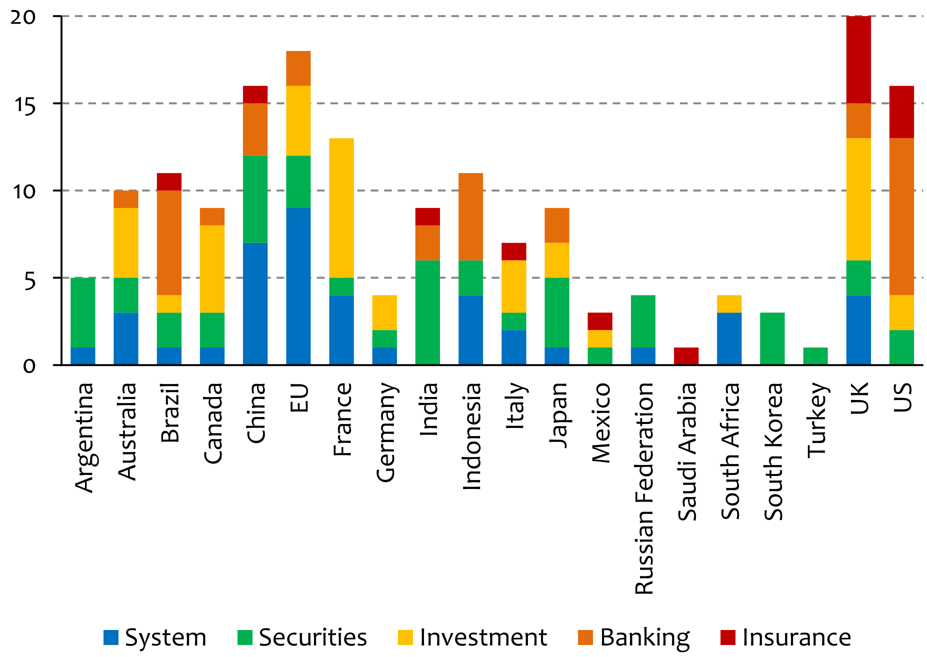
2.2 International Measures

There has been a striking growth over the last two years in international initiatives to share experience, stimulate action and promote cooperation on sustainable finance. At end-2013, there were just eight international policy and regulatory initiatives in place relating to sustainable finance, principally voluntary networks and coalitions. By end-2017, this had grown to 33 driven by a surge in activity by mainstream intergovernmental financial authorities. Key examples include:

- **Financial Stability Board:** In November 2015, the Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD), as an industry-led initiative to draw up voluntary guidance on reporting by business and financial institutions. Released in June 2017, the final recommendations cover how all institutions should report on how climate factors influence their strategy, risk, governance and performance metrics.[5]
- **G20:** During its G20 presidency in 2016, China launched the G20 Green Finance Study Group[6] (GFSG), co-chaired by the People's Bank of China and the Bank of England, with UN Environment as its secretariat. The GFSG developed seven options[7] for scaling up the global green finance

market and included them in the G20 Hangzhou Communiqué in September 2016.[8] The GFSG continued under the German G20 Presidency in 2017 and is now working as the Sustainable Finance Study Group under the Argentinian G20 Presidency in 2018. Looking across the G20 economies, there is a broad distribution in measures across asset classes.

Figure 3: Policy and Regulatory Measures by Asset Class in G20 Members



Source: UN Environment Inquiry, 2018

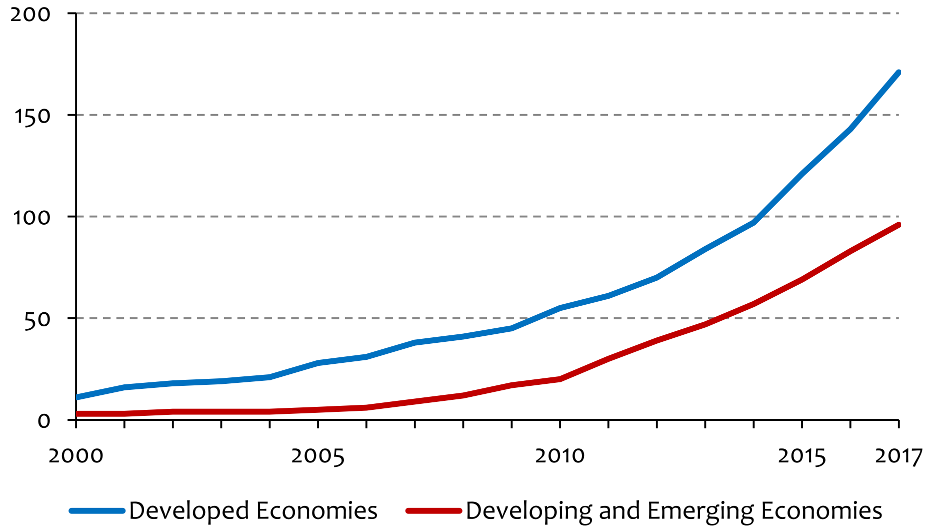
- **Insurance Supervision:** Launched in December 2016, the Sustainable Insurance Forum gathers supervisors from nearly 20 jurisdictions to work together on integrating environmental factors into insurance regulation.[9] A key focus is to develop guidance for regulators on how to manage climate risks as part of their routine supervision of insurance firms. In March 2018, the consultation draft of an Issues Paper on Climate Change Risks to the Insurance Sector was released by SIF together with the International Association of Insurance Supervisors.[10]
- **Central Banking:** In December 2017, the Network of Central Banks and Supervisors for Greening the Financial System was launched at the One Planet Summit in Paris with eight founding members (China, France, Germany, Mexico, the Netherlands, Singapore, Sweden and the UK). The Network will help to strengthen the global response required to meet the goals of the Paris Agreement and to enhance the role of the financial system in managing risks and mobilizing capital for green and low-carbon investments.[11]

These initiatives often have both a substantive and a signalling effect. Substantively, they build up both technical expertise among financial decision makers and can stimulate real policy action. Just as important has been the signalling effect – highlighting both to public authorities and the financial sector that sustainable development is now a strategic issue.

2.3 Measures by Region and Economic Development

To assess the evolution of policy and regulatory (P&R) measures across jurisdictions, we have classified countries in accordance with the World Bank Country Classification framework. This divides economies into two main economic groupings: i) developing and emerging economies (including low, low-middle, upper-middle income countries), and ii) developed economies (including high-income OECD and non-OECD countries).[12] The majority of P&R measures have been implemented in developed economies, with steady growth between 2009 and 2017 (Figure 4).

Figure 4: National and Sub-national Policy and Regulatory Measures Across Developed and Developing and Emerging Economies, 2000-2017



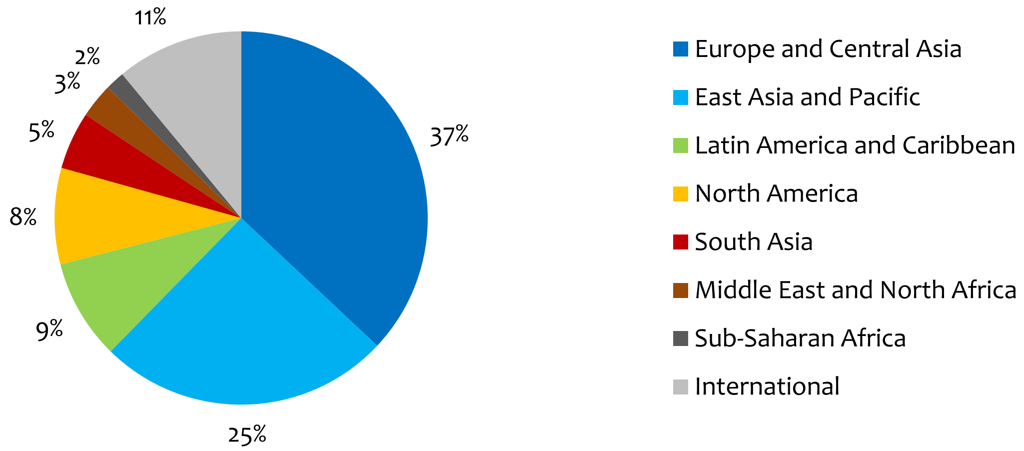
Source: UN Environment Inquiry, 2018

Measures in developed economies are strongly concentrated in the investment and securities sectors, reflecting an early development of responsible investing markets in European countries. Action in developed economies accelerated following the financial crisis, with a 25% increase in measures between 2014 and 2015 – corresponding with the build-up towards the 2015 Paris Agreement.

Measures in developing and emerging economies are focused on the banking, insurance and securities sectors. Action in developing and emerging economies has steadily accelerated during the last four years, with major emerging economies – such as China – setting out broad-ranging policy packages. As these and other efforts contain further sets of measures that will be implemented in coming years, we expect the rate of growth in number of measures in developing and emerging economies actions to accelerate over the medium term.

Taking a regional view illustrates significant variation in the spread of measures around the world. Measures are grouped in accordance with the seven World Bank regional categories in Figure 5.

Figure 5: Regional Breakdown of Policy and Regulatory Measures



Source: UN Environment Inquiry, 2018

The highest regional concentration of measures is in Europe, driven by the UK, France, Italy, the Netherlands and Sweden. These are countries with well-established markets in sustainable and responsible investment, supplemented more recently by policy action on climate risk. Growth in other European countries in recent years has also been driven by action at the EU level.

The high concentration in measures in Asia comes principally from action in China, where government and public authorities are implementing wide-ranging policy packages (including the 2016 green finance guidelines). Other countries in the region have become increasingly active in recent years, notably India and Indonesia. Japan and Australia are also starting to increase their efforts.

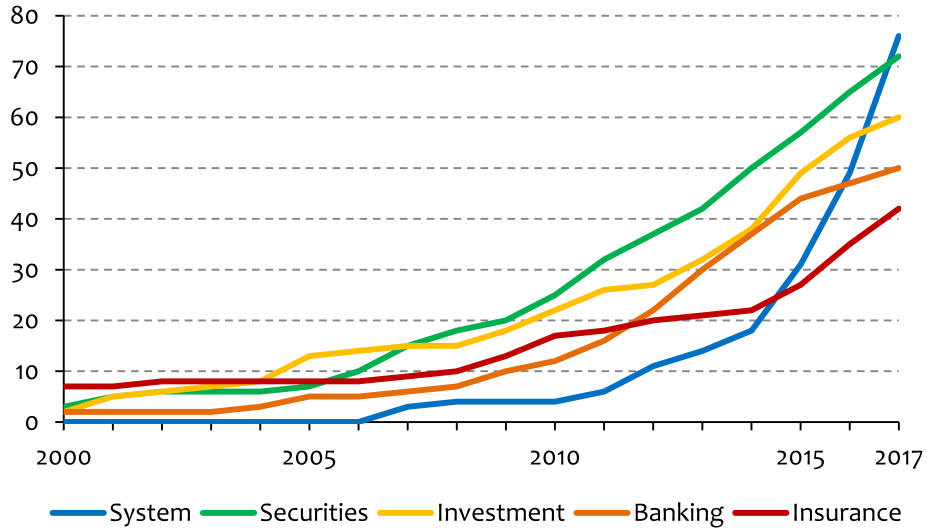
Growth in measures in Latin America is largely due to Brazil, which has taken many steps to harness its financial system to address critical environmental threats such as deforestation. The range of measures in North America is largely comprised of actions at the state and provincial level in the US (such as California) and Canada respectively.

2.4 Looking Across Asset Classes

Policy and regulatory measures can also be examined across asset classes. We have classified measures into five asset class categories: Banking, Insurance, Investment, Securities (including equity and fixed income) and System-level actions. System actions are considered as measures that impact on more than one asset class, such as national-level roadmaps and strategies, as well as system-level prudential risk assessments.

The breakdown of P&R measures across asset classes is visualized in Figure 6. There has been a steady increase across the four main asset class categories since 2009 – with a CAGR of 39% (System), 20% (Banking), 15% (Securities) and 14% (Insurance, Investment).

Figure 6: Global Policy and Regulatory Measures by Asset Class, 2000-2017

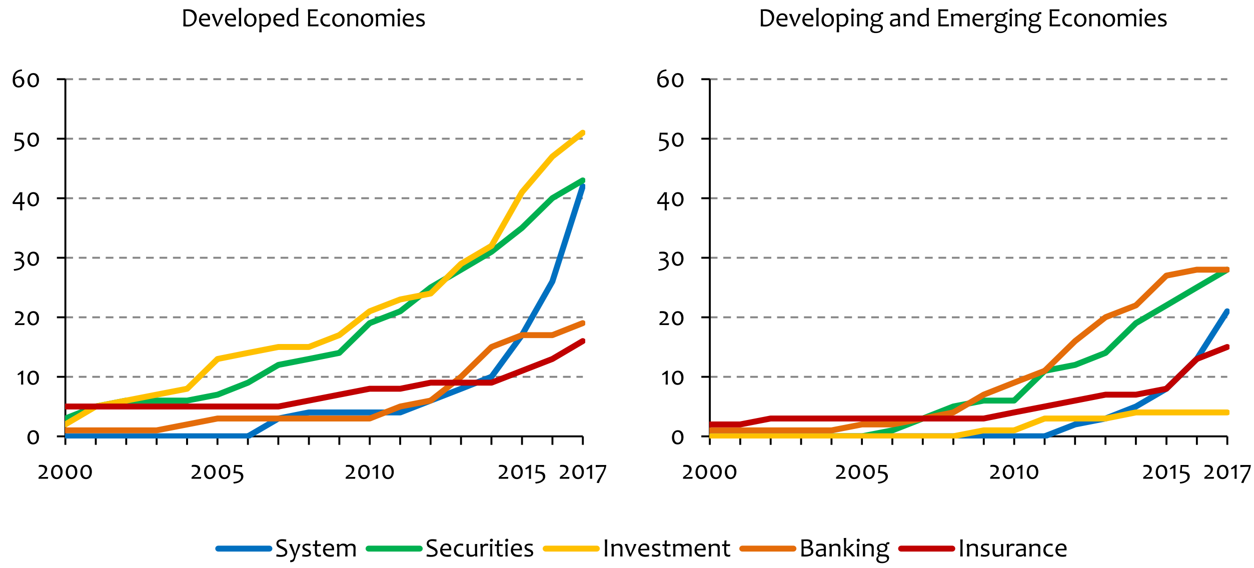


Note: Includes International

Source: UN Environment Inquiry, 2018

Comparing the spread of measures by asset class across developed and developing jurisdictions (Figure 7) illustrates interesting trends, reflecting levels of financial system development, concentrations of financial capital, and regulatory culture and practice across jurisdictions.

Figure 7: Policy and Regulatory Measures by Asset Class, Developed vs Developing and Emerging Economies (2000-2017)



Source: UN Environment Inquiry, 2018

2.4.1 Banking

Policy and regulatory action in the banking sector has been strongly driven by developing and emerging economies, whose financial systems are often dominated by banking assets. In India, which has a long history of steering capital allocation, priority sector lending requirements are now being updated to include capital for renewable energy investment. China's Green Credit Guidelines have had a significant impact on the flow of capital to high-polluting industries. In other countries, such as Bangladesh, the banking sector is a key focus for fiscal support schemes to reduce barriers to financing green assets, such as preferable refinancing rates. Brazil has been a major leader in integrating environmental factors into banking regulation, including environmental compliance checks by the central bank when granting rural credit as well as requirements to consider environmental and social risk as part of core capital adequacy calculations (ICAAP).

Banking measures have been slow to be adopted in developed economies, but over past year, there has been a growth in initiatives linking prudential regulation with climate risk. Leading central banks in the UK and the Netherlands, having initiated prudential analysis of climate change risks in insurance and investment, are now seeking to tackle similar questions in the banking system.

2.4.2 Insurance

The insurance sector has a long track record of assessing, pricing, managing and transferring environmental risk, principally through exposure to physical events like natural disasters. As previously noted, some of the first public interventions linking sustainability issues and finance were within the insurance space – in the form of public insurance facilities for natural disasters. Supervisors have had a long-term focus on sustainability issues in disaster-prone markets and in major global hubs for catastrophe reinsurance. The insurance sector has been the first port of call for many leading central banks in developed countries seeking to explore how environmental issues – specifically physical and transition risks associated with climate change – may pose risks to the solvency and soundness of firms and markets.

2.4.3 Investment

Efforts to support the integration of ESG factors into investment institutions, such as disclosure requirements on pension funds, spread rapidly through European countries during the 2000s, but had varied impact on ESG market growth. Following the financial crisis, investment measures have focused more on the importance of ESG factors to the fiduciary responsibilities of financial institutions, for example, through the UK Law Commission's review of fiduciary duty.[13]

2.4.4 Securities

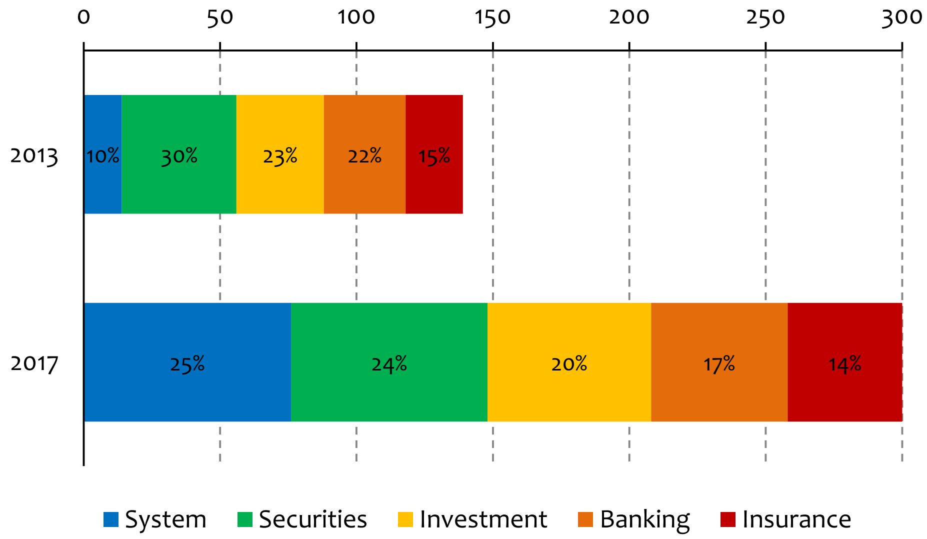
Securities measures – including voluntary guidance, listing criteria or mandatory disclosure requirements – are some of the most widely adopted measures for sustainable finance. Historically, most measures have focused on disclosure by companies listed in equity markets. More recently, securities regulators in countries such as China and India have taken steps to promote the expansion of green bonds in debt capital markets through guidelines and requirements.

2.4.5 System-level Measures

In recent years, the most rapid growth has been in system-level measures – which have increased at a rate of 43% since 2014. At the end 2017, system measures have overtaken securities measures, at over a quarter of the global total. This strong increase in system measures indicates a growing trend among governments and public authorities to consider sustainability priorities in an integrated way across different facets of the national financial system. These include national-level roadmaps for green and sustainable finance in countries, including China,[14] Italy[15] and Morocco.[16] A number of recently implemented system measures in 2017 include national and regional strategic processes (such as the EU

High-Level Expert Group on Sustainable Finance[17]), which seek to coordinate and streamline multiple policy instruments and build coherence among the different institutions active in financial policy and regulation. The broad scope of system measures is often linked to a hybrid implementation structure. An example is the UK's 2016 Green Finance Initiative, supported by the City of London Corporation and the UK Treasury, which aims to enhance the competitiveness of London as a global green finance hub[18].

Figure 8: Global Policy and Regulatory Measures by Asset Class, end-2013 vs. end-2017



Note: Includes International

Source: UN Environment Inquiry, 2018

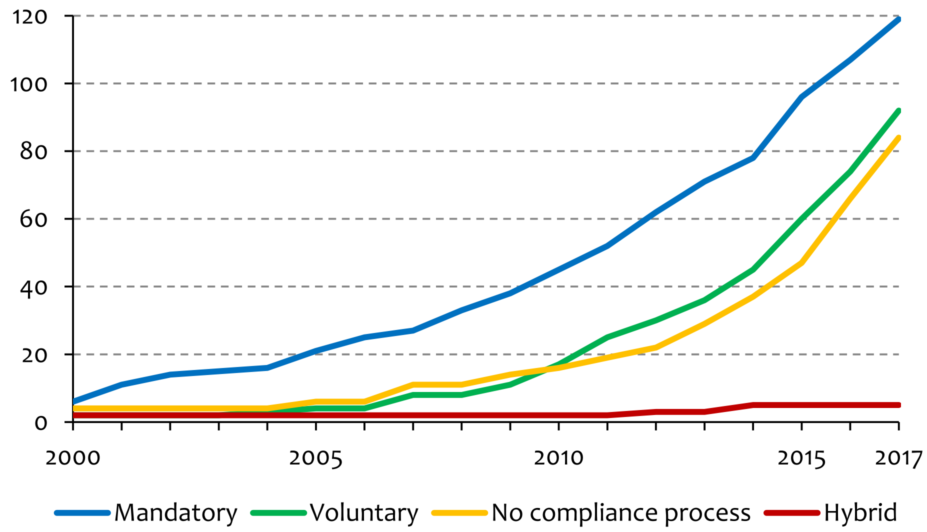
2.5 Exploring Compliance Structures

We have categorized P&R measures with respect to their compliance structures: mandatory (*i.e.* binding requirements on firms), voluntary (*i.e.* the provision of guidance), hybrid (*i.e.* where measures may have phased compliance implementation of varying compliance structures across different actors), or no compliance process (*i.e.* measures that are promotional in nature, or do not have direct implications for market participants).

The rationale for this categorization is to assess measures by their 'strength' or impact within the marketplace. However, such analysis is made complex by multiple variables and a range of subjective choices on the part of the authors (see Section 3). With these caveats in mind, a preliminary analysis suggests that the majority of measures currently in place are mandatory, with an equal share of voluntary measures and those with no compliance process (Figure 9).

Many measures implemented in recent years are exploratory in nature and do not have immediate compliance implications in terms of legislation of markets, regulatory requirements, or supervisory frameworks (Figure 10). Examples include new research efforts on understanding the potential systemic risk implications of climate change for the financial system (including in the Netherlands), consultations on guidelines for forthcoming reporting frameworks (including the EU), and the establishment of system-level initiatives.

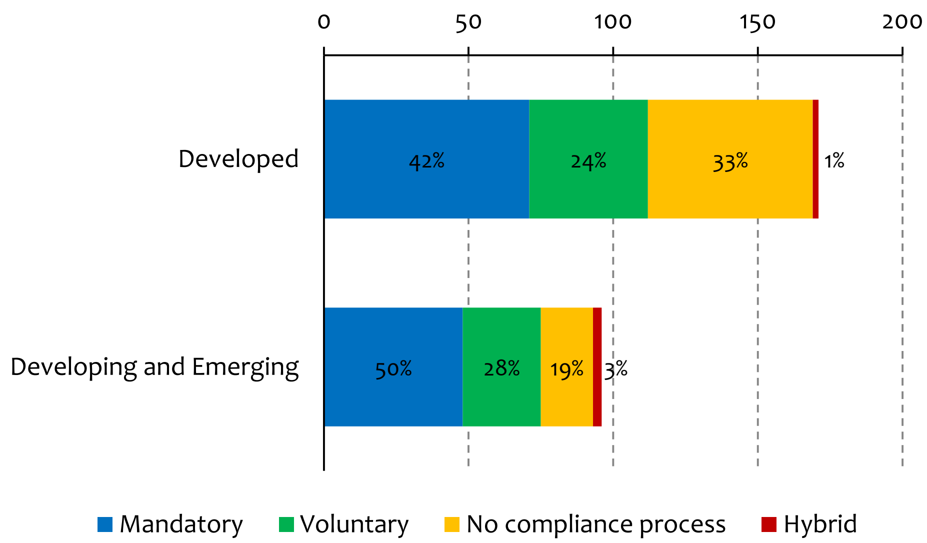
Figure 9: Global Policy and Regulatory Measures by Compliance Structure, 2000-2017



Note: Includes International

Source: UN Environment Inquiry, 2018

Figure 10: Policy and Regulatory Measures by Compliance Structure, Developed vs Developing and Emerging Economies, 2017



Source: UN Environment Inquiry, 2018

3 Conclusions and Next Steps

The growth and transformation of policy and regulatory measures to promote sustainable finance over the last four years is a striking development both for sustainable finance – and for financial policy and regulatory practice. Our collection and analysis of policy and regulatory measures around the world has uncovered a range of important insights into the key dimensions of these new trends. However, this work has also laid bare some significant gaps in understanding and research practice of this evolving body of practice, including with respect to frameworks, methodology and analytical approaches to policy analysis.

We identify five key priorities for future work in this area:

1. **Classifying interventions**: Developing a common language of sustainable finance policy and regulatory measures is important so that actions can be properly identified, designed, implemented and evaluated. For instance, a common framework for understanding the objectives of measures (*i.e.* prudential risk, enhanced reporting, etc.) could be helpful to characterize policy and regulatory action – and then compare and contrast experiences with implementation. Similarly, there is no common basis for delineating and quantifying policy and regulatory measures as discrete action items, including where "packages" of policy actions are announced at once, but implemented over time. For instance, the European Commission's Action Plan for Sustainable Finance (released in March 2018), contains 24 action items – which in this database would be considered as one single measure. Cooperation among key countries and international organizations promoting sustainable finance could help to achieve this.
2. **Evaluating impact**: We have identified little or no assessments of the impact of these measures in terms of their effectiveness, efficiency and equity. In addition, as these initiatives straddle the worlds of financial and sustainability policy, new tools will be needed to assess the achievement of two or more objectives. From a sustainability perspective, the question is whether these measures lead to be enhanced delivery of social and environmental outcomes. From a finance perspective, the focus is on how these initiatives improve market efficiency and resilience.
3. **Policy and market linkages**: At its heart, sustainable finance requires close links between real economy policies (such as carbon pricing), financial system measures (such as climate disclosure requirements) and action within the marketplace. In a limited number of cases, core climate and sustainability policies incorporate financial sector elements – for example, the Bank of England's prudential review of insurance and climate change was based on provisions within the UK's Climate Change Act. Similarly, there has been an increasing trend towards reflecting sustainability linkages within mainstream financial regulatory frameworks. However, more work is needed to understand how these two policy domains should be connected and how best financial system policies should be included in whole economy policy efforts. At a higher level, more work is required to understand how policy action relates to market leadership – including in highly developed financial systems, where measures with hybrid compliance, or no compliance structures, have still had significant impact (including through market signalling).
4. **Cross-country comparisons**: Financial systems differ significantly across countries and stages of development. What might be appropriate and effective in one place may not be in another. This is especially relevant in a compliance context, as appetite for direct intervention in the financial system through regulatory means, and the impacts of such intervention, vary significantly depending on the composition of a national financial system and the expectations of financial

institutions. Understanding what is unique and what can be shared is important as more and more financial policymakers and regulators look to adopt sustainability-related measures.

5. **International norms**: The bulk of experience has been at the national and sub-national levels. Although there has been a pronounced increase, relatively few initiatives exist at the international level. Research and dialogue is needed to understand how best to incorporate sustainability into routine procedures of key standard setting bodies and policy institutions, such as the Bank for International Settlements (BIS), the Financial Stability Board (FSB), the G7, the G20, the International Association of Insurance Supervisors (IAIS), the International Monetary Fund (IMF), the International Organization of Securities Commissions (IOSCO), the Organisation for Economic Co-operation and Development (OECD) and the World Bank.[19]

Clearly, the research agenda flowing from meta-analysis of policy and regulatory action to promote sustainable finance is broad. To date, however, it has been largely unexplored. To take these and other themes forward, UN Environment will be working in partnership with the Grantham Research Institute at the London School of Economics.

Endnotes

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