

Policies, Initiatives, and Regulations Related to Sustainable Finance

Alex Nicholls

DISCLAIMER

This background paper was prepared for the report *Asian Development Outlook 2021: Financing a Green and Inclusive Recovery*. It is made available here to communicate the results of the underlying research work with the least possible delay. The manuscript of this paper therefore has not been prepared in accordance with the procedures appropriate to formally-edited texts.

The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Asian Development Bank (ADB), its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this document and accepts no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB in preference to others of a similar nature that are not mentioned.

Any designation of or reference to a particular territory or geographic area, or use of the term “country” in this document, is not intended to make any judgments as to the legal or other status of any territory or area. Boundaries, colors, denominations, and other information shown on any map in this document do not imply any judgment on the part of the ADB concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

POLICIES, INITIATIVES, AND REGULATIONS RELATED TO SUSTAINABLE FINANCE

Professor Alex Nicholls, MBA

I. INTRODUCTION

Historically, public policy has had a significant influence on how markets develop. Policy actors can use a range of powerful interventions to shape markets around key policy agendas. While there are many examples of how policy can have perverse effects, particularly when driven by extreme ideologies, governments have also played an instrumental role in both constraining and enabling markets for the greater public good. Drawing upon evidence from practice, this paper considers how policy can enable the further development of the sustainable finance market.

A. Historical Context

Sustainable finance combines a range of nonfinancial impact objectives with financial returns. Nonfinancial impact has typically been characterized in terms of three investment impact themes defined as environmental, social, and governance (ESG). In this context, sustainable finance can be defined as:

Capital that is deployed in a range of investments to achieve a specified and measurable environmental, social, or governance objective.

Policy agendas that are focused on sustainable finance can also be seen in a larger, historical context of policy reform and change. Since the 1980s, there has been a global shift in policy away from interventionist, Keynesian models towards a range of policy innovations based on the theory of New Public Management¹ and, more recently, New Public Governance.²

¹ <https://oxfordre.com/business/view/10.1093/acrefore/9780190224851.001.0001/acrefore-9780190224851-e-129>.

² <http://press-files.anu.edu.au/downloads/press/n1949/pdf/ch03.pdf>.

An important element of these innovations has been the recasting of public spending regimes around new models of privatization and public–private partnerships. This significant policy shift has created a new market for private providers of public services as well as, more recently, refocusing public spending more generally on effectiveness and efficiency via outcomes-based spending and contracting models.³ Such contracts have been categorised as payment-by-results (in the UK) or pay-for-success (in the US) models. In both cases, significant private capital has moved into the provision of public goods as a form of sustainable finance that is designed to grow a sector of hybrid, “social enterprise” organizations.⁴

Despite these broad changes in the focus of public policy globally, specific policy agendas that are focused on sustainable finance are likely to be geographically contingent based upon the political, economic, and cultural traditions of a given country or region. For example, the long, historical, tradition of a social economy delivered by cooperative and mutual organizations in the European Union (EU) has partly shaped the policy agenda around sustainable finance as a complement to both the social sector and government.⁵ Conversely, the more individualistic and free-market cultural tradition in the United States (US) has framed sustainable finance as a new opportunity to make superior financial returns on capital invested.⁶ Within Asia, there is also a similar polarity of policy frameworks with Japan⁷ and Singapore,⁸ for example, broadly following more of a US model, while India (given the importance of cooperatives in the overall economy) has some similarities with the European model.⁹ Of course, such categorizations are oversimplifications, and every country and region will have its own particular nuances in policy frameworks. This will be particularly marked between developed and developing countries where the macroeconomic policy agendas will likely be very different.

³ <https://commissioning.connecttosupport.org/s4s/WhereILive/Council?pagelId=1943>.

⁴ https://www.researchgate.net/publication/336944401_The_Rise_of_Hybrids_A_Note_for_Social_Entrepreneurship_Educators.

⁵ https://ec.europa.eu/growth/sectors/social-economy/cooperatives_en.

⁶ <https://www.unenvironment.org/resources/report/state-sustainable-finance-united-states>.

⁷ <https://www.adb.org/publications/sustainable-finance-japan>.

⁸ <https://www.mas.gov.sg/development/sustainable-finance>

⁹ <https://www.lse.ac.uk/granthaminstitute/news/what-next-for-sustainable-finance-in-india/>; and <http://www.caledonia.org.uk/verma.htm>.

At the transnational level, the establishment of the United Nations (UN) Sustainable Development Goals (SDGs)¹⁰ in 2015 requires significant financing across its 17 areas of action. As of 2020, the estimate is that there will be a shortfall of between \$3 trillion and \$4 trillion annually—roughly 50% of the total needed—to achieve the SDGs by 2030.¹¹ Filling this funding gap has been identified as a key objective of sustainable finance (footnote 11).

B. Levels of Analysis

At the macro level, policy agendas for sustainable finance can be categorized by levels of analysis. From this perspective, policy can operate at four levels: transnational, regional, national, and local/city. Transnational policy actors include the UN, the World Trade Organization, and the International Monetary Fund. Regional policy actors include the European Union,¹² the Association of Southeast Asian Nations (ASEAN),¹³ the Intergovernmental Authority on Development,¹⁴ and the Organization of Central American States.¹⁵ National policy actors will be the governments of nation states. Local/city policy actors will be the local government of municipal areas. Two distinctive dynamics operate across these policy levels. On the one hand, since World War II, many of the most significant transnational and regional—intergovernmental—policy structures have emerged to foster cooperation around issues of trade and economic policy (and, more recently, around responses to the climate crisis).¹⁶ On the other hand, patterns of devolution at the national and local/city levels have emerged as a response to claims on identity and self-determination (Table 1).¹⁷

¹⁰ The Sustainable Development Goals (SDGs) were established in 2015 by the United Nations General Assembly as a part of 2030 Agenda UN Resolution. The SDGs represent a set of 17 interlinked goals designed to be a “blueprint to achieve a better and more sustainable future for all”. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

¹¹ <https://www.sustainablegoals.org.uk/filling-the-finance-gap/>.

¹² https://europa.eu/european-union/index_en.

¹³ <https://asean.org>.

¹⁴ <https://igad.int>.

¹⁵ <https://www.ohchr.org/EN/Issues/RuleOfLaw/CompilationDemocracy/Pages/SICA.aspx/>.

¹⁶ https://www.rand.org/content/dam/rand/pubs/research_reports/RR1500/RR1598/RAND_RR1598.pdf.

¹⁷ <https://www.local.gov.uk/english-devolution-learning-lessons-international-models-sub-national-governance>.

Table 1: Sustainable Finance by Policy Level

Policy Level	Example Green Finance Policy	Example Social Finance Policy
Transnational	UNEP Environment Fund	Social Investment Task Force
Regional	ASEAN Catalytic Green Finance Facility	European Social Fund
National	Green New Deal	United Kingdom Cabinet Office
Local	Donut Economy	Social Impact Bonds

ASEAN = Association of Southeast Asian Nations, UNEP = United Nations Environment Programme.

Source: Author's own research.

II. TRANSNATIONAL POLICY

At the transnational level, the United Nations Sustainable Development Goals (SDGs) framework provides the context for a global development agenda. Each of the 17 SDGs includes recommendations for policy frameworks at the national, regional, and international levels.¹⁸ However, while these recommendations engage with economic issues, they do not set out specific sustainable finance objectives and, primarily, are designed as guidelines with which individual countries can interpret in the local political economy context. Nevertheless, the SDGs engage with sustainable finance in terms of the issuance of SDG and SDG-related bonds. In acknowledgement of this, in 2020, the United Nations Development Programme (UNDP) SDG Impact published impact standards for such debt instruments.¹⁹

A. Transnational Green Finance Policy

1. Paris Agreement

The most important transnational policy initiative to address the climate crisis is the Paris Agreement signed in 2016.²⁰ The Paris Agreement was initially signed by 55 countries- which accounted for roughly 55% of the total global greenhouse gas emissions- and required each to agree to build a policy agenda that would limit climate warming to less the 2 degrees centigrade (2C) up to 2023. In terms of green finance, a key element of the Paris Agreement included a

¹⁸ <https://sdgs.un.org>.

¹⁹ <https://sdgimpact.undp.org/sdg-bonds.html>.

²⁰ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

commitment from developed countries to mobilize \$100 billion a year in climate finance by 2020 and to continue investing at this level until 2025. Such green finance aimed to target both the carbon mitigation and climate adaptation required to address the climate crisis often as catalytic capital focused on developing climate adaptation technologies that could not access mainstream finance. However, the Paris Agreement did not specify any particular green policy agendas for its signatories and has been criticized for lack of clear objectives and transparency.²¹

2. UNEP Environment Fund

Within the UN, the United Nations Environment Programme (UNEP)²² manages an Environment Fund²³ to provide flexible funding to partners worldwide. In 2019, the Environment Fund provided \$70 million to support seven thematic areas, including capacity building and green technology transfer; outcomes-based planning and management; research and knowledge (such as the Global Environment Outlook)²⁴ on emerging environmental issues via science-policy platforms that bring together scientists, governments, industrial and international organizations, and civil society; and advocacy and awareness raising.²⁵ In addition, the UNEP manages a range of funds that are focused on specific projects and themes on behalf of the Global Environment Facility—the Green Climate Fund—and the European Commission (EC).

B. Transnational Social Finance Policy

1. Social Investment Task Force

In addition to developing a national sustainable/impact finance policy agenda, the Government of the UK has been the chief global pioneer in terms of transnational set of policy innovations. However, despite a strong focus on national policy, from the beginning the UK also focused on developing a transnational policy agenda. An important driver of these innovations was the Social Impact Investment Task Force (SITF).²⁶ Established by the Government of the United Kingdom in 2013 and coordinated by the Cabinet Office, the SITF was given a remit to grow the impact

²¹ <https://insideclimatenews.org/news/07112019/paris-climate-agreement-pledges-lack-urgency-ipcc-timeline-warning>; and <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2018/mar/28/climate-scientists-debate-a-flaw-in-the-paris-climate-agreement>.

²² <https://www.unep.org>.

²³ <https://www.unep.org/about-un-environment-programme/funding-and-partnerships/funding-facts/environment-fund>.

²⁴ <https://www.unenvironment.org/global-environment-outlook>.

²⁵ <https://www.unep.org/about-un-environment-programme/funding-and-partnerships/funding-facts/environment-fund>.

²⁶ <https://www.gov.uk/government/groups/social-impact-investment-taskforce#members-of-the-taskforce>.

investment market globally. Members of the task force included representatives from Australia, Canada, France, Germany, Italy, Japan, the UK, and the US; and the EU and development finance institutions (DFIs).²⁷

The SITF established a range of topic-specific working groups to agree to a set of key principles and approaches, provide relevant examples, and draft papers to produce recommendations for policy actors. Working groups were set up in the following areas: impact measurement,²⁸ asset allocation,²⁹ international development and impact investing,³⁰ and mission alignment.³¹

In addition to the working groups, the SITF oversaw the preparation of a report on the global social investing market by the Organisation for Economic Co-operation and Development. The Organisation for Economic Co-operation and Development published its report in 2015.³² The SITF members also each developed a national advisory board (NAB) to examine ways of accelerating the growth of the impact investing market in their own country/region. These NABs brought together leaders of organizations that are active in impact investing, philanthropic foundations, social enterprises, and mainstream investment organizations. Each NAB produced an annual report, including policy recommendations.

²⁷ Members of the task force included representatives from the UK (Sir Ronald Cohen, BSC; and Kieron Boyle, Cabinet Office); Canada (Tim Jackson, MaRS Centre for Impact Investing; and Siobhan Harty, Employment and Social Development Canada); the EU (Peter Blom, Triodos Bank, and Ulf Linder, EC); France (Hugues Sibille, Crédit Coopératif; Nadia Voisin, Ministry of Foreign Affairs; and Claude Leroy-Themeze, Treasury, Ministry of Economy and Finance); Germany (Brigitte Mohn, Bertelsmann Foundation; and Susanne Dorasil, Ministry for Economic Cooperation and Development); Italy (Giovanna Melandri, Uman Foundation; Mario Calderini, Polytechnic University of Milan; and Mario La Torre, La Sapienza University, Rome); Japan (Shuichi Ono, Nippon Foundation; and Seiichiro Takahashi, Ministry of Foreign Affairs); US (Matt Bannick, Omidyar Network, and Don Graves, Office of the Vice-President, the White House); Australia (observer) (Rosemary Addis, Impact Investing Australia); DFIs (Elizabeth Littlefield, OPIC); Matthew Bishop (The Economist) acted as the official reporter.

²⁸ This group sought to develop a set of general guidelines for impact measurement practice for use by social impact investors globally to ensure that impact measurement is widely recognized and employed as a fundamental part of the practice of social impact investing. The group was chaired by Luther Ragin, Jr. from the Global Impact Investing Network and Tris Lumley from New Philanthropy Capital.

²⁹ This group focused on how capital can be attracted to social impact investment from specific investor communities, such as foundations, endowments, pension funds, commercial banking institutions, investment banks, and individuals. The group was chaired by Harvey McGrath from Big Society Capital (BSC).

³⁰ This group explored the role of impact investment in international development. This group was chaired by Sonal Shah from the Case Foundation.

³¹ This group examined issues, such as corporate forms, governance, and legal protection as they relate to social ventures and mission-driven businesses. The group was chaired by Cliff Prior from UnLtd.

³² <https://www.oecd.org/sti/social-impact-investment-9789264233430-en.htm>.

In 2015, the SITF was superseded by the Global Steering Group for Impact Investment (GSGII).³³ By 2020, the GSGII had 32 NABs across 28 countries. Of these, four represent Asia: Bangladesh, Japan, India, and the Republic of Korea (ROK).

III. REGIONAL POLICY

A. Regional Green Finance Policy

1. European Green Deal

In 2019, the EU launched a European Green Deal focused on addressing climate change and environmental degradation across the world focused on two objectives: to reduce to zero net emissions of greenhouse gases by 2050, and to decouple economic growth from resource use.³⁴

While the European Green Deal does not specify building the green finance market as an objective, it does encompass the EU Emissions Trading System,³⁵ which is the largest carbon trading market in the world. The Emissions Trading System works on the “cap and trade” principle where a cap is set on the total amount of certain greenhouse gases that can be emitted by companies covered by the system. Over time, the cap is gradually reduced so that total emissions fall. Within the cap framework, companies receive or can buy emission allowances, which they can trade with one another as needed. They can also buy limited amounts of international credits from emission-saving projects around the world. The limit on the total number of allowances available ensures that they have a value. After each year, a company must surrender enough allowances to cover all its emissions, otherwise, heavy fines are imposed. If a company reduces its emissions, it can keep the spare allowances to cover its future needs or else sell them to another company that is short of allowances. Trading brings flexibility that ensures emissions are cut where it costs least to do so. A robust carbon price also promotes investment in clean, low-carbon technologies.

2. European Budget Commitment

Separate from the EU Green Deal is a specific commitment from the EU to allocate a minimum of 20% of the total EU budget to climate-related projects. This includes managing a €864 million

³³ <https://gsgii.org>.

³⁴ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en.

³⁵ <https://ec.europa.eu/clima/policies/ets>.

program of climate action to develop and implement innovative ways to respond to climate challenges by allocating grants and catalytic investments.³⁶

3. ASEAN Catalytic Green Finance Facility

In 2019, the Asian Development Bank (ADB) launched the ASEAN Catalytic Green Finance Facility (ACGF). The ACGF is an ASEAN Infrastructure Fund initiative that provides financial support to governments in Southeast Asia to develop and deliver infrastructure projects that promote environmental sustainability and contribute to climate change goals.³⁷ Specifically, the ACGF provides loans and technical assistance for sovereign green infrastructure projects on sustainable transport, clean energy, and resilient water systems. The ACGF aims to catalyze private capital by mitigating risks through innovative finance structures. The ACGF will mobilize a total of \$1 billion, including \$75 million from the ASEAN Infrastructure Fund, \$300 million from ADB, \$336 million from KfW, €150 million from the European Investment Bank (EIB), and €150 million from Agence Française de Développement.³⁸

B. Regional Social Finance

1. European Social Fund

Within the EU, the European Social Fund (ESF)³⁹ is the primary financial instrument deployed to finance initiatives focused on creating employment and promoting economic and social cohesion across its member states. The ESF aims to be redistributive by concentrating its spending on the less-developed regions of the EU. The ESF is one of several European Structural and Investment Funds, which are dedicated to improving social cohesion and economic well-being across the regions of the EU.

ESF finance is used to co-fund national, regional, and local projects that improve the levels of employment, the quality of jobs, and the inclusiveness of the labor market in the less-developed member states and their regions. ESF spending amounts to roughly 10% of the EU's total budget.

³⁶ https://ec.europa.eu/clima/policies/budget/life_en.

³⁷ <https://www.adb.org/what-we-do/funds/asean-catalytic-green-finance-facility/main>.

³⁸ <https://www.adb.org/publications/asean-catalytic-green-finance-facility>.

³⁹ <https://ec.europa.eu/esf/home.jsp>.

IV. NATIONAL POLICY

A. National Green Finance Policy

1. Green Finance Taskforce

In 2017, the Government of the UK established a Green Finance Taskforce⁴⁰ to accelerate the growth of green finance and the UK's low carbon economy.⁴¹ The Green Finance Taskforce set out a series of recommendations on how the government and the private sector could work together to make green finance an integral part of the UK financial services sector, including boosting investment into innovative clean technologies, driving demand and supply for green lending products, setting up Clean Growth Regeneration Zones, improving climate risk management with advanced data building a green and resilient infrastructure pipeline, and issuing a sovereign green bond.⁴² In 2021, the UK government published a 'roadmap' for sustainable finance⁴³ and - at the COP26 meeting - announced new carbon disclosure regulations, the first by any G20 country.⁴⁴

2. Green New Deal

Since 2018, there have been various policy discussions in the US concerning a Green New Deal.⁴⁵ Referring back to the New Deal introduced by President Franklin D. Roosevelt to address the Great Depression, the Green New Deal proposes a range of legislation to address the climate crisis. The Green New deal was relaunched under the Biden administration in 2021.⁴⁶ However, despite strong support from the Democratic Party, the Green New Deal has failed yet to win majority support in the US Congress.

3. National Social Finance Policy

The Government of the UK pioneered a wide range of policy innovations at the national level to support the growth of the social/impact finance market. Based within the UK Cabinet Office, and

⁴⁰ <https://www.gov.uk/government/publications/accelerating-green-finance-green-finance-taskforce-report>

⁴¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820284/190716_BEIS_Green_Finance_Strategy_Accessible_Final.pdf

⁴² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/703816/green-finance-taskforce-accelerating-green-finance-report.pdf

⁴³ <https://www.gov.uk/government/publications/greening-finance-a-roadmap-to-sustainable-investing>

⁴⁴ <https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law>

⁴⁵ <https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html>

⁴⁶ <https://www.reuters.com/world/us/ahead-bidens-climate-summit-lawmakers-relaunch-green-new-deal-2021-04-20/>

later the Department for Culture, Media and Sport (DCMS), the UK social/impact finance policy agenda continued across the change of government from Labour to a Conservative-Liberal Democrat coalition in 2010.⁴⁷

V. LOCAL POLICY

A. Local Green Finance Policy

1. Donut Economy

At the local/city level, policy actors have also introduced innovative green finance policies. For example, in 2020, Amsterdam adopted the Donut Economy as an integral part of its economic policy planning.⁴⁸ A number of cities have also adopted low emission policies for transport to reduce carbon dioxide and nitrous oxide emissions,⁴⁹ primarily in Europe (Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, and the UK)⁵⁰ and Asia (the People's Republic China [PRC]; Hong Kong, China; and Japan).⁵¹

B. Local Social Finance Policy

1. Social Impact Bonds

While many cities and towns have systems of local governance, social policy is typically the purview of national governments. However, local policy actors have engaged with social impact bonds (SIBs). For example, in 2012, the Great London Authority, in partnership with the Ministry for Housing, Communities and Local Government, commissioned two SIBs to reduce rough sleeping among a cohort of 830 entrenched rough sleepers (divided into two cohorts of 415 individuals).⁵²

Thames Reach was one of the two charity organizations selected to deliver one of the SIBs following a competitive bidding process. Thames Reach used a “navigator” model to provide a holistic approach to supporting the complex individual needs of the members of each cohort. The

⁴⁷ Teasdale and Nicholls (2020).

⁴⁸ <https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy>.

⁴⁹ <https://tfl.gov.uk/modes/driving/low-emission-zone/about-the-lez?intcmp=2263>

⁵⁰ <https://www.theaa.com/european-breakdown-cover/driving-in-europe/european-low-emission-zones>.

⁵¹ <https://wrirosscities.org/our-work/project-city/beijing-low-emission-zone>;

<https://www.legco.gov.hk/research-publications/english/essentials-1415ise09-low-emission-zone.htm>; and

<https://www.transportpolicy.net/standard/japan-emissions-tokyo-retrofit/>.

⁵² <https://golab.bsg.ox.ac.uk/knowledge-bank/case-studies/london-rough-sleepers-thames-reach/>.

program aimed to get rough sleepers off the streets and into stable accommodation. The overall objective was to increase the prospects of employment or training, as well as stabilizing health. Participants had individual intervention plans, personalized budgets, and personal navigators responsible for connecting them with the most appropriate programs for their circumstances. In comparison to existing services, the approach was much more flexible and provided a more focused, longer-term relationship with a single advocate. The SIB was broadly considered to be a success.⁵³

2. Fair Trade Towns

A different example of city-led social/impact finance is the certification scheme for Fair Trade Towns.⁵⁴ The Fair Trade Town campaign was launched in 2001 by Oxfam in Garstang, Lancashire. Soon after this, the UK-based Fairtrade Foundation developed a set of Fair Trade Town Goals and an Action Guide to encourage others to follow Garstang. The model was designed to be open all citizens to self-proclaim their town (or other local geographical area) as a region that complies with some general Fair Trade criteria.

In some countries, Fair Trade Town status was awarded by a recognized Fair Trade certification body (such as the Fairtrade Foundation in the UK, TransFair Canada in Canada) describing an area which is committed to the promotion of Fair Trade certified goods. The certification criteria in the UK were:

- Local government pass a resolution supporting Fair Trade and agree to serve Fair Trade tea and coffee at its meetings and in its offices and restaurants.
- A range of (at least two) Fair Trade products is readily available in the area's shops and local hospitality outlets.
- Target for number of retail outlets: population of < 10,000 - 1 retail outlet per 2,500; population < 200,000 - 1 retail outlet per 5,000; population of < 500,000 - 1 retail outlet per 10,000.

⁵³ <https://www.gov.uk/government/publications/london-homelessness-social-impact-bond-evaluation>.

⁵⁴ <http://www.fairtradetowns.org>.

- Target for number of catering outlets: population of < 10,000 - 1 catering outlet per 5,000; population < 200,000 - 1 catering outlet per 10,000; population of < 500,000 - 1 catering outlet per 20,000.
- Fair Trade products are used by a range of local work places (estate agents, hairdressers) and community organizations (churches, schools).
- Attract media coverage and popular support for the Fair Trade movement.
- Convene a local Fair Trade steering group to ensure continued commitment to its Fair Trade Town status.

Subsequent to the Fair Trade Towns initiative, other place-based schemes emerged to recognize the status of a Fair Trade Church, a Fair Trade City, a Fair Trade Village, a Fair Trade Zone, a Fair Trade Borough, a Fair Trade Island, a Fair Trade Country, and a Fair Trade University. By 2020, more than 2,000 Fair Trade Towns were recognized globally.

VI. POLICY ROLES

Policy actors can play an important role in accelerating the growth of sustainable finance. First, policy actors can play a role in encouraging the deployment of sustainable finance in terms of creating incentives for investors to increase the supply side of such capital. Second, policy actors can support the development of investment instruments and fund structures suited specifically to sustainable finance. Third, policy actors can set a regulatory agenda to standardize ESG measures of performance. Beyond these three agendas, policy actors can play a role in building the demand side of investable ESG projects by supporting the development of the pipeline of investable projects and deals through capacity building and knowledge sharing. Governments can also use their own commissioning budget to invest in sustainable finance models directly. Finally, in terms of building the sustainable market infrastructure more generally, policy actors can fund robust research to underpin the development of the sustainable finance market, as well as directly investing into intermediary funds.

Policy agendas for sustainable finance can be clustered into two types of action: policy *for* sustainable finance and policy *as* sustainable investment. The former has an external focus, in which policy actors deploy various policy levers to grow the sustainable finance market via direct and indirect financing and regulatory and legislative support. The latter has an internal focus, in which policy actors use public sector reforms to reshape policy action itself (specifically public sector commissioning) to act as sustainable finance. In each category, a variety of policy levers are available for policy actors to deploy to shape the sustainable finance market. These are considered next.

VII. POLICY LEVERS

To enact policy agendas aimed at sustainable finance, policy actors can employ a wide range of policy levers to achieve their specific aims. These can be broadly categorized as either policy *for* sustainable finance or policy *as* sustainable finance.

A. Policy *for* Sustainable Finance

In terms of policy *for* sustainable finance, policy actors can participate directly in the market with investments that take equity or debt positions in sustainable funds and deals to grow the supply side of capital. Policy actors can also deploy grants directly to build the capacity and investment readiness of the demand side of the market, as well as to fund research and knowledge networks to provide an impartial evidence base for the market.

A second policy lever is indirect investment that can be deployed as co-investment, often as catalytic capital, such as guarantees or other subordinated finance at concessionary rates. Such co-investment may also leverage more mainstream finance into sustainable finance deals and funds.

Legislation offers a different policy lever to support the sustainable finance market. New legal forms of incorporation for sustainable companies provide a demand-side endorsement of authenticity and impact legitimacy that may attract more investors into the market, while also differentiating “genuine” sustainable investments from green- or impact-washing alternatives.

Moreover, legislation can be used to unlock dormant assets to capitalize sustainable finance intermediaries, such as a wholesale sustainable investment bank.

Fiscal policy can also be deployed to use tax incentives to change the risk-return dynamics of sustainable finance deals for supply-side investors, much as the tax exemption embodied in charity law encourages philanthropy. Equally, fiscal policy can punish or reward good corporate performance, most obviously via a carbon tax.

Finally, regulation can be used to mandate standards of impact data and disclosure, which would affect both supply-side and demand-side actors by providing a common taxonomy of impact performance. It can also mandate banking standards and ESG asset management.

B. Policy *as* Sustainable Finance

In terms of policy *as* sustainable finance, policy actors can use public sector spending as a tool of sustainable finance, specifically in terms of commissioning policy.

Public sector finance that pays for outcomes and impacts, as opposed to paying for inputs or processes, can catalyse the demand side of the sustainable finance market by allowing social enterprises to scale. Outcomes-based contracts - such as payment-by-results or pay-for-success models - also allow policy actors to deploy public finance as the payments in impact bonds, bringing in private capital as the investor for outcomes and further building the supply side. Examples of each of these policy levers will be considered in section VIII.

VIII. POLICY LEVERS IN ACTION

A. Direct Investment

Policy actors can deploy public funding directly as either investments or grants to support the growth of the sustainable finance market. Typically, direct investments have been at the national and transnational levels.⁵⁵

1. National Level Policy

In terms of national level policy agendas, governments have focused on issuing green and social bonds to capitalize environmental and public sector projects.

a. Green Bonds

The market for green bonds⁵⁶ has been growing rapidly. In 2019, \$257.7 billion of green bonds were issued globally—a growth of 51% on the 2018 total of \$167.3 billion. Of these, Europe accounted for 45% while the Asia and Pacific market issued 25% with PRC, the largest Asian issuer.⁵⁷ Some estimates suggest that this market could account for up to \$1 trillion in new issuances by 2021.⁵⁸ In 2019, the largest cumulative issuers of green bonds were the US Federal National Mortgage Association (\$22.8 billion), the German Reconstruction Credit Institute (\$9.02 billion), the Dutch State Treasury Agency (\$6.66 billion), France (\$6.57 billion), and the Industrial and Commercial Bank of China (\$5.85 billion) (footnote 56). Moreover, in a 2019, a survey of 135 hedge funds in 13 countries with assets under management of \$6.25 trillion 84% reported “an increased interest in ESG-orientated funds and strategies over the last 12 months”.⁵⁹ Broadly speaking, there are six forms of green bond:⁶⁰

- Corporate bonds issued by a corporate entity to finance asset acquisitions.
- Project bonds backed by single or multiple projects for which the investor has direct exposure to the risk of the project.

⁵⁵ However, at the national level, the Government of the United Kingdom used public finance to invest directly into Bridges Fund Management—an impact investing intermediary—to help capitalize and de-risk its first fund in 2010 and also to capitalize part of its subsequent first social enterprise fund with a total of £20 million.

⁵⁶ Though equity issues in green technology companies are also used. <https://www.nasdaq.com/solutions/green-equity-indexes>.

⁵⁷ <https://www.climatebonds.net/resources/reports/2019-green-bond-market-summary>.

⁵⁸ <https://expertinvestoreurope.com/green-bonds-forecast-investments-to-break-through-1tm/>.

⁵⁹ <https://www.cnn.com/2020/02/14/esg-investing-numbers-suggest-green-investing-mega-trend-is-here.html>.

⁶⁰ <https://www.oecd.org/environment/cc/Green%20bonds%20PP%20%5Bf3%5D%20%5B1r%5D.pdf>.

- Asset-backed securities collateralized by one or more specific projects, usually providing recourse only to the assets.
- Supranational, subsovereign, or agency bonds issued by international financial institutions such as the World Bank or the EIB.
- Municipal bonds issued by a municipal government, region, or city. This also includes sovereign bonds.
- Finance sector bonds issued by a financial institution to raise capital to finance on-balance-sheet lending (such as loans) to green activities.

All the major global stock exchanges have listings for green bonds as public debt.⁶¹ While the evidence is contested, there appears to be some suggestion that ESG/green investments may outperform the risk-adjusted market average.⁶²

b. Social Bonds

Social bonds are any type of bond where the proceeds will exclusively be used to finance (or refinance) projects focused on water infrastructure, health or education sector, affordable housing, work integration, food security, and access to services. Social bonds are designed directly to address or mitigate a specific social issue often involving a particular target population. In 2020, the International Capital Market Association published a set of Social Bond Principles,⁶³ with four core components to be calibrated to the stated social purpose of the bond: the use of finance, the processes for project evaluation, the management of finance, and the reporting impact.

The first social bond was issued in Spain by the Instituto de Credito in 2015. It focused on offering sub-market loans to small and medium-sized organizations in deprived areas with the aim of accelerating economic growth and creating local jobs. The 3-year social bond raised €1 billion from a range of international investors. Also in 2015, this was followed by a second €1 billion Spanish social bond issued by Kutxabank to provide affordable housing in the Basque country.⁶⁴

⁶¹ <https://www.forbes.com/sites/brendancoffey/2019/11/12/esg-stocks-are-having-a-fantastic-year/?sh=6fd53e352fbb>; and <https://www.climatebonds.net/green-bond-segments-stock-exchanges>.

⁶² <https://www.msci.com/esg-ratings>.

⁶³ <https://www.icmagroup.org/green-social-and-sustainability-bonds/social-bond-principles-sbp/>.

⁶⁴ <https://www.gbm.hsbc.com/-/media/gbm/reports/insights/social-bonds.pdf>.

In 2017, the International Finance Corporation (IFC) launched a Social Bond Program that offered investors an opportunity to allocate social bond investments that are focused on the SDGs with a triple A-rated credit risk. Finance from the bonds focused on supporting banking for women and inclusive business programs, which benefit underserved populations in emerging markets, including women and low-income communities with limited access to essential services, such as basic infrastructure and finance. By 2020, the IFC had issued 39 social bonds raising \$3.1 billion.⁶⁵ In 2020, the SDG Impact project, within the UNDP, launched a set of SDG Impact Standards for SDG Bonds.⁶⁶ There were six standards under four topic areas: strategic intent and impact goal setting, impact measurement and management, transparency and comparability, and context and governance.

By 2020, total social bond issuance had reached \$33.1 billion, up from \$6.2 billion in 2019. This accounted for 28% of the total sustainable finance bond market.⁶⁷ As the social bond market has grown, there has been an increasing demand for standards of impact reporting and disclosure.⁶⁸

2. Transnational Policy

At the transnational level, the focus has been largely on funds.

a. LIFE Programme

In terms of transnational level policy making, the EU has pioneered a number of innovations. For example, in 1992, the EU launched the LIFE programme as a funding instrument for the environment and climate action. From 2014 to 2020, the LIFE programme had a budget of €3.4 billion.⁶⁹ Subsequent to this, in 2015, the EU launched a Private Finance for Energy Efficiency Program as a joint agreement between the EIB and the EC to address the limited access to adequate

⁶⁵ https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/about+ifc_new/investor+relations/ir-products/socialbonds.

⁶⁶ https://sdgimpact.undp.org/assets/SDG-Impact-Standards-for-Bonds_First-Public-Consultation-Draft.pdf.

⁶⁷ https://cib.bnpparibas.com/sustain/capital-markets-and-covid-19-have-social-bonds-come-of-age-_a-3-3503.html.

⁶⁸ https://www.sustainalytics.com/sustainable-finance/social-bonds/?utm_term=&utm_campaign=Leads-Search-20&utm_source=adwords&utm_medium=ppc&hsa_acc=4619360780&hsa_cam=11145778763&hsa_grp=108965194933&hsa_ad=465929335428&hsa_src=g&hsa_tgt=dsa-437115340933&hsa_kw=&hsa_mt=b&hsa_net=adwords&hsa_ver=3&gclid=Cj0KCQjwufn8BRCwARIsAKzP695DhC7NGecVbGtOT9i-GUr-J5f81BjR3oE_FH11KyEESpDqBOS96uoaAhQ7EALw_wcB.

⁶⁹ <https://ec.europa.eu/easme/en/life>.

and affordable commercial financing for energy efficiency investments. The LIFE programme was managed by the EIB and funded by the Programme for the Environment and Climate Action.⁷⁰ The LIFE programme committed €80 million to fund credit risk protection and fund expert support services. The EIB then leveraged this finance to invest €480 million in long-term financing to support energy efficiency programs.

b. European Investment Fund

Similarly, the European Investment Fund (EIF) has focused on what it calls “social” impact investing into projects working on social cohesion. EIF is the only social investing wholesaler developing a pan-EU strategy. By 2020, EIF managed \$1.1 billion invested in microfinance and social enterprises.⁷¹ The fund aimed to provide support to develop the intermediary space to address a market failure in the access to finance for social enterprises. Specifically, the EIF developed a Social Impact Accelerator (SIA)⁷² and an EFSI Equity Instrument.⁷³ The SIA is a fund-of-funds wholesaler managed by EIF and invests in other social impact funds which target social enterprises across Europe. The SIA closed in 2015 at €271 million across 19 funds with a 3.5 times leverage. The SIA brought together resources from the EIB Group and external investors, including Credit Cooperatif and Deutsche Bank, as well as the Finnish group SITRA and the Bulgarian Development Bank. The EFSI Equity Instrument was a joint venture between the EC and the EIF to fund further innovations in the fields of artificial intelligence, blockchain, space technology, impact investing, and blue economy. Within this, and in common with the SIA, the EFSI Equity Instrument focused on supporting the intermediary sector to provide more capital to social enterprises. Across the EU, there is also a significant green finance sector with a sustainability and climate focus.⁷⁴

c. European Fund for Strategic Investments

Created in 2015, the European Fund for Strategic Investments is a joint venture between the EC and EIB that is aimed at building investment infrastructure. Within this, \$164.6 million has been

⁷⁰ <https://www.eib.org/en/products/mandates-partnerships/pf4ee/index.htm>.

⁷¹ <https://gsgii.org/reports/country-profile-european-union/>.

⁷² https://www.eif.org/what_we_do/equity/sia/index.htm.

⁷³ https://www.eif.org/what_we_do/equity/efsi/index.htm.

⁷⁴ <http://www.impact-investing.eu>.

committed to co-invest with impact investing intermediaries to fund early-stage social enterprises as well as payment-by-result models.

d. Programme for Employment and Social Innovation

The Programme for Employment and Social Innovation (EaSI) was launched in 2014. Within this program, there were three impact investment initiatives managed by the EIF: the EaSI Guarantee (\$446.1 million), the EaSI Capacity Building Investment Window (€16 million), and the EaSI Funded (Debt) Instrument (€220 million). Each aimed to increase the flow of capital to social enterprise by building the intermediary sector and de-risking impact investments. As of 2015, 15 EU countries had enacted some form of regulation that specifically targets social enterprises.⁷⁵

e. European Bank for Reconstruction and Development

In 2015, the European Bank for Reconstruction and Development (EBRD) committed to allocate 40% of its annual investment (by 2020) into a Green Economy Transition via direct green investment, technical support, policy advocacy, and concessional co-investing.⁷⁶ Subsequently, by 2019, the EBRD had issued €5.2 billion in 92 green bonds including a \$700 million, 5-year, Climate Resilience Bond. In 2020, the EBRD issued a new set of Green Economy Transition objectives for 2021–2025.

3. Development Finance Policy

DFIs also play an important role as transnational investors.

a. Asian Development Bank

ADB provides lending facilities primarily to the public sector with only 20% going to the private sector.⁷⁷ ADB's lending focuses on a range of operational areas, including education, environmental sustainability, finance sector investment, infrastructure, and regional cooperation and integration. ADB also offers loans on commercial terms primarily to middle-income countries in Asia and concessionary loans with lower interest rates to poorer countries in the region. ADB

⁷⁵ <https://gsgii.org/reports/country-profile-european-union/>.

⁷⁶ <https://www.ebrd.com/what-we-do/get.html>.

⁷⁷ <https://www.adb.org/what-we-do/public-sector-financing/main>.

obtains its funding by issuing bonds on the world's capital markets. It also relies on the contributions of member countries, retained earnings from lending operations, and the repayment of loans. In 2017, ADB's total investments (including grants) totalled \$28.9 billion.⁷⁸ ADB provides direct financial assistance in the form of debt, equity, and mezzanine finance to private sector companies for projects that have clear social benefits beyond the financial rate of return. ADB's participation is usually limited, but it also leverages funds from commercial sources to finance its projects by holding no more than 25% of any given transaction. In 2020, ADB raised a \$118 million rupee-linked bond to support the development of the India International Exchange.⁷⁹

b. CDC Group

The CDC Group also provides sustainable finance in terms of flexible, long-term growth capital to businesses in developing countries—often co-investing with other financial institutions—via three instruments: direct equity, intermediated equity, and debt.⁸⁰ Direct equity typically takes a minority position in deals investing in financial services, infrastructure, health, manufacturing, food and agriculture, construction and real estate, and education with a ticket size of \$10 million–\$150 million. Intermediated equity provides capital to other investment funds across Africa and South Asia. Debt is issued as project finance, corporate lending, trade finance, and lending to financial institutions with a ticket size of \$20 million–\$100 million.

The CDC invests in country-focused funds, as well as those operating across regions with a ticket size of \$5 million–\$150 million.

B. Grants

In terms of direct investment as grants, policy actors can use this finance to build capacity and investment readiness on the demand side of the sustainable finance market.

1. National Level Policy

a. Policy of the United Kingdom

⁷⁸ <https://www.adb.org/news/adb-2017-operations-reach-289-billion>.

⁷⁹ <https://economictimes.indiatimes.com/markets/bonds/adb-raises-118-million-from-rupee-linked-bonds/articleshow/74313917.cms>.

⁸⁰ <https://www.cdcgroup.com/en/our-approach/our-approach-to-investing/our-investment-solutions/types-of-capital/>.

At a national level, the UK used grants in a variety of innovative ways to build the capacity of the social enterprise sector to take investment. These funds focused on growing the demand side of the social/impact finance marketplace.

i. Capacity Building

In 2000, the government mobilized £100 million of public finance, formerly in the Millennium Fund,⁸¹ to create an endowment for UnLtd⁸²—a social enterprise start-up and accelerator organization.

In 2003 and 2006, government grants financed two Futurebuilders Funds (managed by the Social Investment Business and totaling £215 million)⁸³ and the Investment and Contract Readiness Fund (ICRF) 2012–2015 (£60 million)⁸⁴ that aimed to build the capacity of the social economy, in the first case, to grow and scale and, in the second, to be able to tender successfully for government contracts. The ICRF was a great success. The £13.2 million it deployed in capacity-building grants supported 155 ventures (with an average grant size of £85,000) to win contracts and other investments totaling £233 million: every £1 of ICRF grant unlocked £18 in contracts and investments.⁸⁵

ii. Access Foundation

In 2015, the Access Foundation was launched⁸⁶ by Big Society Capital (BSC) in collaboration with the National Lottery Community Fund and the Government of the UK Cabinet Office (responsibilities now transferred to the DCMS). The Access Foundation’s objectives were to support charities and social enterprises in England “to become more financially resilient and self-reliant so that they can sustain or increase their impact”.⁸⁷ Specifically, the aim was to drive the economic development of charities and social enterprises, such that they could diversify their

⁸¹ <https://www.gov.uk/government/organisations/millennium-commission>.

⁸² <https://www.unltd.org.uk>.

⁸³ <https://www.sibgroup.org.uk/futurebuilders-england>.

⁸⁴ <https://www.sibgroup.org.uk/investment-and-contract-readiness-fund>.

⁸⁵ <https://www.sibgroup.org.uk/sites/default/files/files/ICRF%20Evaluation.pdf>.

⁸⁶ <https://access-socialinvestment.org.uk>.

⁸⁷ <https://access-socialinvestment.org.uk/us/what-we-do/>.

income base and become investment ready to access impact investing and provide a pipeline of potential deals for a BSC co-invested fund.

The Access Foundation's capital structure consisted of a £60 million endowment from DCMS and £45 million of "blended growth" capital from split equally between BSC and the National Lottery Community Fund.⁸⁸ This combination of endowment and blended capital allows the Access Foundation to combine grants with sub-market loans in various deal structures to address a capital gap in terms of investment readiness in the social sector. At the same time, it aims to create new investment opportunities for the funds with which BSC co-invests. The Access Foundation developed three programs to address its objectives (footnote 85):

- **Growth Fund.** Launched in 2015 as a co-investment fund, the £45 million Growth Fund offered a range of grants and small-scale unsecured loans to charities and social enterprises to bridge a gap in the market for small ticket, sub-market, finance. By 2018, it had co-invested with 16 other funds (with 15 social investors) a total of £50 million in capital allocated to 250 small social organizations (<50% with turnover >£250,000) with an average investment size of £64,000. This contrasts with the median investment size of £250,000.
- **Reach Fund.** Launched in 2016, the Social Investment Business was selected to run the Reach Fund to build investment capacity in social enterprises. By 2018, more than 220 grants totaling more than £3 million had been made. The median turnover of the grantees was > £100,000. Seventy of those grantees went on to raise investment totaling more than 17 million.
- **Impact Management Programme.** Launched in 2017 and delivered in partnership with New Philanthropy Capital, the program provided £1.8 million worth of grants to build impact management skills and capacity in charities and social enterprises who are seeking impact investment or new government contract opportunities.

⁸⁸ <https://access-socialinvestment.org.uk/us/the-story-so-far/>.

In addition to these core programs, and in collaboration with BSC, the Access Foundation also developed the Good Finance website⁸⁹ in 2016 as a resource to provide advice and examples to help social enterprises access finance. In the first 3 years, the website was used by 74,000 users who engaged with 80 investors and advisors. In 2017, in partnership with the Barrow Cadbury Trust, the Access Foundation also created the Connect Fund as another initiative to build the impact investing infrastructure. By 2019, the Connect Fund had supported more than 50 projects around the UK with capacity building, data sharing, building networks, developing standards and templates, and sharing market information.

Finally, in 2018, the Access Foundation launched the Enterprise Development Programme to support early-stage social enterprises as a 12-month pilot scheme. The Enterprise Development Programme worked with the Social Investment Business to manage two grant products—feasibility grants and larger enterprise development grants—and with the School for Social Entrepreneurs to manage social enterprise learning in two cohorts of experiential programs for leaders working on homelessness and youth training. During the pilot phase, 92 grants were made totalling £1.25 million.

C. Indirect Investment: Catalytic Capital

Indirect investment offers opportunities to create innovative impact deal and fund structures supported by “catalytic capital” that bring in mainstream finance, specifically subordinated and first loss debt and guarantees.⁹⁰ This funding aims to build the supply side of the sustainable finance market. Further, these structures typically bring in a range of investors with different risk-return (and impact) profiles as a form of “blended finance”.⁹¹ The opportunity offered by these blended funds is to leverage in commercial capital that typically looks for a market return (or lower risk-adjusted return) into impact deals that would not provide such a return without the other

⁸⁹ <https://www.goodfinance.org.uk>.

⁹⁰ <https://www.macfound.org/programs/catalytic-capital-consortium/>. The GIIN (2020) investor report stated that 78% of its sample had engaged with catalytic capital. Within this sample, the largest segment at 72% of respondents deployed some form of “flexible” debt, though only 49% described this as “subordinate”.

⁹¹ <https://thegiin.org/blended-finance-working-group>; and <http://www.oecd.org/publications/making-blended-finance-work-for-the-sustainable-development-goals-9789264288768-en.htm>; <https://www.blendedvalue.org/blog-posts/blended-value-investing-an-initial-paper-from-the-world-economic-forum>; and <https://www.weforum.org/reports/blended-finance-toolkit>.

subordinate investors. In this sense, the structuring of blended funds and deals should bring in additional commercial capital that, otherwise, would not be deployed for impact.

1. Co-Mingling

In 2013, the UK Cabinet Office Report provided the first overview of the various emergent forms of blended funds described as “co-mingling”.⁹² The report identified three types of co-mingling fund: pari-passu, risk-reward, and but-for.

With pari-passu funds, all investors come in on equal terms as limited partners and include foundations, investment funds, individual investments, and donations deployed via a charitable trust. Risk mitigation can take the form of a cornerstone investment from a foundation, as well as shared risk across the whole portfolio.⁹³ Moreover, in these funds, impact investors can also act as path finders for more commercial capital by identifying an attractive investment opportunity through an impact lens.⁹⁴

With risk-reward funds, foundations, or other impact investors typically taking a higher-risk position but also receiving an expected higher return, this should still leverage in extra commercial investment. Such structures may also include guarantees, such as the African Agricultural Fund⁹⁵ that was structured around a blend of high-risk equity from foundations (Gatsby, Rockefeller, and Gates); subordinated/unsecured debt from a commercial bank (JP Morgan); and a 50% loan guarantee from the United States Agency for International Development that changed the risk-return profile of the commercial debt. This allowed the fund to make equity and quasi-equity investments into smallholder farmers.

⁹²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/193697/2900897_HMGCO_Co-mingling_acc.pdf.

⁹³ For example: Esmée Fairbairn Foundation in the Big Issue Invest Social Enterprise Investment Fund.

⁹⁴ As was the case with the Grameen Bank and BRAC pioneering microfinance, a market that is projected to be worth \$174.4 billion by the year 2025. <https://www.globenewswire.com/news-release/2020/04/02/2010777/0/en/Global-Microfinance-Industry.html>.

⁹⁵ <https://www.aatif.lu/home.html>.

Finally, with but-for funds, foundations, governments, or international development agencies typically invest on subordinate terms to leverage larger volumes of commercial investment to deliver impact at scale. For example, the Eye Fund⁹⁶ loan fund blended three types of capital: equity and subordinated debt from foundation and individual impact investors with senior debt provided by commercial banks, DFIs \$1.48 million of equity, and subordinated debt brought in \$13 million in senior debt at nearly 13 times leverage. The fund provided direct loans to eye care organizations across the world.

2. Impact Milestones

Beyond fund and deal structures, impact investors have also innovated in terms of deploying capital around impact milestones, for example in outcomes-linked loans, such as the social impact incentives (SIINC) designed by Roots of Impact.⁹⁷ At the deal level, this could include integrating impact milestones with other performance incentives, such as releasing capital in tranches, transferring the ownership of shares (vesting), or other options for equity buyback by the enterprise. If impact milestones are not achieved, disincentives can be built into to the deal structure, including investor exit or loan default.

At the fund level, the Bertha Centre at the University of Cape Town co-created at Green Outcomes Fund that operates in the same way as a SIINC, but at a fund level.⁹⁸ Participating fund managers committed to investing their own capital into green enterprises in order to achieve predetermined social and environmental outcomes as well as a financial return. As they achieve milestones, they can claim payment from the fund, which is capitalized by a mix of public and private grant capital. These outcome payments amounted to a top-up payment because they are much smaller than the overall investments. Outcomes-linked loans allowed outcome funders to leverage their capital to pay for a portion of the cost of impact. They are distinct from SIBs and development impact bonds (DIBs), where the full cost of outcomes are borne by the funder. Further, at the fund manager level, impact performance can be linked to reward as a form of impact bonus as is already the case with

⁹⁶ https://gsgii.org/case_studies/eye-fund/.

⁹⁷ <https://www.roots-of-impact.org/siinc/>.

⁹⁸ <https://www.greencape.co.za/content/sector/the-green-outcomes-fund>.

some ESG funds.⁹⁹ Similarly, a form of impact “carry” could link fund managers’ fees to impact performance.¹⁰⁰

3. Quasi-Equity

In the EU context, the EIB supported a quasi-equity investment in Heliatek, a world leader in organic photovoltaic and a manufacturer of solar films. As a part of a €80 million round of growth finance, the EIB contributed a €20 million loan from its European Fund for Strategic Investments,¹⁰¹ in conjunction with five other investors who raised €42 million in equity. There were also €18 million in subsidies from the State of Saxony and the European Regional Development Fund.¹⁰² In Asia, there is also growing interest in blended finance with Indonesia pioneering innovations.¹⁰³

D. Legislation

Primary legislation can be used to create new demand-side forms of incorporation or new supply-side financial requirements to access pools of dormant capital. In both, the UK has been a pioneer.

1. Community Interest Companies

In 2005, the Government of the UK launched the first new legal form of incorporation for more than 100 years, specifically aimed at social enterprises, the community interest company (CIC). By mid-2020, more than 19,000 organizations had registered as CICs.¹⁰⁴ To be eligible to register as a CIC, an organization must already be a company limited by guarantee (CLG); a company limited by shares (CLS); or a cooperative, mutual, or industrial and provident society (a form of mutual company). Registered charities are excluded. The policy objective of the CIC model was to facilitate more investment into social enterprises as a recognized legal entity that would ensure

⁹⁹ <https://www.acre.com/thought-leadership/outcomes-aligned-incentive-structures-investment-management>.

¹⁰⁰ Though this is, as yet a rare model. <https://www.mdif.org/about/funds/>.

¹⁰¹ <https://www.eib.org/en/efsi/index>.

¹⁰² <https://www.eib.org/en/press/all/2016-213-heliatek-raises-eur80-million-to-finance-large-manufacturing-expansion-and-support-worldwide-market-development>.

¹⁰³ <https://www.convergence.finance/news-and-events/news/2JxHe7gu4yCImhQa4RFcRy/view>.

¹⁰⁴ <https://communityinterestcompanies.blog.gov.uk/2020/09/09/annual-report-2019-to-2020-community-interest-companies/>.

an impact focus. In addition, every CIC is required to file an annual report to the regulator setting out some details of their social impact. A number of legal requirements are built into the CIC model: an asset lock that does not allow for a CIC to be bought out to realize an asset, such as property, a dividend payment cap (for CLSs) of 35% of net annual profits, and a performance related interest loan cap of 20% of outstanding debt (for CLGs).¹⁰⁵ These requirements were designed to discourage organizations registering as CICs that took a finance-first rather than an impact-first approach. In addition, any investment in a CIC attracts social investment tax relief. Despite these factors, it still remains unclear how much new capital has actually been raised by CICs.¹⁰⁶

2. Unclaimed Assets

In 2005, the Government of the UK set up a Commission on Unclaimed Assets that is tasked with exploring how unclaimed assets in dormant bank accounts, specified as having no transaction for 15 years or over could be reclaimed to benefit society.

Following the recommendations of the commission, in 2008, as a supply-side measure, the government introduced the Dormant Bank and Building Society Accounts Act.¹⁰⁷ The act specified that dormant retail bank account assets should be transferred to a new, non-statutory, body the Reclaim Fund for “good causes”.¹⁰⁸

The Reclaim Fund was administered by The Co-operative Banking Group as a 100% shareholder, which then released funds via the National Lottery Community Fund to each of the four administrative areas of the UK.¹⁰⁹ Participation by banks and building societies was voluntary. Nevertheless, 22 agreed to release their dormant assets annually, including the four big high street banks: the Hongkong and Shanghai Banking Corporation, Lloyds, Barclays, and the Royal Bank of Scotland. By 2020, £1.35 billion in dormant bank account assets had been transferred from 118,000 accounts, of which only £93 million had been reclaimed by customers or roughly 7%.

¹⁰⁵ <https://www.isonharrison.co.uk/blog/how-could-a-community-interest-company-meet-your-enterprise-needs/>.

¹⁰⁶ For example, the rather nebulous comment: “A solid number of CICs are already receiving social investment and this market has grown significantly.” <https://www.accountingweb.co.uk/business/finance-strategy/community-interest-companies-funding-for-growth/>.

¹⁰⁷ <https://www.legislation.gov.uk/ukpga/2008/31/contents>.

¹⁰⁸ <https://www.reclaimfund.co.uk/about-us/>. By 2020, 1,5000 “good causes” had been funded across the UK.

¹⁰⁹ <https://www.reclaimfund.co.uk>.

From these dormant assets, the Reclaim Fund allocated £745 million to the National Lottery Community Fund to disburse.¹¹⁰

In 2015, the Government of the UK launched a Commission on Dormant Assets to explore other sources of dormant assets from pension and insurance funds, and investment and wealth management portfolios. The commission reported back in 2017 and suggested that a further £1.6 billion of unclaimed assets could be accessed.¹¹¹ However, as of 2020, none of its recommendations have been implemented.¹¹²

a. Big Society Capital

Of the various “good causes” to which dormant assets have been directed, the most significant was Big Society Capital (BSC). In 2008, when the Dormant Bank and Building Society Accounts Act passed, one of its three specified purposes focused on creating a “social investment wholesaler”.

The objective was to build the supply of capital to impact investing funds by co-investment with other assets managers, while not making direct investments itself. In 2011, as a part of the “Merlin Agreement”¹¹³ that specified the terms of the financial bailout between the Government of the UK and the major UK high street banks, a commitment was included that the four largest banks should each contribute £50 million in equity into the Big Society Bank. The combination of unclaimed assets and the Merlin Bank’s equity capitalized BSC.

In 2012, BSC was launched as the world’s first wholesale impact investment intermediary.¹¹⁴ By 2019, BSC had signed £2 billion commitments with other investors, of which £1.3 billion had been drawn down. In these deals, BSC mobilized £626 million worth of dormant assets to achieve a greater than 3 times leverage of its assets.¹¹⁵ Following an initial phase of opportunistic co-

¹¹⁰ https://fr.zone-secure.net/-/Reclaim_Fund_Annual_Report_and_Accounts_2019/-/#_page=1&page=1.

¹¹¹ £715 million from investments and wealth management, £550 million from the pensions and insurance sectors, £150 million from securities, and £140 million from banks and building societies. <https://www.gov.uk/government/news/2-billion-boost-set-to-transform-charity-and-voluntary-sector-funding>.

¹¹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727189/Tackling_dormant_assets_-_recommendations_to_benefit_investors_and_society_1.pdf.

¹¹³ <https://commonslibrary.parliament.uk/research-briefings/sn06047/>.

¹¹⁴ <https://bigsocietycapital.com>.

¹¹⁵ <https://bigsocietycapital.com/investment-numbers/>.

investment, BSC focused on three categories of impact: early interventions in health and education, place-based investment that is focused on areas of deprivation, and homes and social housing.¹¹⁶

E. Fiscal Policy

1. Social Investment Tax Relief

In 2014, the Government of the UK introduced Social Investment Tax Relief (SITR).¹¹⁷ The new tax relief was specified in three ways: income tax relief of 30% on annual investments of up to £1 million with a carry back relief to the tax year preceding the year of investment; deferral that matched the investment to capital gains made in the 3 years prior to, or 1 year following, the date of the investment; and exemption of gains on subscribing for shares realised on their disposal (which will not be subject to tax provided that a claim for income tax relief is made 3 years after the date of the investment). In terms of the requirements to apply for SITR, investments must be made into a specified set of organizations: charities, CICs, community benefit societies (with an asset lock of less than 500 employees and less than £15 million in assets), and SIBs (as agreed by the DCMS) up to a maximum, per organization, of £1.5 million over the life of the organization. For the individual investee, the maximum investment was capped at £1 million per year.

The take up of SITR has been surprisingly modest. By 2016/17, only £5.1 million of investment had been subject to the tax relief against a UK Treasury projection of £83.3 million.¹¹⁸ Perhaps, this is because of a lack of infrastructure. As of 2018, there were only four SITR funds available to investors.¹¹⁹

2. Carbon Tax

¹¹⁶ <https://bigsocietycapital.com/how-we-work/focus-areas/>.

¹¹⁷ <https://www.gov.uk/guidance/venture-capital-schemes-apply-to-use-social-investment-tax-relief>.

¹¹⁸ <https://www.sibgroup.org.uk/sites/default/files/files/What%20A%20Relief%20-%20SITR%20research%20report.pdf>; and <https://www.ftadviser.com/investments/2018/07/10/understanding-social-investment-tax-relief-and-how-to-make-it-work/>.

¹¹⁹ https://www.ethex.org.uk/what-is-sitr_1763.html; <https://www.socialfinance.org.uk/resources/news/bright-futures-sitr-fund-launched>; <https://resonance.ltd.uk/for-investors/investment-opportunities/enterprise-growth-funds/resonance-west-midlands-sitr-fund>; and <https://www.socialinvestmentscotland.com/sis-community-capital-invests-400k-in-seven-social-enterprises/>.

In terms of using fiscal policy to support the development of green finance projects, various forms of carbon tax have been introduced around the world under the United Nations Framework Convention on Climate Change.¹²⁰ In Asia, a carbon tax has been introduced in India (2010: a carbon tax of ₹50 per ton of coal increased to ₹400 by 2020)¹²¹ and Singapore (2018: \$10–\$15 per ton of emissions by 2030).¹²² While Japan; the ROK; Taipei, China; and the PRC have also proposed introducing a carbon tax.¹²³

F. Regulation

At the national and transnational levels of policy, there is growing interest in developing regulated structures around social and environmental reporting and disclosure.

1. Standards of Disclosure

a. Voluntary Standards

In 2019, the UNDP launched the SDG Impact project to define the standards of sustainable investment in SDG-related bonds and other instruments.¹²⁴ In 2019, the IFC also published a set of principles for sustainable development at the fund level.¹²⁵

The Impact Management Project¹²⁶ is a network of sustainability reporting organizations also aimed at developing an agreed set of principles and frameworks for impact measurement and management. Each of these examples remains voluntary, however.

b. Legal Standards

Currently, the EU is the only region to propose a legally enforceable regulatory framework on nonfinancial disclosure that requires large companies to disclose information on the way they operate and manage social and environmental challenges.¹²⁷ In 2017, the EU introduced Directive

¹²⁰ <https://unfccc.int>.

¹²¹ <https://energy.economictimes.indiatimes.com/news/power/opinion-carbon-tax-and-its-impact-on-india/77373648>.

¹²² <https://blogs.adb.org/blog/taxing-emissions-singapore>.

¹²³ <https://www.carbontax.org/where-carbon-is-taxed/>.

¹²⁴ <https://sdgimpact.undp.org/practice-standards.html>.

¹²⁵ https://www.ifc.org/wps/wcm/connect/720ed26b-48fe-40fb-9807-711d869c5bf9/Impact+Investing_Principles_FINAL_4-25-19_footnote+change_web.pdf?MOD=AJPERES&CVID=mJ20IIA.

¹²⁶ <https://impactmanagementproject.com>.

¹²⁷ https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en.

2014/95/EU as a requirement for reporting standards of nonfinancial data—the Non-Financial Reporting Directive (NFRD)¹²⁸—as an amendment to the Accounting Directive (Directive 2013/34/EU).¹²⁹

The NFRD applies to listed companies, banks, and insurance companies with more than 500 employees and requires a nonfinancial statement to form a part of their annual public reporting obligations. Companies had to report for the first time in 2018 (for financial year 2017). Specifically, the NFRD requires companies to disclose information about their business model, policies (including implemented due diligence processes), outcomes, risks and risk management, and Key Performance Indicators relevant to the business with respect to four sustainability issues: the environment, social and employee issues, human rights, and bribery and corruption.

However, the NFRD does not require the use of any specific nonfinancial reporting standards or frameworks, nor does it impose detailed disclosure requirements, such as lists of indicators per sector, rather it requires companies to disclose information “to the extent necessary for an understanding of the development, performance, position and impact of [the company’s] activities.” This means companies should disclose not only how sustainability issues may affect the company, but also how the company affects society and the environment from a “double materiality” perspective. Following on from the NFRD, in 2017, the EU published nonbinding guidelines for companies on how to report nonfinancial information.¹³⁰ Then, in 2019, as a part of the Sustainable Finance Action Plan, the EU published additional guidelines on reporting climate-related information, which integrate the recommendations of the Task Force on Climate-Related Financial Disclosures (footnote 127).

However, the initial directive was widely considered insufficient to address the climate crisis and was reviewed with the intention to strengthen and clarify the disclosure requirements to provide more reliable, comparable, and relevant nonfinancial information to investors and other stakeholders.

¹²⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0095>.

¹²⁹ For an overview: https://www.globalreporting.org/media/5egmicer/nfrd_update-2020.pdf.

¹³⁰ [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017XC0705\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017XC0705(01)).

In 2020, a public consultation was carried out on the NFRD as a part of the EU's European Green Deal Project.¹³¹ The intention was to introduce new regulation in 2021.¹³²

2. Banking Regulation

Another regulatory policy agenda for sustainable finance is banking regulation. In Asia, the Monetary Authority of Singapore introduce regulation that requires banks to report on their sustainability practices in its supervisory assessment.¹³³ In Malaysia, the central bank—Bank Negara Malaysia—introduced a “principle-based” green taxonomy and label for banks and insurers.¹³⁴

3. Corporate Regulation

In terms of corporate regulation, in 2014, India became the first country in the world to legally mandate companies of a certain turnover and profitability to spend 2% of their average net profit for the past 3 years on corporate social responsibility—sustainability—projects (under Section 135 of India's Companies Act).¹³⁵ However, this regulation has been criticized for having limited material impact on social or environmental issues.¹³⁶

G. Commissioning and Outcomes Contracts

In terms of policy *as* sustainable finance, policy actors focus at a national level on how to reform the state such that public finance is deployed as sustainable finance. There are two policy agendas in this regard: reforming public sector commissioning to focus on outcomes rather than outputs, and acting as an outcomes payer in impact bonds.

1. Public Sector Commissioning

¹³¹ <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive/public-consultation>.

¹³² <https://www.allenoverly.com/en-gb/global/news-and-insights/publications/review-of-the-non-financial-reporting-directive>.

¹³³ <https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/2020/Consultation-Paper-on-Proposed-Guidelines-on-Environmental-Risk-Management-for-Banks.pdf>; https://wwf.panda.org/our_work/our_focus/finance/?356947/WWF-SINGAPORES-LATEST-REPORT-SUSTAINABLE-BANKING-REGULATIONS-IN-ASEAN-FINDS-THAT-FINANCIAL-REGULATORS-ARE-SHORING-UP-SAFEGUARDS-AGAINST-CLIMATE-AND-ENVIRONMENTAL-EMERGENCIES.

¹³⁴ <https://esgclarity.com/malaysia-targets-green-taxonomy/>.

¹³⁵ <https://www.india-briefing.com/news/corporate-social-responsibility-india-5511.html/>,

¹³⁶ <https://bthechange.com/csr-in-india-is-now-a-law-2502aa6d0daa>.

In 2013, the Government of the UK introduced the Public Services (Social Value) Act.¹³⁷ This act aimed to grow the demand side of the sustainable finance market by increasing the scope for access to public sector contracts.

The act required all public sector commissioners to consider social value when evaluating tender applications for contracts above £111,676 (central government) and £172,514 (for other bodies). By 2015, only 11% of local authorities had applied the act in their commissioning process, and only 27% of those who tendered for contracts were chosen on their superior social value criterion.¹³⁸

However, some estimates suggest that, by 2019, social value issues had influenced more than £25 billion worth of public sector spending on delivering training, apprenticeships, improving the environment, supporting local businesses, supporting charities and social enterprises, supporting manufacturers, helping people with disabilities into work, employing ex-offenders, tackling homelessness, and reducing food waste.

Moreover, the opportunity for the act further to influence public sector commissioning in the UK remains substantial- total public sector spending is roughly £268 billion annually.¹³⁹ In addition, the outcomes logic of impact bonds has had an important effect on public services commissioning more generally, particularly in health care and pharmacology.¹⁴⁰ In 2020, all NHS clinical contracts were awarded as payment-by-results contracts, a total spend of £150 billion.

2. Impact Bonds

In the context of the wide range of support of the Government of the UK for the sustainable finance market, perhaps the most innovative initiative has been the development of impact bonds, starting

¹³⁷ <https://www.gov.uk/government/publications/social-value-act-information-and-resources/social-value-act-information-and-resources>.

¹³⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/403748/Social_Value_Act_review_report_150212.pdf; https://www.socialenterprise.org.uk/wp-content/uploads/2019/05/Our_Money_our_Future-1.pdf.

¹³⁹ https://www.socialenterprise.org.uk/wp-content/uploads/2019/05/Our_Money_our_Future-1.pdf.

¹⁴⁰ <https://golab.bsg.ox.ac.uk/toolkit/technical-guidance/awarding-outcomes-based-contracts/>; http://www.pmlive.com/pharma_news/greater_manchester_backs_move_to_outcome-based_payment_1279006; and http://www.pmlive.com/pharma_news/greater_manchester_backs_move_to_outcome-based_payment_1279006.

with SIBs.¹⁴¹ SIBs are not, in fact, bonds of any sort. Rather they are a form of contingent future liability contract or, more simply, a payment-by-results contract¹⁴² between an investor, an outcomes payer, and a service provider, where the returns to the investor are directly linked to clear measures of social impact (the outcomes) (Figure 1).

The necessary conditions for a SIB to come together are an outcome that can be robustly measured, an investor who has an interest in achieving the given outcome and who also expects an outcome performance-linked return, and an outcomes payer for whom paying an investor a return for achieving an outcome is an attractive proposition. In addition, SIBs often required a third-party assessor/auditor of the outcomes achieved and legal advice on the structuring of the SIB contract.

In principle, the impact model can be applied to any intervention that satisfies three conditions: the outcome is measurable and can be given an agreed financial value, there is an outcomes payer, and there are investors. This has made impact bonds very attractive to the impact-investing community since they seem to offer an elegant model by which to price impacts in the market, build robust outcomes data, and offer the potential of reaching substantial scale.

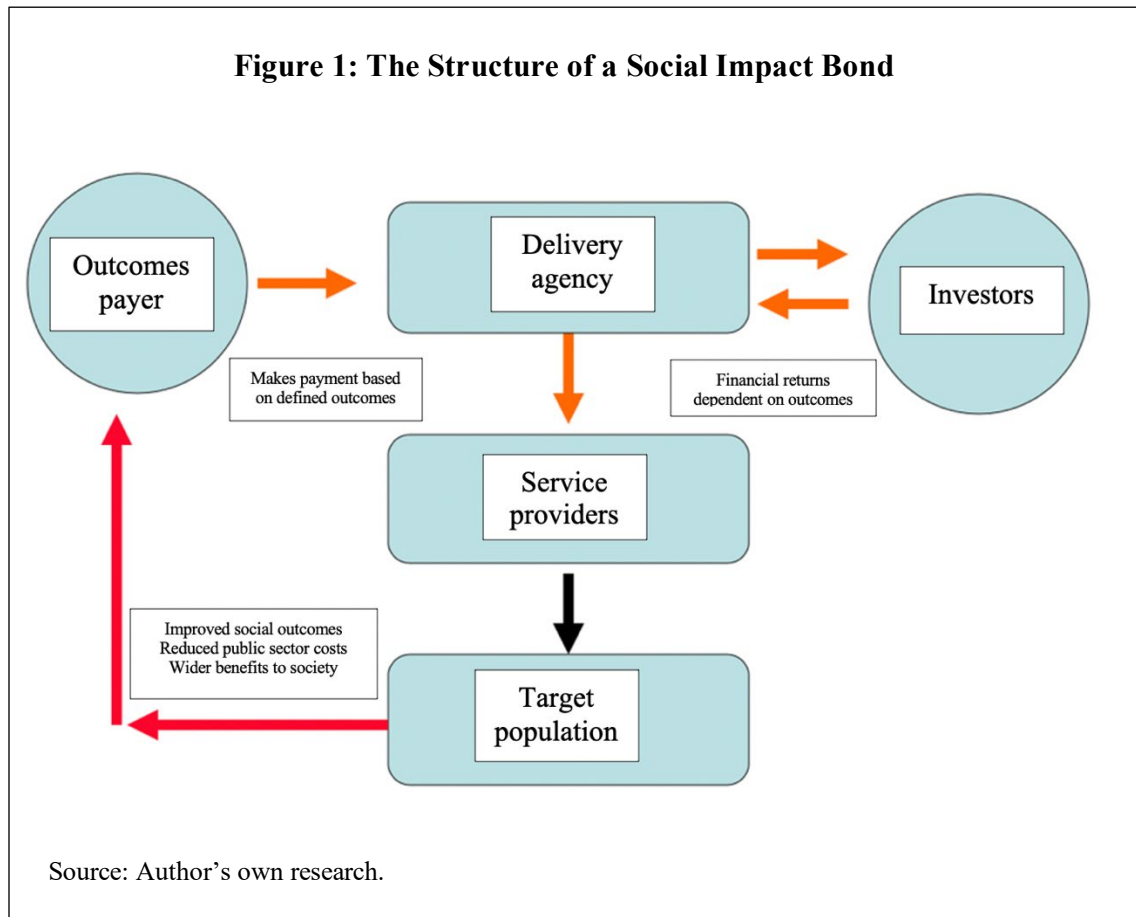
By 2021, there were 225 impact bonds globally mobilizing £534 million in 26 countries.¹⁴³ The UK continues to dominate the landscape (89), but several other countries have also launched more than ten impact bonds, including the US (27), the Netherlands (17), Portugal (16), and Australia (14). In Asia there are 9, in Africa 10, and in Latin America 6. In terms of policy focus, the largest percent of all number of impact bonds focussed on employment and training (29%), followed by child and family welfare (19%), homelessness (15%), and health (15%). Beyond social impact bonds, other impact bonds have addressed international development (see below), the environment, humanitarian issues, and conservation.

¹⁴¹ <https://www.socialfinance.org.uk/what-we-do/social-impact-bonds/>; and <https://www.gov.uk/guidance/social-impact-bonds/>; <https://golab.bsg.ox.ac.uk/the-basics/impact-bonds/>; <https://www.brookings.edu/series/impact-bonds/>.

¹⁴² In the US, these are typically known as “pay for success” contracts. <https://www.air.org/resource/pay-success-social-impact-bonds/>.

¹⁴³ Data varies slightly, but there are three important impact bond resources. <https://sibdatabase.socialfinance.org.uk/>; <https://golab.bsg.ox.ac.uk/knowledge-bank/indigo-data-and-visualisation/impact-bond-dataset-v2/>; and <https://www.brookings.edu/series/impact-bonds/>.

Figure 1: The Structure of a Social Impact Bond



a. Peterborough SIB

i. Structure

In 2010, the UK Ministry of Justice launched the world's first social impact bond - the HMP Peterborough SIB that was focused on decreasing re-offending rates among low-risk, short-term ex-offenders.¹⁴⁴ The pretext for the SIB was that re-offending represents an issue where preventative work can save the public sector significant money: at the time, 60% of the 40,200 adults on short-term sentences re-offend within a year of release. This repeated pattern of re-offending incurred significant costs to the judicial system, the prison service, as well as externality costs in terms of the effects on those who experienced crime. Moreover, at the time, short-term offenders did not receive any rehabilitation or probationary support after leaving prison, significantly increasing the likelihood of re-offending.

¹⁴⁴ Nicholls and Tomkinson (2015).

In this context, the pilot Peterborough SIB aimed to reduce re-offending by prisoners who were serving a sentence of less than 12 months. The structure of the SIB was brokered by Social Finance¹⁴⁵ with the UK Ministry of Justice, with the latter agreeing to act as the outcomes payer.

The service provision offered intensive support to 3,000 short-term prisoners in HMP Peterborough in three successive cohorts of 1,000 prisoners for 2 years per cohort (meaning the SIB's duration was 6 years of intervention plus 1 year of post hoc analysis of the outcomes, a total of 7 years). The support for prisoners was provided by a coalition of five existing service providers all of whom had deep experience of working with ex-offenders across several types of rehabilitation: the St Giles Trust, Ormiston Family and Children's Services, Supporting Others through Voluntary Action, YMCA, and mental health support from Peterborough and Fenland Mind.¹⁴⁶

An important innovation of the SIB was that these service providers were brought together as single organization—the One Service—located in the same building close to the prison. This allowed the ex-offenders to access a multisystemic rehabilitation service in one place at one time, greatly simplifying other models.

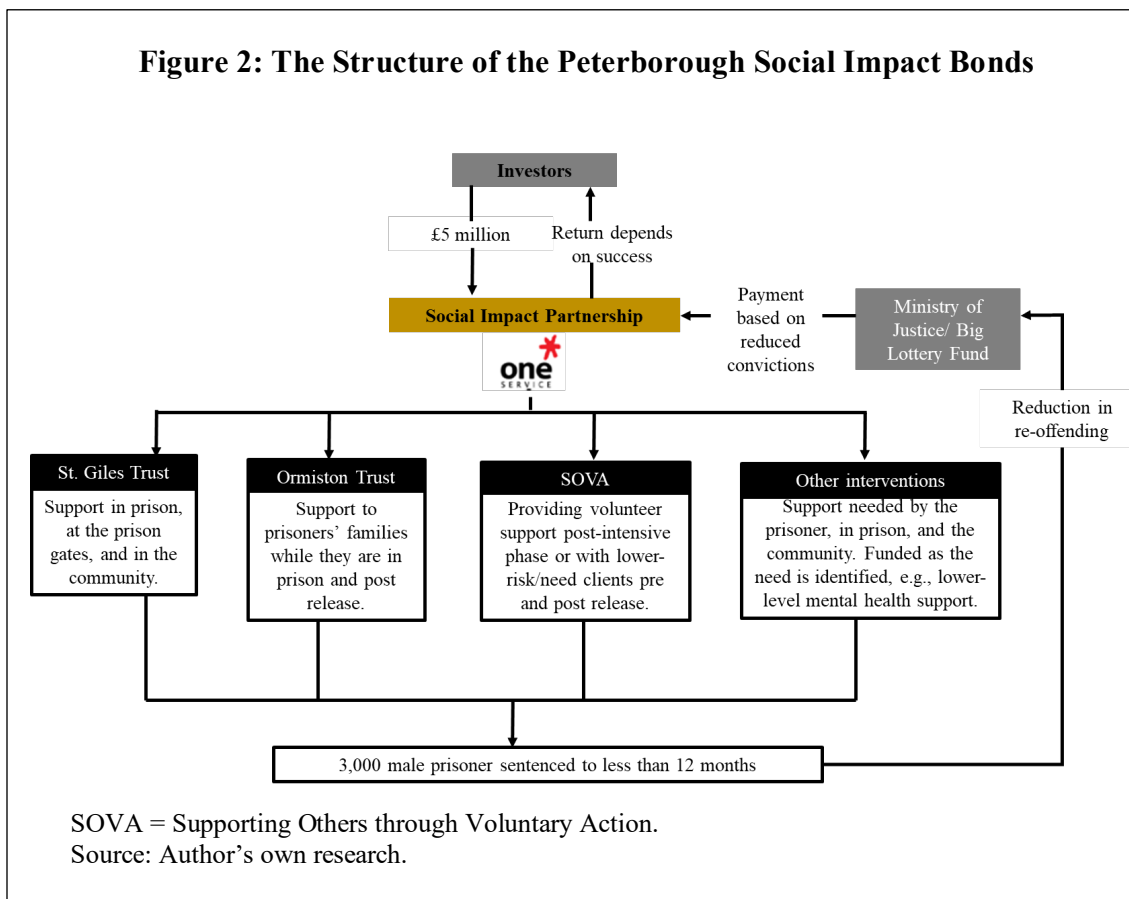
Investment came from a coalition of 17 investors into the SIB—most of whom were charitable trusts and foundations—who committed £5 million over the 6-year period of intervention.¹⁴⁷ Figure 2 shows the overall structure of the SIB.

¹⁴⁵ <https://www.socialfinance.org.uk>.

¹⁴⁶ The YMCA left the One Service after 1 year as their contribution was less effective than anticipated. The opportunity to change the service provision model during the SIB contract was another important innovation of the model in opposition to the standard, rigid, public sector contracting practice.

¹⁴⁷ The investors were the Barrow Cadbury Charitable Trust, the Esmée Fairbairn Foundation, the Friends Provident Foundation, the Henry Smith Charity, the Johansson Family Foundation, the Lankelly Chase Foundation, the Monument Trust, the Panahpur Charitable Trust, the Paul Hamlyn Foundation, and the Tudor Trust.

Figure 2: The Structure of the Peterborough Social Impact Bonds



ii. Outcomes

The outcomes of the SIB were determined by a simplified randomized control trial model in which the number of reconviction events in each cohort of 1,000 ex-offenders that had received support from the One Service was compared to similar control group of short-sentenced male prisoners from across the UK drawn from the Police National Computer database. In practice, this model provided a 10:1 control group to increase the robustness of the comparative analysis.

The outcomes payments to investors were determined by the reduction in re-offending: if the SIB reduced re-offending by at least 7.5% against the control group, investors received a minimum

repayment of 2.5% annual internal rate of return (IRR); if the reduction in re-offending went beyond this threshold, then payments increased with the return to investors capped at 13% annual IRR.

iii. Transforming Rehabilitation

After the completion of the first cohort, the Ministry of Justice launched a new, statutory rehabilitation service for all short-term ex-offenders in 2014—Transforming Rehabilitation. While it can be reasonably inferred that this was a response to the initial success of the One Service proving the value of such services in reducing re-offending, it had a negative effect on the SIB in two ways.

First, by introducing a universal rehabilitation service, Transforming Rehabilitation rendered the SIB control group of prisoners who had not experienced rehabilitation invalid. The effect was to make it impossible to prove further outcomes of the SIB. Second, when Transforming Rehabilitation was put out to tender by regions, the One Service tendered for the Peterborough contract but lost out to a larger provider because it was too costly. Taken together, these decisions by the Ministry of Justice effectively terminate the SIB early in 2015.

iv. Results and Payments

Nevertheless, the SIB could still return results for the first two cohorts of ex-offenders (between 2010 and 2017). In terms of the first cohort, there was -8.4% reduction in re-offending events against the control group by 2014. In terms of the second cohort, in 2017, there was -9.7% reduction. These results gave an overall average reduction rate across both cohorts of -9% against the control group. Since this was above the minimum contractual threshold of -7.5% required to trigger outcomes payments to investors, a 3% per annum repayment plus initial capital was made.

v. Support for Subsequent SIBs

Despite these setbacks, the Peterborough SIB was considered a success and the Government of the UK committed to further SIBs, particularly in terms of financial support as the payer of the outcomes. Six initiatives were launched from 2015 committing £241 million:

- Life Chances Fund (Department for Digital, Culture, Media and Sport): £80 million outcomes fund with a focus on drug and alcohol dependency, children's services, early years, young people, older people's services, and healthy lives.
- The Rough Sleeping SIB Fund (Ministry of Housing, Communities and Local Government): £40 million outcomes fund with a focus on local homelessness.
- Social Outcomes Fund and Commissioning Better Outcomes Fund (Cabinet Office, and Big Lottery Fund): £60 million outcomes fund with a focus on complex policy areas, as well as support to develop robust proposals.
- Fair Chance Fund (Ministry of Housing, Communities and Local Government, and Cabinet Office): £15 million outcomes fund with a focus on improving outcomes for young homeless people.
- Youth Engagement Fund (Cabinet Office, Ministry of Justice, and Department of Work and Pensions): £16 million outcomes fund with a focus on disadvantaged young people aged 14–17 and education or training.
- Innovation Fund (Department for Work and Pensions): £30 million outcomes fund with a focus on disadvantaged young people and education, training, and employment.

b. Development Impact Bonds

a. Educate Girls

In 2015, the world's first Development Impact Bond (DIB) was launched in India. It focused on young girls' education in Northern India. The context was that many young girls lacked access to education for cultural and economic reasons, and that addressing this offered a substantial development opportunity. Designed as a proof of concept, the Educate Girls DIB aimed to increase enrollment and improve learning outcomes for girls in Rajasthan, India, improving education for 18,000 children. The DIB ran for 3 years from 2015 to 2018.

i. Structure

The DIB was a joint project between Educate Girls (service provider), the Children's Investment Fund Foundation (outcomes payer), the UBS Optimus Foundation (investor that provided

\$238,000 in working capital to fund the service delivery programs), and Instiglio and IDinsight (structuring and measurement consultants).

ii. Outcomes

IDinsight evaluated the improvement in learning of girls (and boys) in the treatment schools in comparison to a control group of other children across the region. Instiglio provided the technical assistance to all parties during the design and delivery of the DIB. The outcomes objectives were to improve and measure the enrollment, retention, and learning outcomes for girls.

The outcomes payment structure had two components: an enrollment objective of 79% of the girls who were otherwise out of school at the inception of the DIB with \$935.64 for every percentage point increase in enrollment above this baseline (20% of total payments) and a learning objective (80% of outcome payment) of the completion of the ACER¹⁴⁸ test for English, Hindi, and mathematics (grades A–E) with \$48.28 for each unit of improved learning (of 5,592 grade levels) compared to a comparison group.

iii. Service Delivery

To support the teaching programs offered by Educate Girls, the DIB also trained a team of community volunteers, aged 18–30, to make door-to-door visits in villages to encourage families to enroll their girls in school and to deliver curriculum enhancement in public school classrooms. These volunteers worked in more than 8,000 villages and 12,500 schools in Rajasthan.¹⁴⁹

iv. Results

The DIB was a success and exceeded its targets in both enrolment and learning outcomes. By the end of the 3-year DIB, Educate Girls had enrolled 768 out-of-school girls, representing 92% of all identified out-of-school schoolgirls eligible for enrolment exceeding the target of 79%.

¹⁴⁸ <https://www.acer.org/gb/assessment>.

¹⁴⁹ <http://instiglio.org/educategirlsdib/wp-content/uploads/2015/09/Educate-Girls-DIB-Sept-2015.pdf>.

Moreover, schoolgirls in program villages gained an additional 8,940 ASER learning (unit) levels relative to comparable students in control villages, exceeding the learning target of 60%. Learning gains were higher for treatment students than for control students across all grades and subjects, with relatively higher gains in mathematics and English than in Hindi and relatively larger treatment effects among students who were exposed to the program for more years. Educate Girls program in year 3 was particularly effective in increasing test scores, suggesting that the DIB had improved its models of provision as it progressed.¹⁵⁰

v. Outcomes Payments

Given the success of the DIB, the outcomes payer—the UBS Optimus Foundation—was repaid its initial funding of \$238,000 in full plus further payments that constituted a 15% IRR. Part of this was distributed back to Educate Girls subsequently as a bonus payment, with the rest being rolled over into other programs.¹⁵¹ Subsequent to the Educate Girls DIBs, a larger project was developed to scale the model in India.¹⁵² Other forms of impact bonds have also emerged that focused on the environment,¹⁵³ conservation,¹⁵⁴ and humanitarian aid.¹⁵⁵

4. Criticisms of SIBs

Despite considerable hype and some hyperbole,¹⁵⁶ a number of criticisms have also emerged.¹⁵⁷ From a market-efficiency perspective, impact bonds typically have high transaction costs, largely because of the complexity of their contractual structures that require grant or concessionary capital to fund. From a social policy perspective, impact bonds have been criticized for privatizing and, therefore, undermining the public sector.

¹⁵⁰ https://www.educategirls.ngo/pdf/Educate-Girls-DIB-Final-Evaluation-Report_2018-06-10.pdf; and <https://golab.bsg.ox.ac.uk/knowledge-bank/resources/ecorys-evaluation-dfid-dibs/>.

¹⁵¹ https://www.ubs.com/global/en/ubs-society/our-stories/2018/first-education-bond.html?campID=SEM-BRAND-s_kwcid=AL!430!3!388414976334!b!!g!!%2Bdib&ef_id=Cj0KCCQjw8fr7BRDSARIsAK0Qqr7bchMhQh1mTSj0niUk6-6QnYpLeFZH3simqeCsHVJSZMyrJo-ozigaAuWWEALw_wcB:G:s&s_kwcid=AL!430!3!388414976334!b!!g!!%2Bdib!6743337551!78124052303.

¹⁵² <https://qualityeducationindiadib.com>.

¹⁵³ <https://www.goldmansachs.com/media-relations/press-releases/current/dc-water-environmental-impact-bond-fact-sheet.pdf>.

¹⁵⁴ <https://www.ft.com/content/2f8bf9e6-a790-11e9-984c-fac8325aaa04>.

¹⁵⁵ <https://www.icrc.org/en/document/worlds-first-humanitarian-impact-bond-launched-transform-financing-aid-conflict-hit>.

¹⁵⁶ <https://www.ipem-market.com/news/the-impact-revolution-sir-ronal-cohens-webinar-wrap-up/>. There is an entire film devoted to SIBs. <https://www.theinvisibleheart.ca>.

¹⁵⁷ https://ssir.org/articles/entry/the_downside_of_social_impact_bonds#; https://ssir.org/articles/entry/a_critical_reflection_on_social_impact_bonds; https://apolitical.co/en/solution_article/sibs-wont-fix-toughest-problems; and McHugh et al. (2013).

From a moral philosophy perspective, impact bonds have been criticized for exploiting vulnerable populations to enrich investors and, with DIBs, enacting a new form of colonialism (as developed country investors make profits from activities in poorer countries). Nevertheless, despite these concerns, it seems likely that impact bonds will continue to grow globally and play an important role in the development of the sustainable finance market.

H. Summary

Taken together these policy levers can be conceptualized in terms of building the supply side, the demand side, or the intermediary space within the sustainable finance market. They can also be categorized in terms of the variety of available policy levers in terms of policy *for* sustainable finance or policy *as* sustainable finance (Table 2).

Table 2: Policy Levers in Action for Sustainable Finance

Policy Lever	Supply-Side	Intermediaries	Demand-Side
Policy for Sustainable Finance			
Direct investment	Equity and debt in sustainable deals and funds Social and green bonds		
Grants		Research and data	Capacity building Investment readiness
Indirect investment	Co-investment Catalytic capital		
Legislation		Realizing dormant assets Building wholesale sector	Legal forms of incorporation for sustainable investees
Fiscal Policy	Tax incentives for sustainable finance		Carbon tax
Regulation	Impact measurement and disclosure corporate social responsibility regulation	Banking regulation	Impact measurement and disclosure
Policy as Sustainable Finance			

Commissioning			Public sector contracts prioritizing sustainable organizations
Outcomes contracts	Public finance as outcomes payments		

Source: Author's own research.

IX. GLOBAL CONTEXT

Policy agendas focused on sustainable finance are likely to be geographically contingent based upon the political, economic, and cultural traditions of a given country or region. For example, the long, historical tradition of a social economy delivered by cooperative and mutual organizations in the EU has partly shaped the policy agenda around sustainable finance as a complement to both the social sector and government.¹⁵⁸ Conversely, the more individualistic and free-market cultural tradition in the US has framed sustainable finance as a new opportunity to make superior financial returns on capital invested.¹⁵⁹

At the transnational level, the UN SDGs have set the framework for the global sustainable finance market in terms of both social and environmental objectives. At the regional level, the EU has also been a leader in developing funding models for sustainable impact. However, other geographies, including Asia, has also used policy actively to develop this market. At the national level, the Government of the UK has pioneered innovations in all of these categories.

A. Asian Context

Within Asia, the sustainable finance market has developed significantly over the past decade. The primary focus has been on green finance, but, more recently, the market for social finance has also begun to develop. At the regional level, ADB has played an important role, while at the national level, a number of individual countries have developed policy agendas and innovations dedicated to growing the market.

¹⁵⁸ https://ec.europa.eu/growth/sectors/social-economy/cooperatives_en.

¹⁵⁹ <https://www.unenvironment.org/resources/report/state-sustainable-finance-united-states>.

1. Regional Level

At the regional level, ADB has been the most important player in Asia. Primarily, ADB raises money from global capital markets to capitalize debt to the public sector¹⁶⁰ across a range of social and environmental issues, including education, environmental sustainability, finance sector investment, infrastructure, and regional cooperation and integration. In 2017, ADB's investments (including grants) totalled \$28.9 billion.¹⁶¹

ADB has also established catalytic funds. For example, in 2019, ADB launched the ASEAN \$1 billion ACGF to provide financial support to governments in Southeast Asia to develop and deliver infrastructure projects that promote environmental sustainability and contribute to climate change goals.¹⁶²

2. National Level: Instruments

a. Green Bonds

Asian countries have been active in issuing green bonds¹⁶³ to capitalize environmental and public sector projects. By 2019, Asian countries accounted for 25% of global green bonds issued globally, with the PRC the largest Asian issuer.¹⁶⁴ The total amount of Chinese green bonds issued in both domestic and overseas market reached \$55.8 billion, representing a 33% increase from 2018.¹⁶⁵ The PRC is now the second largest issuer of green bonds globally.¹⁶⁶ The PRC was the largest source of labelled green bonds globally, and the total volume of green bonds issued by nonfinancial corporates increased by 54% year-on-year. Transport is the largest theme aligned with green bonds growing by 11% to \$11.2 billion. However, some discrepancies exist between the PRC's local green bond guidelines and international norms, especially when it comes to the eligibility of green projects and disclosure on the proceeds allocation.

b. Social Bonds

¹⁶⁰ <https://www.adb.org/what-we-do/public-sector-financing/main>.

¹⁶¹ <https://www.adb.org/news/adb-2017-operations-reach-289-billion>.

¹⁶² <https://www.adb.org/what-we-do/funds/asean-catalytic-green-finance-facility/main>.

¹⁶³ Equity issues in green technology companies are also used. <https://www.nasdaq.com/solutions/green-equity-indexes>.

¹⁶⁴ <https://www.climatebonds.net/resources/reports/2019-green-bond-market-summary>

¹⁶⁵ https://www.climatebonds.net/system/tdf/reports/2019_cbi_china_report_en.pdf?file=1&type=node&id=47441&force=0.

¹⁶⁶ <https://www.globalcapital.com/article/b1k0tky39v6f2x/asian-green-bonds-build-on-2019-momentum>.

Unlike green bonds, the market for social bonds remains a small market in Asia, accounting for only 5% of the total Asia and Pacific issuance of sustainable bonds in 2019.¹⁶⁷ However, this represents a growth of 4% since 2019, partly driven by coronavirus disease (COVID-19). In 2019, the Bank of China issued a \$4 billion sovereign bond¹⁶⁸ and, in 2020, it issued a sovereign COVID-19 bond.¹⁶⁹

c. Carbon Tax

A number of Asian countries have enacted policies to introduce a carbon tax. In 2010, a carbon tax was introduced in India at a rate of ₹50 per ton of coal (increased to ₹400 by 2020).¹⁷⁰ In 2018, Singapore also introduced a carbon tax at a rate of \$10–\$15 per ton of emissions by 2030.¹⁷¹ In addition, at the local level, a number of Asian cities have adopted low emissions policies for transport to reduce carbon dioxide and nitrous oxide emissions¹⁷² primarily in the PRC; Hong Kong, China; and Japan.¹⁷³

d. Banking Regulation

In terms of banking regulation, the Monetary Authority of Singapore introduced a regulation that requires banks to report on their sustainability practices in its supervisory assessment.¹⁷⁴ In Malaysia, the central bank—Bank Negara Malaysia—also introduced a “principle-based” green taxonomy and label for banks and insurers.¹⁷⁵

3. National Level: Country Profiles

¹⁶⁷ <https://www.gbm.hsbc.com/insights/growth/social-bonds-on-the-front-line>.

¹⁶⁸ <https://www.ft.com/content/c02a8184-5c9d-45ce-b4bd-02b028de7f63>.

¹⁶⁹ <https://www.globalcapital.com/article/b1klgqnnl3n65s/chinas-social-bonds-coloured-by-politics>.

¹⁷⁰ <https://energy.economictimes.indiatimes.com/news/power/opinion-carbon-tax-and-its-impact-on-india/77373648>.

¹⁷¹ <https://blogs.adb.org/blog/taxing-emissions-singapore>.

¹⁷² <https://tfl.gov.uk/modes/driving/low-emission-zone/about-the-lez?intcmp=2263>.

¹⁷³ <https://wri.org/cities/our-work/project-city/beijing-low-emission-zone>; <https://www.legco.gov.hk/research-publications/english/essentials-1415ise09-low-emission-zone.htm>; and <https://www.transportpolicy.net/standard/japan-emissions-tokyo-retrofit/>.

¹⁷⁴ <https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/2020/Consultation-Paper-on-Proposed-Guidelines-on-Environmental-Risk-Management-for-Banks.pdf>; and https://www.panda.org/our_work/our_focus/finance/?356947/WWF-SINGAPORES-LATEST-REPORT-SUSTAINABLE-BANKING-REGULATIONS-IN-ASEAN-FINDS-THAT-FINANCIAL-REGULATORS-ARE-SHORING-UP-SAFEGUARDS-AGAINST-CLIMATE-AND-ENVIRONMENTAL-EMERGENCIES.

¹⁷⁵ <https://esgclarity.com/malaysia-targets-green-taxonomy/>.

With respect to sustainable finance, four Asian countries have established NABs within the GSGII network:¹⁷⁶ Bangladesh, India Japan, and the ROK.

a. Bangladesh

The market for sustainable finance is at an early stage of development in Bangladesh,¹⁷⁷ and has been dominated by DFIs.

As of 2019, DFIs had invested \$834 million out of the total of \$955 million, mostly as debt. Microfinance is the largest investment sector. In terms of policy, complex regulatory frameworks have discouraged foreign equity investment.

In 2011, the Central Bank of Bangladesh issued a set of Policy Guidelines for Green Banking. The Central Bank established rules requiring banks to establish sustainable finance units to promote green and social investment, and to commit 5% of their total loan portfolio to debt or equity in green finance. The Central Bank also instructed all banks to contribute to a Climate Risk Fund with 10% of their Corporate Social Responsibility budget.

The central government has launched two green funds, the Bangladesh Climate Change Trust Fund and Bangladesh Climate Resilience Fund, as well as a \$200 million Green Transformation Fund (in 2016).

Using Islamic finance for sustainable impact also offers an important opportunity—20% of all deposits and 23% of all credit are sharia-compliant.

b. India

In India,¹⁷⁸ the sustainable finance market is primarily equity (75%) with external investment from DFIs dominating. By 2017, the sustainable finance market accounted for \$30 billion, of which \$8.6 billion were green bonds.

¹⁷⁶ <https://gsgii.org>.

¹⁷⁷ <https://gsgii.org/reports/country-profile-bangladesh/>.

¹⁷⁸ <https://gsgii.org/reports/country-profile-india/>.

In 2012, the Securities and Exchange Board of India created a new category of fund—the Alternative Investment Fund—for the purpose of pooling international and domestic sustainable finance in new social venture funds.

The Reserve Bank of India introduced the Priority Sector Lending Rules under which all banks are required to provide at least 40% of their lending to specified sectors, such as agriculture, education, and housing.

In 2013, the Indian Companies Act was introduced that required every large corporations to implement a CSR policy and to spend at least 2% of their average profit over the preceding 3 financial years on CSR activities.

In 2014, the government helped catalyse an Inclusive Innovation Fund that is focused on capitalizing enterprises that benefited the poor through job creations with a 20% stake.

In 2018, the National Guidelines on the Economic, Social, and Environmental Responsibilities of Business were introduced. Following the success of the Educate Girls DIB, in 2019, India began raising a \$1 billion outcomes fund for education.

c. Japan

Japan has a well-developed sustainable finance market.¹⁷⁹ By 2018, 18% of all assets under management were considered as sustainable finance. This made Japan the third largest sustainable finance market in the world after Europe and the US.

The main focus has been on green finance with the Ministry of the Environment playing an important role by establishing guidelines for green bonds. The engagement of two large institutional investors was an important driver of the growth of this market. The Government

¹⁷⁹ <https://gsgii.org/reports/country-profile-japan/>.

Pension Investment Fund (in 2015) and the Pension Fund Association (in 2016) became signatories of the UN Principles for Responsible Investment.

In 2016, the Dormant Accounts Utilization Bill was introduced to access up to \$700 million in unclaimed assets per year.

By 2018, Japan has issued three SIBs in Hachioji, Kobe City and as a partnership between the Hiroshima Prefecture and six other cities

d. Republic of Korea

In the ROK, the market for sustainable finance has evolved significantly over the past 5 years, with strong support from policy actors.¹⁸⁰ The main focus has been on green finance. The first green bond was issued in 2013 by the Export-Import Bank of Korea. In 2017, Hyundai Capital issued a \$500 million green bond, and the Korea Development Bank issued a \$300 million green bond.

In 2016, the Financial Services Commission issued the Korea Stewardship Code as voluntary to encourage the use of ESG factors in corporate decision-making.

In 2017, the government deployed \$2.7 million in catalytic guarantees, loans, and equity into sustainable finance in collaboration with other guarantors (for example, the Korea Credit Guarantee Fund), mutual finance institutions (for example, the National Credit Union Federation of Korea), and fund-of-funds (for example, the Korea Venture Investment Corporation).

In 2018, the President's Office introduced a Social Finance Promotion Policy. This resulted in the establishment of a coordinated social finance policy initiative lead by the Ministry of Economy and Finance, the Ministry of Employment and Labour, the Ministry of SMEs and Start-ups, and the Financial Services Commission. A secretarial within the President's Office facilitates coordination.

¹⁸⁰ <https://gsgii.org/reports/country-profile-south-korea/>.

In 2019, the government established Social Value Solidarity Fund as a sustainable finance wholesale fund to leverage public capital in co-investments with the private sector with the aim of investing \$250.5 million per year from 2020 onwards.

In 2019, a consultation began over the introduction of a new public procurement bill—the Special Law for Promotion of Social Economy Business Products and Distribution Channel. The bill would require all public procurement agencies to commission a minimum of 5% in value from social economy businesses.

Regional governments also provide sustainable finance. For example, the Government of Seoul invested \$49.3 million in local sustainable projects.

To date, two special needs education SIBs have been issued by the governments of Seoul and Gyeonggi. Current regulation does not allow the national government to invest directly in impact bonds. However, this restriction is under review by the National Assembly. The market for green bonds is well developed in the ROK.

X. CONCLUSION

This paper has set out in detail the range of policy levers available to policy actors who are aiming to advance the sustainable finance market. It has also noted various geographical differences and how policy is evolving at different levels of action. Looking ahead, the future development of this market offers several new opportunities, and also a series of challenges.

A. Opportunities

The opportunities for the future development of sustainable finance can be categorized in five forms of policy action: invest, catalyse, innovate, advocate, and research.

1. Invest

In terms of opportunities to advance the social finance, the primary aim should be to provide additional capital to fund the shortfall in funding for SDGs 1, 2, 3, 4, 5, 10, and 16. Specifically, there is significant scope for direct new investment in deals and projects addressing issues of inequality in the provision of health, education, and work. Each of these sectors offers both the opportunity for scale and significant long-term impact.

In terms of green finance, the primary aim should be to provide additional capital to fund the shortfall in funding for SDGs 6, 7, 11, 12, 13, 14, and 15. There are significant new market opportunities to both have impact and make significant returns in new green finance deployed into established sector, such as green energy and transport, as well as clean water and the broader blue economy. In the wider context of the climate crisis, new direct investment would most effectively be directed toward three strategic objectives:

- adaptation: to provide better flood and fire defense mechanisms,
- mitigation: to reduce carbon intensity and pollution, and
- development: to develop new technologies focused on carbon-neutral and carbon-reduction strategies.

Given that the effects of the climate crisis will be more destructive in developing countries (for example, severe flooding and extreme typhoons in Bangladesh, the Philippines, Thailand, and Viet Nam), effective green finance offers a double impact, both environment and social.

The various available policy levers for direct investment can all be applied to these opportunities. Grant funding can be used to support early stage innovation, and research and development as well as guaranteeing and de-risking later stage investment. Direct investing could focus on development finance projects that are looking for growth capital and can combine impact with attractive risk-adjusted returns deploying private debt and private equity. Later-stage investment could also lead to exits via public listings. Finally, issuing green and social sovereign bonds offers an important opportunity to raise sustainable capital at a national scale.

2. Catalyse

In terms of catalytic models, direct and indirect funding can be deployed in blended deals that leverage mainstream capital to fund both social and green finance. There are three direct investment “co-mingling” models that can be used: pari-passu, risk-return, and but-for. Specific Instruments include credit guarantees, blended funds and deals, and other co-investment models that blend debt and equity or quasi-equity.

Moreover, indirect investment could be deployed to build intermediary capacity in terms of capitalizing wholesale sustainable finance institutions or investment platforms. Allocating grant capital for supply-side capacity building and investment readiness could also grow the pipeline of investable deals.

3. Innovate

In terms of financing innovation in sustainable finance, developing new impact bonds could deploy both direct and indirect investments. In the former role, public finance provides capital as an investor, in the latter as an outcomes-payer. Impact bonds can be used to create more effective and measurable outcomes in social, environmental, and developmental contexts.

4. Advocate

In terms of using policy to advocate for the development of the sustainable finance market, policy actors can utilize several policy levers. In terms of legislation, new policy could release dormant assets from banks, pension funds, and insurance companies to provide a substantial new source of sustainable finance. Legislation policy can be used also to create new legal forms of incorporation for social or green enterprises to encourage the building of their legitimacy to sustainable investors.

In terms of new fiscal policy, tax regimes could be instituted either to discourage negative social or environmental action or to reward positive social or environmental action. In the case of green finance, tax policy could be most effective in moving economies towards achieving carbon-neutral emissions via carbon taxes on high-polluting companies (which would, in turn, affect equity prices and encourage divestment) or via investment tax relief for funding into new green technologies.

Developing an individual “carbon budget” model could also be impactful.¹⁸¹ In terms of social finance, social investment tax relief models offer an opportunity to change the risk-return profile of social finance in order to crowd in a wider range of capital.

In terms of regulation, new policy to enforce the disclosure of ESG data in a standardized and transparent format could significantly improve the efficiency of capital allocation in the sustainable finance market on both the supply side and demand side. In addition, new banking regulation could require a portion of bank assets to be deployed for sustainable impact.

Changing public commissioning practices from a focus on outputs to a focus on outcomes would offer also new opportunities for social or environmental enterprises to win contracts, scale these sectors, and, as a consequence, grow the investment opportunities for sustainable finance. Such contracts follow either payment-by-results or pay-for-success models.

5. Research

Policy actors can deploy grants to support research into sustainable finance. This capital can pump prime research projects that provide useful data or analysis to support the development of the sustainable finance market.

Grants can also be deployed to build research networks and cooperative partnerships between universities, as well as between universities and practice. In addition, grants could support knowledge transfer models and practice-to-practice knowledge networks.

Funding new research could have value in terms of building the sustainable finance market in several ways. Specific topics for research could include:

- Working with existing projects to develop reporting and disclosure standards, including accounting for carbon impact of all listed stocks.

¹⁸¹ https://warwick.ac.uk/fac/arts/schoolforcross-facultystudies/gsd/currentstudents/studyabroad/studyabroadapplicationform/the_5tco2_lifestyle_v2.pdf.

- Collecting - and sharing - data on the comparative risk and return performance of sustainable finance against the mainstream market.
- Testing the authenticity of impact claims to expose impact- or green-washing.

In particular, universities can play an important role in providing robust and independent evaluations and data analysis.

Direct public investment in the form of grants, debt, or equity could also be deployed as research and development, start-up, or growth capital to support innovative green or social projects in universities. Investment in early-stage green or health technologies offer significant opportunities for scale and impact.¹⁸²

Table 3 summarizes the policy opportunities that can support the growth of the sustainable finance market.

¹⁸² <https://www.ovg.ox.ac.uk>.

Table 3: Policy Opportunities

	Green Finance	Social Finance	Policy Lever
Invest	Equity and debt in green deals and funds Green bonds	Equity and debt in social deals and funds Social bonds	Direct investment Grants
Catalyze	Blended green deals and funds Capacity building and investment readiness	Blended social deals and funds Capacity building and investment readiness	Indirect investment grants
Innovate	Environmental impact bonds Sustainable impact bonds Development impact bonds	Social impact bonds Development impact bonds	Direct investment Indirect investment
Advocate	New legal forms of incorporation Accessing dormant assets Carbon tax Green investment tax Relief Regulated green disclosure and reporting standards (supply-side and demand-side) Banking regulation for environmental, social, and governance investment Payment-by-results contracts	New Legal Forms of Incorporation Accessing Dormant Assets Corporate Social Responsibility Tax Social investment tax relief Regulated social disclosure and reporting standards (supply-side and demand-side) Banking regulation for environmental, social, and gender investment Payment-by-results contracts	Legislation, fiscal policy Regulation Commissioning
Research	Independent data analysis Knowledge networks	Independent data analysis Knowledge networks	Grants

	Knowledge transfer	Knowledge transfer	
--	--------------------	--------------------	--

Source: Author's own research.

B. Policy Challenges

While there is a range of important policy opportunities for the future development of the sustainable finance market, four challenges can also be identified.

1. Short-Termism

Policy agendas can be subject to short-termism. The nature of the democratic cycle is such that the governments conventionally change every 4–5 years. Even in situations where an election maintains the political party status quo, prime ministers and ministers can change, and the political will to continue policy agendas beyond the electoral cycle can be hard to maintain.

2. Ideological Capture

Policy agendas can be subject to ideological capture that are driven by political identities rather rational or public-duty logics. At the national level, protectionism and an inward-looking policy lens can mitigate against consensus building. Similarly, democratic governance model may challenge large-scale policy agendas that fail to build an electoral consensus.

3. Policy Translation

The translation of policy agendas across different countries and political economies can prove problematic. The role of transnational bodies, such as the UN, is of central importance here. However, evidence suggests that building an international consensus of sustainable policy at a global level remains problematic. The difficulties in building a global consensus over climate crisis policy demonstrates these difficulties.

4. Regulatory Failure

An important policy opportunity is to introduce regulatory structures for consistent, transparent, robust, and material disclosure of sustainable impact/ESG data. Conversely, a failure to implement such regulation is likely to lead to more green- and impact-washing linked to a capture and dilution

of the sustainable finance market by non-impact-driven actors. Such a process would lead to a delegitimization of sustainable finance more generally with serious implications for the global finance markets appetite to address the shortfall in finance to achieve the SDGs by 2030.

C. Summary

This paper has provided an overview of the global policy landscape for sustainable finance. The analysis here has suggested that policy actors have a wide variety of policy levers with which to make significant contributions to the development of the sustainable finance market.

This paper began by setting out the historical context for sustainable finance policy, it then set out how policy agendas can be enacted at four levels of analysis: transnational, regional, national, and local.

Next, it suggested two broad categories of policy action: policy *for* sustainable finance and policy *as* sustainable finance.

The central section of the paper set out the eight policy levers with which sustainable finance policy agendas can be enacted in practice: direct investment (debt and equity); grants; indirect investment (including quasi-equity and catalytic capital); legislation; fiscal policy, regulation; commissioning; and outcomes-based contracts (including impact bonds).

Each policy lever was illustrated with examples from practice in terms of national and transnational initiatives as well as distinctive green and social finance policies.

Following these examples, the global context for sustainable finance policy was presented. This paper acknowledged the pioneering policy innovations from the UK, the EU, and the UN, but also set out the range of policy initiatives emerging in Asia.

The paper concluded by setting out policy opportunities and challenges.

The primary contribution of this paper has been to demonstrate the richness of policy opportunities globally to build the sustainable finance market further. It has also suggested that, absent a consolidated and transnational policy agenda for sustainable finance, neither funding the SDGs nor addressing the climate crisis will be achieved successfully.

KEY TAKEAWAYS

1. Engaged public policy is central to growing the social and environmental finance market.
2. Governments can use a range of policy levers to both shape markets and participate in them.
3. Many policy innovations are already in place, there is no need to reinvent, but just reshape locally.
4. Sovereign wealth funds offer a rich source of potential sustainable finance into social and green bonds.
5. A policy to regulate standards for the public disclosure of robust social and environmental data in a consistent format is a necessary condition for the continued growth of the sustainable finance market.
6. Green and impact washing remains a concern. Tougher regulation of environmental, social, and governance standards is needed.¹⁸³

¹⁸³ <https://www.ft.com/content/15602932-5bb1-49de-90bf-15932bc1aac4>.

REFERENCES

- Addis, Rosemary. 2015. The Roles of Government and Policy in Social Finance. In *Social Finance*, edited by Alex Nicholls, Rob Paton, and Jed Emerson, pp. 379–455. Oxford University Press.
- ADB. 2011. *Impact Investors in Asia. Characteristics and Preferences for Investing in Social Enterprises in Asia and the Pacific*. Asian Development Bank.
- _____. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Asian Development Bank.
- _____. 2020. *Green Finance Strategies for Post-COVID 19 Economic Recovery in South East Asia. Greening Recoveries for People and Planet*. Asian Development Bank.
- ADBI. 2018. *Fostering Green Finance for Sustainable Development in Asia*. Asian Development Bank Institute.
- Edmiston, Daniel and Alex Nicholls. 2018. Social Impact Bonds: The Role of Private Capital in Outcome-Based Commissioning. *Journal of Social Policy*. 47.1: pp. 57–76.
- EIB. 2018. *A Guide to Procurement for Projects Financed by the EIB*.
- Global Impact Investing Network. 2020. *Annual Impact Investor Survey*.
- Government of the United Kingdom, Cabinet Office. 2010. *Growing the Social Investment Market: A Vision and Strategy*.
- Government of the United Kingdom. 2015. *A Green Future: Our 25 Year Plan to Improve the Environment*.
- _____. 2019. *Green Finance Strategy. Transforming Finance for a Greener Future*.
- IFC. 2019. *Principles for Impact Management*.
- McHugh, Neil, Stephen Sinclair, Michael Roy, and Leslie Huckfield. 2013. Social Impact Bonds: A Wolf in Sheep's Clothing? *Journal of Poverty and Social Justice*. 21.3: pp. 247–257.
- Nicholls, Alex. 2009. We Do Good Things, Don't We? 'Blended Value Accounting' in Social Entrepreneurship. *Accounting, Organizations and Society*. 34. 6-7: pp. 755–769.
- _____. 2010. The Institutionalization of Social Investment: The Interplay of Investment Logics and Investor Rationalities. *Journal of Social Entrepreneurship*. 1.1: pp. 70–100.

- _____. 2018. A General Theory of Social Impact Accounting: Materiality, Uncertainty and Empowerment. *Journal of Social Entrepreneurship*. 9.2: pp. 132–153.
- Nicholls, Alex and Emma Tomkinson. 2015. The Peterborough Social Impact Bond. In *Social Finance*, edited by Alex Nicholls, Rob Paton, and Jed Emerson, pp. 331–378. Oxford University Press.
- Nicholls, Alex and Simon Teasdale. 2017. Neoliberalism by Stealth? Exploring Continuity and Change Within the UK Social Enterprise Policy Paradigm. *Policy and Politics*. 45.3: pp. 323–341.
- OECD. 2012. *Towards a Green Investment Policy Framework. The Case of Low-Carbon, Climate-Resilient Infrastructure*.
- SDG Impact. 2020. *SDG Impact Standards for SDG Bonds*. United Nations Development Programme.
- Spear, Roger, Rob Paton, and Alex Nicholls. 2015. Public Policy for Social Finance in Context. In *Social Finance*, edited by Alex Nicholls, Rob Paton, and Jed Emerson, pp. 456–483. Oxford University Press.
- Teasdale, Simon and Alex Nicholls. 2020. Dynamic Persistence in UK Policy Making: The Evolution of Social Investment Ideas and Policy Instruments. *Public Management Review*. 1-16.
- UNCTAD. 2015. *Investment Policy Framework for Sustainable Investment*.
- Volz, Ulrich. 2018. *Fostering Green Finance for Sustainable Investment in Asia*. ADBI Working Paper, Asian Development Bank Institute.
- WEF and Government of the United Kingdom. 2018. *Behind the Scenes of Impact Investment Policy Making*.