Recommendations for how Finland can develop sustainable finance at the national level

DEVELOPING FINLAND'S SUSTAINABLE FINANCE ECOSYSTEMS

This Report was prepared with funding by the European Union via the Structure Reform Support Programme and in cooperation with the Directorate General for Structural Reform Support of the European Commission

This report is a deliverable (deliverable 4) of the project "Developing Finland´s Sustainable Finance Ecosystems"

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Recommendations for how Finland can develop sustainable finance at the national level

Enhancing information exchange and coordination & leveraging lessons learnt from the pilot ecosystems

May 2022

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Cover design and layout: June Park

This project is implemented by AARC Ltd. in association with Gaia Consulting Oy and Trinomics.

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Executive summary

The overall objective of the EU-funded Project "Developing Finland's Sustainable Finance Ecosystems" is to contribute to increasing financing for ecosystems that provide solutions to the Sustainable Development Goals (SDGs) in Finland and globally, and in which Finland has strong expertise. The project supports national authorities, beneficiary institutions, and stakeholders in deploying and harmonising sustainable finance practices and identifying solutions on how to enhance information exchange, better coordinate their activities, and share lessons learnt.

In parallel to finalizing and launching the Finnish Roadmap for Financing a Decade of SDG Action 2021, the project focused during 2021 on four pilot ecosystems, with the aim to concretely identify bottlenecks and solutions for mobilising SDG aligned investments. The key findings and recommendations from that work have been integrated into Financing SDG Transformations: experiences from four pilot ecosystems (2022).

This report is an integral continuation of the Roadmap development and the work on four pilot ecosystems, focusing on boosting SDG aligned finance for offshore wind-power, sustainable protein, climate smart water and vocational education solutions. The previous report on financing transitions (Deliverable 3) provides in total 46 recommendations for how to accelerate SDG aligned finance within four pilot ecosystems.

This report (Deliverable 4, within the EU-funded Project "Developing Finland's Sustainable Finance Ecosystems"), further refines the analysis and focuses on **how Finland can develop sustainable finance at the national level**. In particular the report provides analysis and recommendations related to enhancing information exchange and coordination as well as related to leveraging lessons learnt from the pilot ecosystems.

Chapter 2 presents a number of lessons learnt from ecosystem work, with a view to harness these experiences also for other pilot ecosystems in Finland as well as internationally. The analysis highlights three overriding lessons and preconditions for successful pilot ecosystem work.

First, it is essential to secure good ***transparency and solid criteria for choosing pilot ecosystems and engaging stakeholders.*** While looking for focus areas to advance SDG-aligned finance, it is important to profoundly analyse and understand what kind of SDG solutions of true value-add a country or region can competitively offer. Simultaneously it is important to ensure that all key stakeholders are informed and have a possibility to participate in the selection process. This is important for securing the uptake and commitment to any recommended changes in the finance ecosystem.

Second, ***a structured process and framework for working with ecosystem.*** The pilot ecosystems bring together a broad group of stakeholders that need to work intensively together, in order to address rather challenging SDG financing problems. For this reason the project has developed and piloted within the four ecosystems an SDG finance toolkit that provides structure and guidance throughout the process, with the key elements consisting of i) Defining the scope for the finance ecosystem, ii) Developing a joint vision for the ecosystem, iii) Creating an understanding the current status and investment needs in the ecosystem, iv) Analysing the financial ecosystem in more detail and its key bottlenecks, and v) Developing recommendations for removing bottlenecks and scaling-up.

Third, having a structured process in place also lays the foundations for ***systematically distilling conclusions and lessons learnt from hands-on pilot work*.** The SDG pilot ecosystem framework has provided a useful structure to analyse and compare the recommendations and lesson learnt, within and between the four pilot ecosystems in Finland, but also providing a rather useful and applicable mechanism to compare analysis and lessons learnt between Finnish and international peers. This is crucial, noting that we are addressing a global challenge needing major national and international transformations during this decade.

Building on the above-mentioned structured process, chapter 2 also presents in total nine recommendations that could help accelerate SDG aligned finance on national level. In addition, the analysis reveals that the Finnish sustainable finance ecosystem landscape could be further improved by adding new instruments or adjusting existing ones.

Chapter 3 presents analysis and recommendations for enhancing coordination and information exchange, in order to help the Finnish finance ecosystem to step up to the SDG finance challenge during this decade.

Based on experiences from developing the national SDG roadmap, work within the four pilot ecosystems, as well consultation with international peers, chapter 3.1 presents an ambitious **overall framework to enhance national coordination and** suggests **five guiding principles and core elements** needed at the national level. Based on the analysis it would be advisable to have a high-level national Coordination Group, setting the overall objectives for SDG finance in Finland, providing the policy signal and governmental coordination.

Chapter 3.2 provides a deep dive into opportunities to improve **national level sustainable finance coordination,** suggesting the establishment of a SDG finance Taskforce, to operationalize and drive the coordination.

Throughout the pilot ecosystem work, several stakeholders seeking funding have highlighted challenges in navigating the finance ecosystems, indicating problems in accessing information on most suitable funding options, and in particular challenges in assessing the various funding options in order to build an optimal funding pathway for themselves. Chapter 3.3 provides recommendations for developing and strengthening national level **sustainable finance information exchange,** to help different stakeholders navigate the finance ecosystems, and in particular improve the quality and targeting of communication of financing options available to them.

Chapter 4 pulls together the analysis, noting that while many elements (including actors, instruments and capacities) are rather well in place in Finland, in case Finland wants to develop an SDG finance ecosystem, which is ready to tackle the task of delivering SDG aligned finance systematically and at massive scale, a number of changes and improvements to the Finnish finance ecosystem should be considered.

1. Introduction

1.1 Pilot ecosystems as a foundation for refining national measures

The EU-funded project "Developing Finland's Sustainable Finance ecosystems" (2020-2022) has so far produced the (updated) national **Sustainable Development Goals Finance Roadmap** for Finland[1] (2021), which provides an overall framework for defining the key elements that need to be addressed in Finland to tackle the SDG finance gap and mobilise private finance at required scale. The implementation of the roadmap has been concretised in four pilot ecosystems (offshore wind, sustainable protein, climate-smart water solutions, and vocational education).

The experiences from these pilot ecosystems have been gathered in the report **Financing SDG Transformations** (2022)[2]. The four pilot ecosystems have brought together Finnish private and public sector financial and technical experts from each theme into core groups, which have during 2021 been able to identify more specifically which kinds of financing modalities and instruments are needed in scaling sustainable finance in Finland. The pilot ecosystems have created recommendations on how the public sector could advance the development of these sectors in Finland and internationally, both through sustainable finance solutions and through creating a more favourable enabling environment for directing more finance towards the SDGs.

The recommendations and lessons learnt from the pilot ecosystems are valuable for increasing sustainable finance more comprehensively at the national level in Finland. The recommendations from the pilot ecosystems can also help the formation of other thematic ecosystems, and for this the toolkit for establishing new SDG finance pilot ecosystems has been developed (see chapter 2.2, section systematically distilling conclusions and lessons learnt from hands-on pilot work).

1.2 Overview of pilot ecosystem recommendations

As the outcome of work within the four pilot ecosystems, a total of 46 recommendations (see Figure 1) were developed by the ecosystem core groups and refined based on national stakeholder consultations (see Deliverable 3).

[1] Gaia, Trinomics and AARC (2021). Sustainable Development Goals Finance Roadmap - Finnish Roadmap for Financing a Decade of SDG Action. https://tem.fi/documents/1410877/92029151/SDG+Finance+Roadmap_2021+Finnish+Roadmap+for+financing+a+Decade+of+Action_final.pdf/3c273980-f1f6-da98-acca-d767d13ca52d/SDG+Finance+Roadmap_2021+Finnish+Roadmap+for+financing+a+Decade+of+Action_final.pdf?t=1632389757818
[2] Gaia, Trinomics and AARC (2022). Financing SDG Transformations - Experiences from four sustainable finance pilot ecosystems. https://tem.fi/documents/1410877/92029151/Financing+SDG+Transformations_experiences+from+four+Finnish+pilots_January+2022_FINAL.pdf/4a061cd1-ba21-7a02-8694-5cb54ffcfab0/Financing+SDG+Transformations_experiences+from+four+Finnish+pilots_January+2022_FINAL.pdf?t=1646736151532

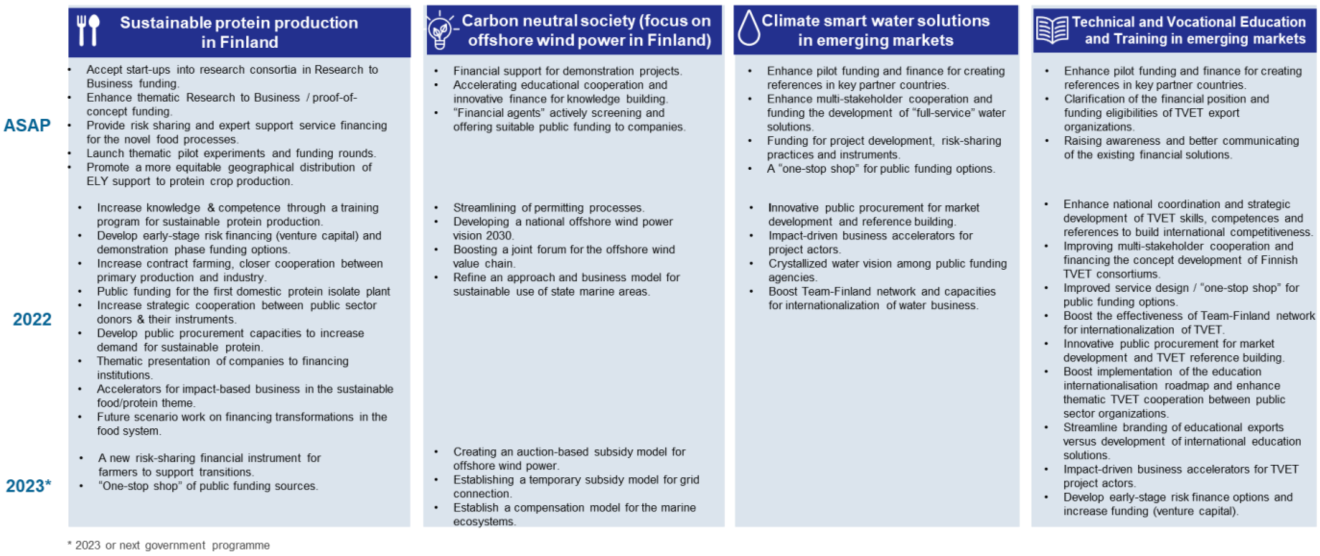

Figure 1. Recommendations given by all four pilot ecosystems

Each pilot ecosystem has developed recommendations that include both ecosystem-specific recommendations (such as increasing contract farming to support sustainable protein production or streamlining of the permitting processes for offshore wind projects) and common recommendations for several or all of the pilot ecosystems. The cross-cutting, common recommendations for all ecosystems are described more in detail in section 2.2.

The recommendations for sustainable protein production and offshore wind power have a focus on addressing these SDG challenges in Finland, however, integrating the option of later providing these solutions also internationally (e.g. novel protein products or Finnish offshore wind-related expertise). The recommendations for climate smart water solutions and technical and vocational education (TVET) have a stronger internationalisation perspective, with the ecosystem geared also to address challenges finance to access and scale-up Finnish SDG solutions in emerging markets, too. Some of the recommendations are related to enhancing the enabling environment of SDG finance and SDG solutions in Finland, some are more specific to enhancing or modifying the currently available financial instruments, and some are suggesting the establishment of new financial instruments in Finland.

1.3 Objectives for the report

This report further refines the analysis from the four pilot ecosystems, and specifically focuses on how Finland can develop sustainable finance at the national level. In particular the report provides analysis and recommendations related to enhancing information exchange and co-ordination as well as to leveraging lessons learnt from the pilot ecosystems. Hence the report is forward looking and strongly geared on action needed on national level, in particular how Finland and the public sector overall could become a driver of SDG transitions, from the perspective of SDG aligned financing. Following this introductory section, Chapter 2 highlights key recommendations and lessons learnt from pilot ecosystem work, while Chapter 3 presents recommendations for improving the sustainable finance coordination and information exchange in Finland.

2. Leveraging the lessons learnt from the pilot ecosystems

2.1 Key lessons learnt from the pilot ecosystems

The Finnish SDG finance roadmap (2021) provides a national framework and strategic guidance for re-directing and upscaling SDG-aligned finance during this decade. In 2021-2022 the work has continued through the establishment of four pilot finance ecosystems. These pilot ecosystems (Figure 2) have allowed to analyse the required changes in the Finnish finance ecosystems in more detail and engage key stakeholders for building capacity and commitment for boosting necessary transformations in SDG finance.

Figure 2. The four pilots address SDG challenges of national and international relevance.

While the key outcomes and recommendations for pilot-specific follow-up from pilot ecosystem work are presented in detail in Financing SDG Transformations (2022), this chapter highlights key lessons that have been learnt during ecosystem work, with a view to harness these experiences also for other pilot ecosystems in Finland as well as internationally.

Transparency and solid criteria for choosing pilot ecosystems and engaging stakeholders

All countries have their specific and particular SDG challenges as well as strengths when addressing these challenges. While looking for focus areas to advance SDG-aligned finance, it is important to profoundly analyse and understand what kind of SDG solutions of true value-add a country or region can competitively offer.

This has been the case when initiating the work on pilot finance ecosystems in Finland. The four pilot ecosystems were selected through a transparent and participatory process in late 2020 - early 2021, to tackle SDG challenges of national and international relevance.

For those reasons the selection criteria and process of ecosystem pilots took careful note of relevant previous SDG analyses in Finland, included a solid review of the finance sector "SDG-alignment-status" and noted various competitiveness/business potential analyses.[3] The review results are presented in Finnish SDG finance roadmap and Financing SDG

[3] See e.g. the Growth Portfolio 2.0 (Kasvuportfolio 2.0) project of the Ministry of Employment and Economy at https://tem.fi/documents/1410877/35402773/Tiivistelma_Kasvuportfolio.pdf/9c319019-b91a-3438-fd17249519f739f0/Tiivistelma_Kasvuportfolio.pdf?t=1600251188583 and Prime Minister's Office of Finland (2020). Report on the Implementation of the 2030 Agenda for Sustainable Development. https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162268/VNK_2020_8_Voluntary_National_Review_Finland.pdf?sequence=4 . The full selection process and criteria are presented in more detail in project report, Deliverable 2 (D2, 2021).

Transformations[4] and have directly fed into pilot ecosystem work as well as the analysis and recommendations in this report.

In order to build commitment of key stakeholders to any forthcoming recommendations for improving the sustainable finance ecosystems, the selection process was iterative and transparent, making use of a clear set of primary and secondary criteria (Figure 3). A considerable amount of stakeholder consultations (national and international) as well as national workshops helped ensure that the process engaged widely and transparently key stakeholders. This is well in line with the objective of the pilot ecosystem work to stepwise build commitment and ensure a high potential to create SDG impacts, as well as to learn as much as possible from different kinds of ecosystems.

Figure 3. Selection criteria for sustainable finance ecosystem piloting.

A structured process and framework for working with ecosystems

The pilot ecosystems brought together a broad group of stakeholders. In some cases, a number of those stakeholders have collaborated previously, and/or are possibly aware of each other, in other cases those stakeholders are new to each other and may for the first time consider being part of a joint ecosystem. For these reasons it has been essential within this project (Developing Finland´s Sustainable Finance Ecosystems) to develop and pilot a structured process to engage and commit key stakeholders to collaboration.

Inevitably, some of the ecosystem stakeholders are competitors, some of the mandates of public funding agencies might overlap, while some of the ecosystem stakeholders prefer a more national/international focus in prioritizing SDG challenges to be addressed etc. Hence it is important to create a clear and structured framework for collaboration, where all stakeholders understand the objectives of ecosystem work, what is expected from them (what kinds of input) as well as what could optimally be the outcomes and benefits (nationally and/or per stakeholder) of such ecosystem work. Setting the stage for ecosystem work as transparently as possible, helps build commitment and trust, and discuss bottlenecks and solutions openly, and encourages ecosystem stakeholders to jointly look for solutions to

[4] Previous project deliverables 2 and 3 are available at project website.

bottlenecks hampering the flow and scale-up of finance into critical SDG solutions. Within this project, following the selection process discussed above, a toolkit consisting of five key elements was developed and tested (see Figure 4), consisting of:

1. Defining the scope for the finance ecosystem
2. Developing a joint vision for the ecosystem
3. Understanding the current status and investment needs in the ecosystem
4. Analysing the financial ecosystem in more detail and its key bottlenecks
5. Developing recommendations for removing bottlenecks and scaling-up.

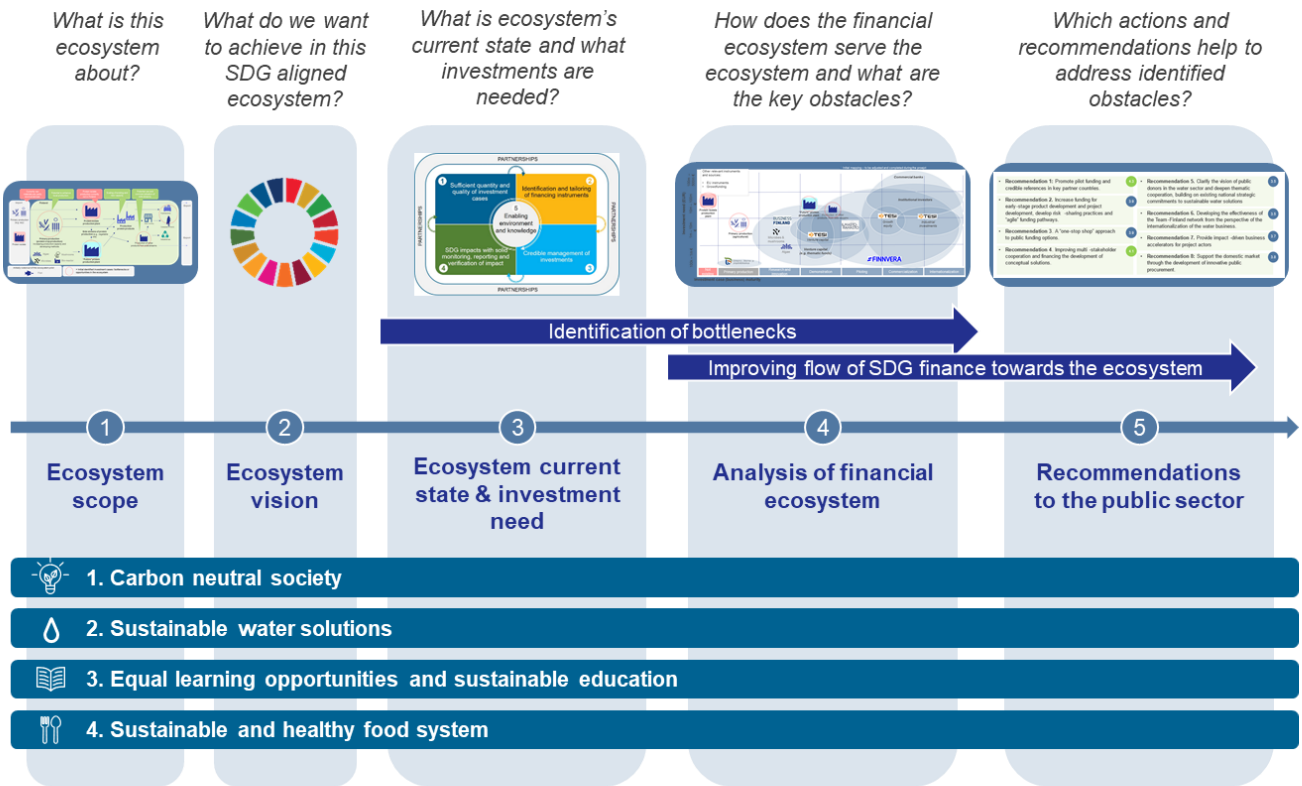

Figure 4. A structured process for building SDG finance ecosystems – key elements of the SDG finance toolkit. The elements and visualisations are explained and presented in more detail in next section below.

This framework has allowed to stepwise analyse the key bottlenecks within each finance ecosystem, and identify ways, in particular from the perspective of public sector, to mobilize private finance at scale to address central SDG challenges.

Systematically distilling conclusions and lessons learnt from hands-on pilot work

The SDG pilot ecosystem framework has provided a useful structure to analyse and compare the recommendations and lessons learnt, within and between the four pilot ecosystems in Finland, but also providing a rather useful and applicable mechanism to compare analysis and lessons learnt between Finnish and international peers.

When looking at the five elements of the Finnish SDG finance toolkit a set of conclusions and lessons learnt arise:

1. Defining the scope for the finance ecosystem
   - Defining the scope of each pilot ecosystem is central for delivering useful analysis and recommendations. A transparent and in-depth discussion of the scoping including i) what is left in/out and why, ii) what are the value chains in this ecosystem that can deliver SDG transformations, and iii) jointly deciding the regional/geographical focus (national/international priorities), serves also to test that all relevant stakeholders have been invited to the process.
   - This helps ensuring that the work within the pilot is efficient and effective, that roles and key stakeholders within the ecosystem can be better defined (is somebody missing from the table) as well as results can be achieved within the means of the pilot ecosystem. Having a clear scope helps better manage and orchestrate different stakeholders within the ecosystem, in some cases having complementary, in other cases overlapping or even competing mandates/objectives).
2. Developing a joint vision for the ecosystem
   - While national commitments to Agenda2030 provides a good starting point for advancing SDGs, many of the transformations require clear policy signals and enabling environments, in order to attack major private investments. However, pilot ecosystem work confirms that broad visions are not sufficient for driving major changes in finance allocations, stressing the importance of clear, high-level vision statements build with sector representatives, and with transparent ambition/target levels and timelines.
   - While vision development is useful for bringing ecosystem stakeholders together, to build required commitment for future action, work within pilot ecosystems has also highlighted the opportunity of linking the ecosystem vision from the beginning strongly with the SDGs (or optionally some other credible sustainability goal) as a major driver for credible impact tracking.
3. Understanding the current status and investment needs in the ecosystem
   - Reviewing the current status of investments within the pilot ecosystem and conducting initial scanning of the investments needs, provides a solid basis to refine the analysis of where the finance ecosystem stands – in terms of project pipeline (incl. type, size, maturity), financing instruments and investors available to it, readiness and capacity to track and disclose SDG impacts, as well as the overall status and quality of the policy enabling environment.
   - This analysis has made use of the elements of the SDG finance roadmap (presented in Step 3, in Figure 4 above) which have also been useful in comparing international experiences and distilling lessons learnt for Finnish pilot ecosystems. These analyses have helped to understand differences in the type and maturity of finance ecosystems, why certain solutions might work in one country but would require tailoring and/or accompanying measures in another country. The pilot ecosystem work has also highlighted the importance to be able to work with initial market estimates and proxies, noting that many SDG transitions require developing innovations and new market solutions. This also highlights the need for improved dialogue between financing agencies and solutions providers to develop a joint understanding of required business models, associated risks and opportunities.
4. Analysing the financial ecosystem in more detail and its key bottlenecks

- The in-depth analysis of available financing instruments, in close collaboration with the public funding agencies as well as private funding actors – while also bringing on-board the companies, public sector actors and NGOs that actually deliver the SDG products and services - is at the core of pilot ecosystem process.
- The visualization of the entire finance ecosystems from the point of view of a thematic SDG solution (presented in Step 4, in Figure 4 above), has strengthened a joint commitment to build "full-value chain" / full financing pathways" for key SDG solutions. In some cases, the analysis has identified gaps or overlaps in the mandates of funding agencies, and a lack of instruments in particular linked to de-risking or piloting. In other cases, the challenge is more in the scattering of financing services. Bringing together key actors, and e.g., through visualisations depicting the respective roles and mandates, has served as a strong tool to build joint understanding and to jointly address key bottlenecks.[5]

5. Developing recommendations for removing bottlenecks and scaling-up
    - The development and refinement of recommendations has been a rather natural step within the pilot ecosystems, noting the iterative process of scoping the pilot ecosystem, defining a vision for it, and jointly identifying the key bottlenecks. From the perspective of uptake of the recommendations, it has been central to engage a wider group of stakeholders through national workshops and complementary interviews, also helping to identify key stakeholders for taking the lead in implementing the recommendations.
    - While the recommendations have been rather straightforward to develop and refine within the framework described above, the overall success of any changes in the finance ecosystems will be measured through impacts created by upscaled investments in the SDG transformations, which in most cases are not visible immediately. For these reasons, it is of utmost importance that sufficient resources and efforts are geared to ensure that the recommendations find solid "home base and champion", and the recommendations are well linked to other key national priorities and transformation processes.

As noted above, some of the bottlenecks do require pilot-specific and tailored measures. However, in many cases synergies between recommendations are evident and many of the recommendations can cut across several or all the four pilot ecosystems, and most likely also serving other ecosystems that can advance SDG transformations. The subsequent sections provide an in-depth analysis of these recommendations, also highlighting potential measures for addressing national level bottlenecks, such as the need to boost better national coordination and information sharing on SDG finance.

[5] The visualization of key stakeholders in the respective finance ecosystems, has most recently also served e.g. the inter-ministerial working group in Finland, looking into green finance during spring 2022 (in Finnish).

2.2 Cross-cutting pilot ecosystem recommendations at the national level

The four pilot ecosystems have delivered multiple recommendations that can be considered cross-cutting, which can be further refined and leveraged also in other SDG-related ecosystems. These recommendations suggest solutions to rather similar and/or commonly shared bottlenecks identified during pilot ecosystem work.

The nine recommendations presented below can provide effective and cost-efficient pathways for addressing bottlenecks at national level in Finland, across most finance ecosystems with the aim to mobilize SDG-aligned investments at scale. The recommendations address various elements of the Finnish finance ecosystem (Figure 5), with some having more national, other more global bearing. These recommendations have also international applicability, obviously with some tailoring needed in different national contexts.

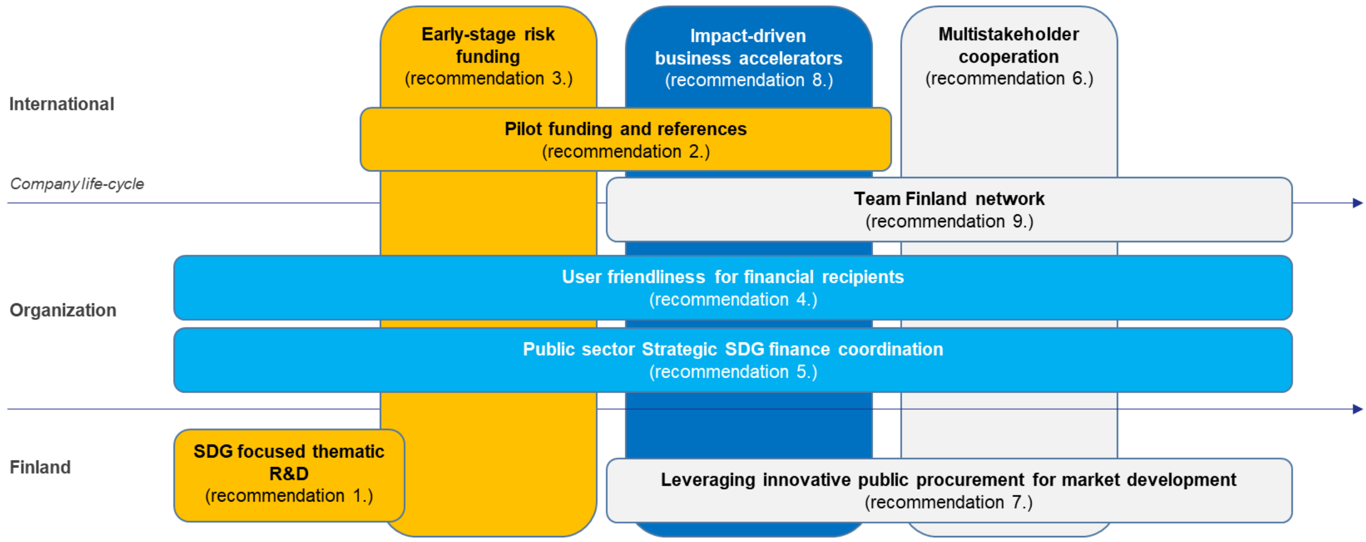

Figure 5. Joint recommendations from the pilot ecosystem work. The recommendations suggest actions in various components of a sustainable finance ecosystem.[6]

Recommendation 1. Enhance SDG-focused thematic research and development funding

Background and the need for this recommendation. Currently a common bottleneck in the Finnish SDG solution landscape is a rather low commercialisation level of research. Finland has high capabilities in research and developing innovative SDG solutions in differ-

[6] The Finnish SDG finance Roadmap makes us of five key elements when developing and putting into action an SDG finance ecosystem. The colours in this figure refer to those key elements (see Roadmap, figure 3).

ent sectors, e.g. food, manufacturing, circular economy. To untap the potential in the research and commercialisation pipeline, there is a strong need to improve SDG focused support in the R&D phase and ensure early-stage financing for both research consortia and start-ups.

There are two key bottlenecks identified in the pilot ecosystem work. First, Research to Business support should be suitable for companies of all sizes, including start-ups. For example, Business Finland's Research to Business funding is currently targeted at research institutes, and ELY[7] funding on the other hand at companies that are already making a turnover. Consequently, there is no sufficient Research to Business funding available for early-stage companies (especially pre-revenue start-ups). Second, research funding is currently not sufficiently targeted and channelled to specific key SDG areas. For this reason, SDG related innovations presenting new type of business (e.g. sustainable protein), often lag behind other topics and sectors in open funding searches and thus do not receive the necessary funding.

Recommendation: Business Finland's Research to Business[8] funding or proof of concept funding should be modified to also allow participation of start-ups in the consortia applying for funding, instead of only research institutions. As many SDG solutions present innovative new business models and cooperation approaches (often with start-up companies working together with larger companies and research institutions), the existing R&D funding options in Finland do not necessarily provide a good fit as they limit the participation based on the type of applying organization.

Additionally, to ensure that emerging SDG innovation areas a covered in the R&D funding, it is recommended to develop targeted and SDG focused funding to support innovation in selected SDG thematic areas. Thematic funding searches could bring up new innovations and business models created by research-based start-ups, e.g., in food industry or circular economy, noting that funding searches open for all sectors are often dominated by large existing companies with proven track records. This would boost the R&D funding for also new emerging SDG areas.

Geographical scope: Finland, with export possibilities of solutions to other countries.

Key actors: Business Finland

Leverage and value in other ecosystems: Finland has strong capabilities to provide SDG impact solutions in multiple different sectors. R&D efforts should be focused on the areas where Finland has national strengths and that are critical for Finnish efforts to enable sustainability transition and contribute to the SDGs. A thematic approach to R&D and the evolving of SDG solutions from research to business opportunities can be utilized in these key areas to ensure that public sector can efficiently boost important R&D efforts timely and in sufficient scale.

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[7] Funding from Centres for Economic Development, Transport and the Environment
[8] Business Finland: Research to Business funding: https://www.businessfinland.fi/en/for-finnish-customers/services/funding/cooperation-between-companies-and-research-organizations/research-to-business

Recommendation 2. Enhance pilot funding and finance for creating references in the international market

Background and the need for this recommendation. Many Finnish export-focused SDG solution providers lack international references (track record), which is a key bottleneck for their growth. Credible references, as well as local networks, are essential for both public and private sector clients in emerging markets. Lacking track record may be interpreted by buyers as a sign of lacking market understanding and limited capacity to build solid and lasting local partnerships. The lack of funding for early-stage project development and the ability to carry financial risk are major bottlenecks for the growth and access to further funding.

Recommendation. The ecosystem pilots (climate-smart water solutions & TVET) with strong international focus, indicate that Finland and Finnish actors possess solutions that can create SDG impact in developing countries. However, entering the international market and being competitive in international tenders (e.g., by governments, cities or international finance institutions, such as the World Bank) requires significant earlier references and a good track record of successful implementation of these solutions. Finland should rapidly enhance its funding for required pilots and creating references in selected emerging markets.

Geographical scope: Global, with special focus on Asia and Africa.

Key actors: Business Finland (DevPlat[9], Sustainable Growth Program of Finland[10]), Ministry for Foreign Affairs (PIF[11]), NEFCO (Nopef[12], funding feasibility studies).

Leverage and value in other ecosystems: The public sector could through its market intelligence (including Team Finland services) and refined finance instruments play a more active role to support Finnish companies to enter international markets and ensure finance for the first in-country pilot and reference projects in emerging markets. This is valid for all export-focused ecosystems in Finland.

Recommendation 3. Develop early-stage risk sharing instruments and demonstration funding options

Background and the need for this recommendation. SDGs solutions are developed increasingly by innovative start-ups, which do not have a long revenue history and thus carry *a priori* more risk in their operations than established large companies. Public funding in Finland is still rather risk-averse, and funding is mainly done based on market-based conditions. However, there is a promising early-stage pipeline of Finnish solutions that would require targeted support and access to finance to refine and scale their innovative solutions. New solutions supporting sustainability and green transition are typically non-bankable for

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[9] https://um.fi/devplat-funds-the-development-of-innovations-especially-for-african-and-asian-markets
[10] https://www.businessfinland.fi/en/campaign-sites/sustainable-growth-program-for-finland
[11] https://um.fi/public-sector-investment-facility
[12] https://nopef.com/

traditional investors, hence various blended funding solutions to asymmetrically share risk are being actively introduced internationally.

Recommendation. To advance the scaling of these solutions, and accelerate the required transitions, it is evident that more actors with readiness and capacity to carry various risks related to the SDG transitions is needed. Public sector financial contributions have a significant value-added potential in this regard, if they are able to take more risks than in the current ecosystem, and hence help leverage more private finance towards the early-stage innovative solutions and subsequently towards their scaling.

Geographical scope: Especially needed to accelerate finance in SDGs solutions in Finland. However, similarly risk-sharing instruments are needed for organizations targeting emerging markets, taking note of experiences from international forerunners

Key actors: Currently Climate Fund as a key actor in Finland, TESI as venture capital provider, as well as Finnfund and Finnvera in international markets.

Leverage and value in other ecosystems: Public sector finance (with a mandate to take risks) is highly needed to enable private finance organizations to participate in high-risk projects. This recommendation is relevant for any innovative new SDG solution.

Recommendation 4. Develop the customer orientation and accessibility of the public funding options

Background and the need for this recommendation. One of the key cross-cutting findings from the pilot ecosystems is that the financial recipients do not have a clear view of the available public finance instruments. Public sector financing options are scattered and not easily accessible. Due to lack of coordination between public financial institutions, financial beneficiaries need to invest a considerable amount of time and resources to proactively contact, find and analyse potentially suitable funding solutions and combinations thereof, from multiple different channels and organizations. In many cases, SDGs solution providers are small growth companies with limited resources as well as limited understanding of the financing instruments and options best suitable for them.[13]

Recommendation. The pilot ecosystem participants suggest improving the overall coordination between the institutions and instruments and providing a single access point to public sector financing options & support in Finland, e.g., through a public sector "hub" or "service desk" that focuses on SDG solutions and their financing. This actor could be implemented within the existing organizations and present the whole public sector financing landscape to ensure that financial recipients have better access to funding.

In addition, pilot ecosystem stakeholders see value-add in engaging/launching "public sector agents" who pro-actively scan, screen, and engage with interesting SDG solution providers,

[13] In addition, due to high-risk profiles (typical for many emerging SDG solutions), these companies are not easily funded by private finance. Often, public sector instruments could be a good fit for them, but these companies do not find the right ones or do not get access to the right persons/organizations that could help them.

to offer guidance about potential financial instruments that the company could utilize to scale its business. Linking these agents for example to key thematic SDGs areas in Finland (e.g. starting from pilot ecosystems launched within this work) could also improve public sector's understanding of the SDGs solutions landscape and offer better tailored instruments, possibly linking with "thematic SDGs finance webpages". Many companies providing SDG solutions require also external support to improve their overall bankability and strengthen their business case from SDGs perspective (see also Rec 8. about Impact-driven business accelerators, which could be linked to the public sector "service package" in this recommendation).

Geographical scope. This challenge is common for pilot ecosystems focusing on Finland and international markets. Especially when targeting emerging markets, knowledgeable and proactive public sector support to help identify the best financial instruments, and their combination, could play a significant role in facilitating the development of "funding pathways" that help advance the market access and scaling of Finnish SDG solutions globally.

Key actors: Business Finland, Team Finland members and ministries in charge of ownership steering for key public funding agencies.

Leverage and value in other ecosystems. Based on the four pilot ecosystems, this challenge is widely applicable to current and future SDGs ecosystems. Implementing this recommendation, and potentially using the four pilot ecosystems as a starting point to pilot a public sector SDG finance "service design" approach, could be an important overriding step to develop the national Finnish sustainable finance landscape and its efficiency. The quality and sustainability of the national finance landscape is also an increasingly important competitiveness factor for future SDG transformation investments, needed in all countries.

Recommendation 5. Increase strategic and SDG-thematic cooperation between public sector financial organizations and ownership steering

Background and need for the recommendation. The Finnish public sector finance landscape is rather well developed, offering a good variety of actors and financial instruments. A set of financing options are available but their utilization to finance SDG solutions is sporadic, most instruments have not been designed with SDG impacts explicitly in mind.

The experience from pilot ecosystems also show that there are SDG themes and investment areas that remain outside the radar - public sector financial organizations have not specifically targeted or addressed some of the increasingly important SDG challenges, and/or have insufficient understanding and experience in those emerging areas. For example, sustainable protein and TVET ecosystems represent areas where public sector finance actors indicate rather limited presence and commitment, and overall the financing experience of operating within these areas is narrow. Recently, this landscape has started to change, in part as more systematic cross-ministerial work has been launched in Finland, including screening of green and sustainable finance challenges as well as opportunities nationally, as also suggested in the SDGs Finance Roadmap (2021).

However, based on the findings from the pilot ecosystems, sustainable finance is currently not sufficiently coordinated at the national level and there is a lack of ownership steering in public sector finance with regards to systematically introducing and scaling SDGs solutions. While public sector finance institutions operate within their mandate, many have started to identify and/or take steps to integrate SDGs considerations (including approaches and instruments) into their work, representing a positive "bottom-up" trend in the right direction. However, a joint national approach to SDGs financing is missing. Developing such a national approach, with a functional coordination mechanism, could help boost the effectiveness of the Finnish finance ecosystems, and its capability to mobilize private finance with major SDGs impacts, nationally and internationally.

Recommendation. To address this challenge, better and more strategic coordination between different public funding institutions, coordination of funding criteria, pipeline development and management, driven by common national priorities for sustainable finance are needed. If a certain SDG theme is defined as important nationally (several credible and systematic processes are currently producing this prioritisation), it would be important that public sector financing organizations organise themselves around these priority areas/themes. Public sector actors could develop models that allow different organisations to collaborate thematically and aim to better accommodate their respective roles and financing services in that thematic area. Beyond policy commitments, successful coordination will require investments in capacity building and knowledge sharing, enabling SDG aligned ownership steering that crowds-in private finance where it is most needed (Chapter 3 focuses explicitly on the national level coordination and information sharing recommendations).

Geographical scope. While operational focus is in Finland, improved coordination and organisation of the finance ecosystem serves Finnish SDG solutions internationally too.

Key actors: Prime minister's office, public sector financial organizations and ministries in charge of their ownership steering.

Leverage and value in other ecosystems: Improvements in the ownership steering and strategic cooperation serves all Finnish SDG finance ecosystems. The improvements made in this area can easily be leveraged to any potential future SDG focus area.

Recommendation 6. Improve multi-stakeholder cooperation and financing the joint offering and consortiums

Background and the need for this recommendation. To date, within climate smart water and TVET solutions, a limited number of Finnish SDG solution consortia have been successful in international markets. Hence, improving multi-stakeholder cooperation and partnership models was identified as a key bottleneck in pilot ecosystems, especially TVET and climate smart water solutions. Successful models for multi-stakeholder collaboration are still rare, developing multi-stakeholder cooperation remains challenging, effective models and practices (e.g. financial and contractual models), "orchestrators and/or integrators" of cooperation, and resources for enhancing multi-stakeholder cooperation are insufficient.

The multi-stakeholder models are important as a large number of Finnish SDG solution providers are relatively small companies, while many of buyers in the emerging markets look for "comprehensive solutions and packages". This increases the need for building attractive coalitions and collaborations around Finnish SDG solutions, often complemented with local partners. Investments and support in developing broader ecosystem participation and collaboration can boost the availability of Finnish SDG solutions on the global market. Similar consortia development is also needed in certain SDG areas in Finland, including e.g. large scale energy investments.

Recommendation. Developing multi-stakeholder cooperation and partnership models for helping companies especially in the international market to provide competitive "full service/end-to-end solutions" through Finnish consortia. Bringing together different actors and building models for multi-stakeholder cooperation is needed to enhance Finnish SDG solutions to compete for bigger contracts and/or tailor solutions that fit optimally the customer needs in emerging markets. Public sector could play more active role to enable and finance building these joint offerings and consortia. Public sector can support in building attractive partnership models and alleviate the costs and burden of individual actors in entering partnerships. Also in Finland, large green transition projects will require significant investments and participation from multiple stakeholders.

Geographical scope. Emerging markets, but also applicable to Finnish SDGs investments.

Key actors: Business Finland, Finnpartnership. E.g., DevPlat[14] has recently improved the opportunities to integrate local partners in co-creation, the development of sustainable, locally tailored business models and preparation of larger scale projects.

Leverage and value in other ecosystems: The development of multi-stakeholder cooperation and partnership models would help building competitive "end-to-end solutions" and improve Finnish SDG solution offering in international markets. This recommendation is relevant for several SDG focus areas, where larger scale SDG solutions are needed.

Recommendation 7. Leveraging innovative public procurement for market development

Background and the need for this recommendation. Many Finnish SDG solutions currently lack a "home market" and a test bed for piloting and growing their solution. Furthermore, many Finnish actors aiming to scale their efforts and investments in the international market are lacking references needed in the global market. Developing domestic market as a test bed could also provide an efficient tool to support the international market entry.

Pilot ecosystem work indicate that harnessing national public procurement emphasizing SDGs impacts could play important role to boost SDGs ecosystems. For example, the educational solutions of Finnish EdTech firms could be utilised and piloted in the Finnish educational system. Additionally, Finnish public institutions could help building important demand-side appetite for Finnish sustainable food innovations. New public procurement skills are needed, as well as systematic coordination to identify opportunities of SDG impact areas where public budget can help Finnish actors.

[14] DevPlat funds the development of innovations especially for African and Asian markets.

Recommendation. In Finland, there is a massive € 47 billion potential in public procurement[15], which is an opportunity to save costs and reap climate and sustainability benefits. Through public procurement, Finnish actors could utilise home market as a test bed for SDGs solutions. Developing Finnish SDGs public procurement capabilities has already been identified in many circumstances as an effective way to create SDGs impact. However, real progress has been moderate to date and mainly realised through individual cases, rather than systematic national efforts.

On-going development of the impact driven public procurement could be further boosted by utilising a thematic SDG approach, with focus on selected SDG themes. E.g. sustainable food value chains and Finnish food innovations could be systematically approached from public procurement point of view, aiming to find ways and channels to deepen the dialogue and relationship between SDG solution providers and the public sector procurement. SDG solution providers would also benefit from having possibilities for strategic co-development and cooperation with customers.

Geographical scope. Main focus of actions nationally in Finland, but could also help significantly Finnish SDG solutions in the international market when they have a “Finnish test-bed” and support to build references in the home country.

Key actors: Finnish Centre of Expertise for Impact Investing, Competence centre for sustainable and innovative public procurement (KEINO)[16]

Leverage and value in other ecosystems: This recommendation could be important especially in SDG areas, where the national demand-side signal has major change potential and could rather easily be activated.

Recommendation 8. Develop and utilize impact-driven business accelerators to boost selected national SDG focus areas

Background and the need for this recommendation. Finnish actors providing SDG solutions typically have strong substance, technical and theoretical knowledge of the underlying solution. In many cases, however, these actors lack business expertise and commercial skills as well as skills related to sustainability and financial modelling, measuring, and communicating SDG impact. In a competitive SDG solutions market, it is extremely important to have a strong SDG business case and a strong team with the right skillset and track record to attract required funding for entering markets and scaling up.

Providing attractive SDG solutions at commercial scale will require combining technical, commercial, sustainability and impact knowledge and skills. Currently many SDG solution providers are lacking some of these important areas. Impact-driven business accelerators

[15] Source: Ministry for Economic Affairs and Employment. For breakdown of opportunities see e.g. Positive Impacts of Innovative Public Procurement.

[16] The Finnish Centre of Expertise for Impact Investing started its work in January 2020 under the Ministry of Economic Affairs and Employment. From April 2022, the Centre of Expertise has continued its work as part of the activities of the State Sustainable Development Company Motiva. The Centre of Expertise has in important synergies with the Competence centre for sustainable and innovative public procurement (KEINO).

could have an important role in strengthening Finnish actors’ holistic approach to impact-driven business development. Accelerators could contribute to the development of companies’ sustainability- and impact-based business skills and facilitate the positive collision of different actors (companies, organizations, financiers, consumers, etc.). Accelerators could also increase companies’ understanding of the financier’s perspective and funding criteria, which is currently an area where a deeper dialogue and common understanding is needed.

Recommendation. Developing a concept for thematic SDG business Accelerators coordinated nationally would support the development of the Finnish sustainable finance ecosystem by improving the quality and quantity of the future investment pipeline.

Accelerators should focus on the well-defined SDG focus areas, linked with national SDG priorities. This thematic approach would add value by deepening the networks and collaboration between different ecosystem organizations. National coordination of the SDG Accelerators would ensure that the lessons learnt from the accelerator programs are leveraged in developing the concept systematically and helping to further leverage and replicate the concept in any other future SDG focus area. In this regard, the national Center of Expertise for Impact Investing could take leadership in boosting and coordinating these capacities.

Thematic SDG accelerator activities can help strengthen the business case of individual companies, boost SDG ecosystems and overall, in building of the investment pipeline for Finnish SDG solutions. In addition, the accelerator would play an important role in bringing together actors in the field of specific thematic SDG area, building community, and bringing them together to share lessons learnt and best practices. Accelerators can also be used to improve the dialogue between investors and SDG solution providers. Previously in Finland, for example, Sitra has run Impact Boot Camps for impact-driven start-ups and other organizations. Also, this recommendation should build upon on-going work by Finnpartnership, Business Finland and Fingo, and the lessons learnt so far from the SDG- Booster since 2020.

Geographical scope. The main focus of actions would be nationally in Finland but could also help significantly Finnish SDG solutions in the international market due to strengthened SDG business case capacities by Finnish solutions providers.

Key actors: Business Finland, Finnpartnership, Fingo, private finance actors and companies with SDG solutions.

Leverage and value in other ecosystems: SDG Accelerators are widely applicable in any potential SDG focus area in the future. Developing a concept can easily be multiplied to different SDG ecosystems.

Recommendation 9. Boost the effectiveness of Team Finland network to support international scaling

Background and the need for this recommendation. Limited target market understanding and lack of solid local partnerships hamper Finnish actors’ internationalization efforts. For small organisations, being present and building networks locally in the global market requires significant resources and capacity. Public sector could utilize its existing networks and provide services and support for Finnish actors, especially in terms of building connections, identifying high-potential leads for project pipeline development and advancing awareness of Finnish SDG offering/solutions.

Work within pilot ecosystems highlighted the need for stronger thematic support from the Team Finland network in emerging markets. Credible presence in the target countries and local partnerships are key in understanding the customer needs and refining solutions that truly work on local markets. Quality investment cases in, e.g., the African continent are difficult to build without a strong local presence. Tailoring offerings to local context require market research and contacts, which in turn requires local presence.

Recommendation. Identify stronger thematic priorities for Team Finland network and link it more actively with Finnish SDG finance ecosystem work. A more thematic approach could help accelerate international scaling of Finnish SDG solutions, while also contribute to better tracking of investment cases and more systematic learning. Proactive advocacy work in the target countries is needed to lobby funding agencies and influence the SDG criteria of tenders.

Geographical scope. Emerging markets, global

Key actors: Team Finland, The Ministry for Foreign Affairs, Ministry for Economic Affairs and Employment, Business Finland, Finnfund (and Finnpartnership)

Leverage and value in other ecosystems: The recommendation can be leveraged to selected international SDG focus areas. Many Finnish SDG solutions are small with limited resources to access emerging markets, and Team Finland can through its international network and expertise offer significant value for them.

2.3 Leveraging financial instruments in other ecosystems

Developing the Finnish SDG Finance Roadmap as well as delivering guidance for Financing SDG Transitions, during this project has allowed to analyse in detail the elements of a sustainable finance ecosystem. The work conducted within the four pilot ecosystems during 2021-2022, has further highlighted the understanding that successful finance ecosystems must be able to systematically identify and develop a pipeline of investment cases with SDG impact potential, and the ecosystem must be able to propose a variety of funding instruments and approaches, managed by credible funding agencies and investors with solid track records.

Simultaneously it is essential that the actors have the capacity and skills to track and report their SDG impacts, beyond simply reporting profit and loss. However, these elements must be embedded into an enabling environment (including policy frameworks, regulation, permitting processes, awareness and capacities etc.) that allow these elements to jointly deliver financing pathways that systematically help mobilise SDG aligned private finance at scale.

How the financial instruments currently work together on national level

The four pilot ecosystems have served to analyse how the various funding agencies in Finland interact and what kinds of instruments and services they can provide. The finance landscapes have been analysed separately for each pilot, which is crucial for identifying pilot specific bottlenecks and successfully addressing any pilot specific funding gaps. However, while pilot specific recommendations have been elaborated, some cross-cutting conclusions can also be drawn that can help fill gaps and improve the overall interplay on national level. Figure 6 provides an overview of the general sustainable finance landscape in Finland, highlighting key public funding agencies (including DFIs and IFIs with Finnish ownership, with focus both on national as well as international markets).

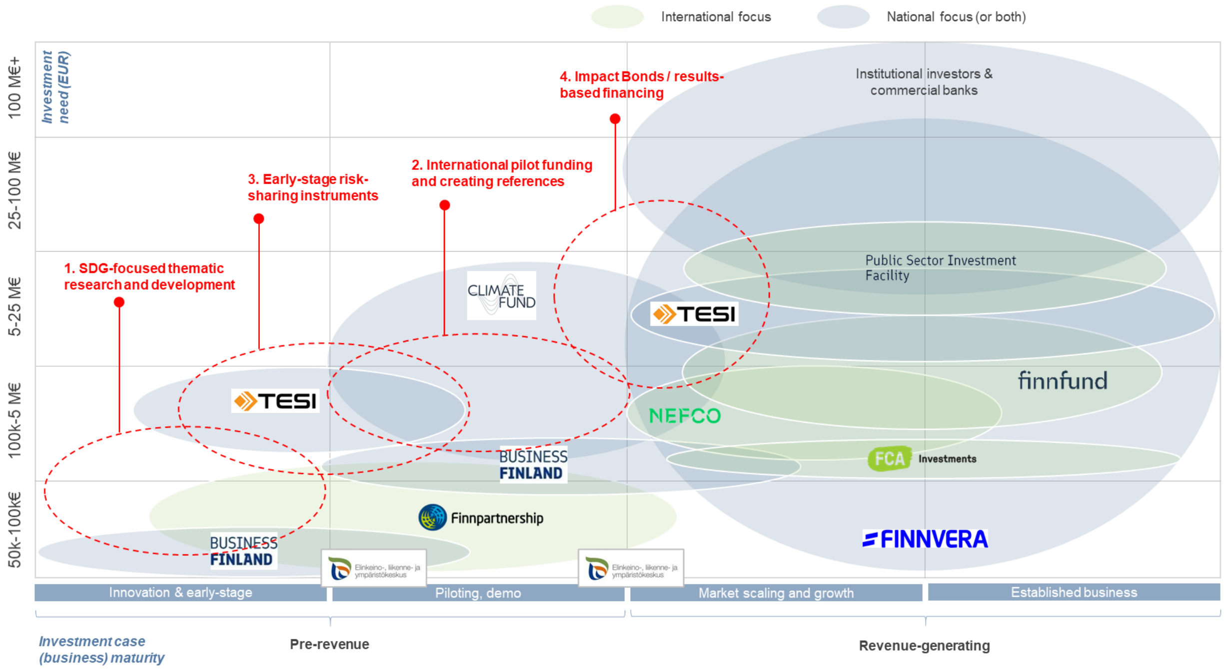

Figure 6. Current sustainable finance landscape in Finland (on general level) and identified gaps and tailoring needs in current financial instruments

The pilot ecosystem analysis confirms that there is a wealth of instruments available, but it also reveals a few gaps in this landscape (marked in red in Figure 6). The functioning of the Finnish sustainable finance ecosystem landscape can be further improved by addressing these gaps, adding new instruments or adjusting existing ones. However, the overall lessons from pilot ecosystem work in Finland still remains, without a solid enabling environment and all other elements of the finance ecosystem in place, no single financing instrument can solve the SDG financing mobilization challenge.

Addressing gaps and leveraging *new financial instruments*

While these gaps have been identified through pilot ecosystem work, with some being rather specific to certain pilot ecosystems, they confirm the importance of developing full "finance pathways" and to have all the elements of a finance ecosystem together in one place. Hence, these instruments could be modified to target also other types of ecosystems. The identified gaps or tailoring needs can be divided into four different categories (the red circles in Figure 6), which also correspond to the cross-cutting pilot ecosystem recommendations at the national level presented in chapter 2.2.

1. **SDG-focused thematic research and development** (this gap is proposed to be tackled with Recommendation 1, in chapter 2.2)

Financial risk sharing and expert support service financing for the novel food process

Description: : Novel protein foods, such as laboratory-based forms of protein, must be authorized as a novel food before they enter the food market, to ensure their safety. The safety is assessed by the European Food Safety Authority (EFSA) and the marketing authorization is finally issued by a European Commission decision. One risk in the development of novel foods is that they do not pass the approval process, despite going through a complicated, often lengthy, process with relatively high costs (estimated at circa 0.25-1.5 million EUR in total).[17] A new type of financial instrument could be developed for risk-sharing, where not all costs or risks would be borne by the novel food developer. This could mean for example that part of the costs of the approval process could be paid back to the novel food developer by a public funding agency, after the completion of the approval process (a type of results-based payment). However, the development of the instrument should take into account that the company applying for authorization should be responsible for the legality and safety of its products. The financial instrument could also partially support, for example, the use of expert services in the application process.

Why this is needed: Going through the novel food process is costly for research organizations and businesses working in the sustainable protein field. For example, the necessary animal experiments and clinical trials are costly for new food product developers. To scale up novel protein products in Finland, this bottleneck should be addressed.

2. **International pilot funding and creating references** (see Recommendation 2 in chapter 2.2)

Description: Many Finnish SDG solution providers lack international references, which is a key bottleneck for their growth. Credible references are essential for both public and private sector clients in emerging markets. The lack of funding for early-stage project development and the ability to carry financial risk are major bottlenecks for the growth and access to further funding.

Why this is needed: Entering the international market and being competitive in international tenders requires credible earlier references on local markets and a good track record of successful implementation of Finnish SDG solutions

3. **Early-stage risk-sharing instruments** (see Recommendation 3 in chapter 2.2)

Risk-sharing instrument for farmers to support the start phase and experimentation of new protein crops

Description: Farmers need support for experimenting with the cultivation of new protein crop varieties, which is quite high risk in Finnish weather conditions. New protein plant varieties to be tested can be e.g. pea, kidney bean, hemp, flax, lupine, buckwheat, canola, rapeseed or protein crop varieties typically cultivated in other countries such as soybeans and quinoa. The financial instrument could be similar to a product development loan, in which the state participates in risk-

[17] Estimation done by sustainable protein pilot ecosystem participants. Depending on the complexity of each particular case, e.g., whether costly toxicity tests are needed, the cost may vary considerably. It should also be noted that there are no direct costs of the application process itself, but the costs are caused e.g., by tests required to complete the process or the expert services required. There are always costs of new products entering the markets, whether novel foods or more established products. Hence any possible new instrument should not put different kind of food companies (whether novel foods or not) in an unequal position.

sharing if the cultivation experiment fails. An option would be also to re-direct an existing financial instrument for this purpose.

Why this is needed: To increase the self-sufficiency level of Finnish food and especially sustainable protein production, farmers need support in trying out new crop varieties that can be cultivated in the challenging Finnish conditions.

4. **Impact Bonds / result-based financing for SDG solutions** (see Annex I)

Energy Transition Impact Bonds (ETIB) to address rapidly increasing wind power employment needs

Description: Impact bonds are outcomes-based contracts. They use private funding from investors to cover the upfront capital required for a provider to set up and deliver a service. The investor is repaid based on achieved outcomes. The proposed new impact bond would target increasing the (offshore and onshore) wind power expertise and employment in Finland. In this case, with the funding solution is aiming to accelerate expertise, skills and capacity development, in order to enable the energy transition to happen at required scale and pace. Currently there is a shortage of skilled workforce to upscale the wind power production in Finland. The new instrument proposed to be called Energy Transition Impact Bond (ETIB).[18]

Why this is needed: Skilled labour shortages are already significant in the wind power markets in Finland and are expected to grow. In the offshore wind ecosystem, the estimated need for total cumulative new full-time employees is approximately 47 000 in 2021–2030. An ETIB could provide a fast way to improve the situation.[19]

While it is important to ensure full financing pathways exists, and hence try to fill any major gaps in the instruments available, the current sustainable finance landscape in Finland can be improved through better coordination and information exchange between different parties - both within public sector finance organizations, between public and finance organizations as well as between financiers and finance recipients. Recommendations for enhancing these aspects are discussed in more detail in Chapter 3.

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[18] Developing Finland's Sustainable Finance Ecosystem project (2022). Innovative finance solutions to accelerate sustainability transitions - Scoping study on the potential role of Energy Transition Impact Bonds (ETIB) to address rapidly increasing wind power employment needs.
[19] *Ibid.*

3. Enhancing coordination and information exchange

Based on SDG finance roadmap development and extensive pilot ecosystem work, a number of recommendations and ideas for how to further accelerate sustainable finance in Finland at the national level have been elaborated. This chapter provides suggestions for how to tackle the most important bottlenecks in the Finnish sustainable finance ecosystems, by elevating the pilot ecosystem recommendations to the national level. The objective is to leverage the learnings beyond the pilot ecosystems and help Finnish public sector stakeholder recognize and embrace an optimal role in accelerating sustainable finance in Finland during this decade.

Chapter 3.1 presents an ambitious **overall framework,** suggests **guiding principles and core elements** needed at the national level. Thereafter, chapter 3.2 provides a deep dive into opportunities to improve **national level sustainable finance coordination**, and chapter 3.3 provides recommendations for developing and systematically strengthening national level **sustainable finance information exchange**.

All these recommendations and suggestions are integrated into Figure 7 serving as an overall "master plan", i.e. bringing together a broad set of potential measures that could help Finland host internationally leading sustainable finance ecosystems. These are initial recommendations that should be actively discussed and refined by Finnish stakeholders. In some cases, the recommendation needs to be adjusted and/or combined.

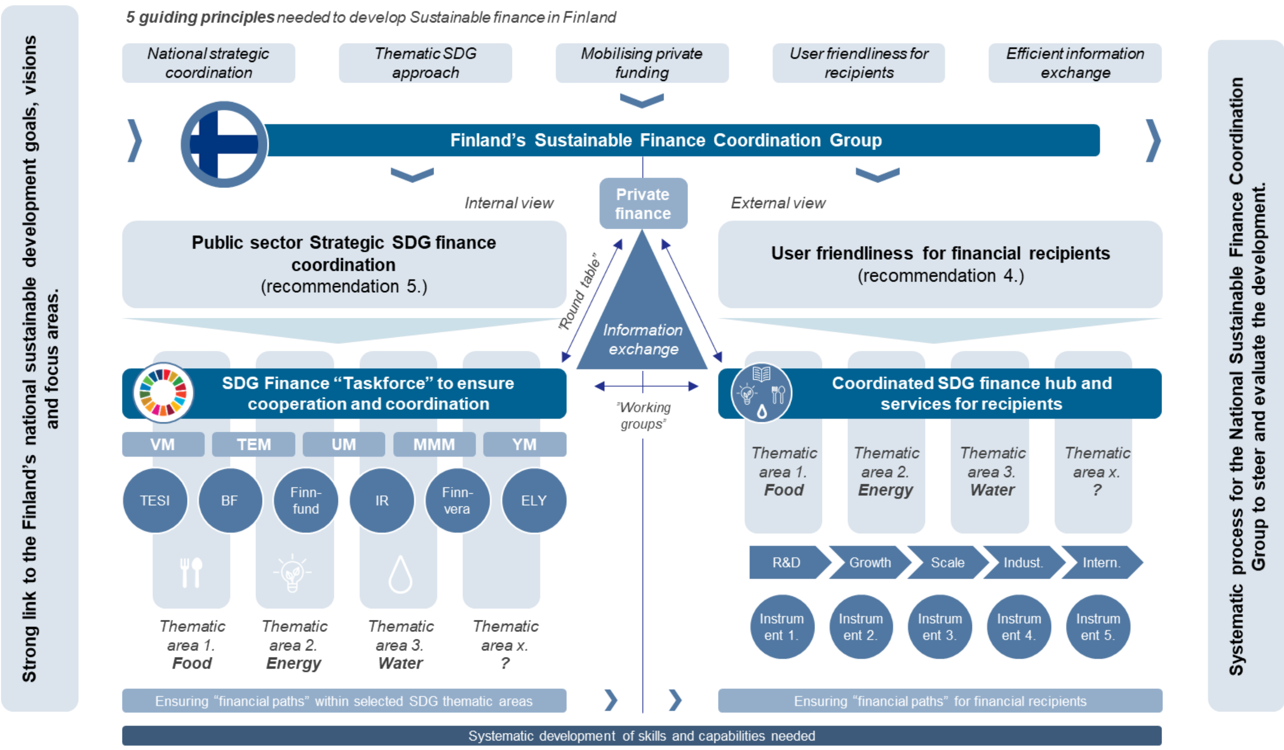

Figure 7 Overall framework of developing sustainable finance at the national level.

The different elements of this "initial framework/masterplan" are discussed separately below, highlighting the various options and reasoning behind the recommendations. This should facilitate the subsequent discussions by responsible national stakeholders

3.1 Ingredients for enhancing coordination and information exchange

Key principles and interlinkages

The framework is built around **five guiding principles** that are central for accelerating national level sustainable finance development (presented at the top of Figure 7). These principles have been widely supported by stakeholders that have participated in SDG finance work during this project, and highlight the importance of:

- **National strategic coordination**: noting the importance of the enabling environments when SDG transformations are urgently needed
- **Thematic SDG approaches**: noting the necessity to prioritise, and bring stakeholders together around joint themes, to build functional finance ecosystems
- **Mobilising private funding**: noting the ultimate objective to scale-up and ensure access to finance at scale
- **User friendliness for financial recipients**: noting existing bottlenecks in accessing finance
- **Efficient information exchange:** noting the need for rapid learning processes, capacity development and improved coordination

It is evident that public sector efforts in developing sustainable finance should have **a strong link to the national sustainable development goals, visions, and objectives** (presented in left hand column in Figure 7). Sustainable finance is a tool to advance selected national level SDG priorities. For that reason, it is highly important that sustainable finance is aligned with and communicates with broader national SDG ambitions and gathers input to understand where finance and public sector intervention is mostly needed. The framework presented in Figure 7 highlights the need to ensure that this link is operational and facilitated by regular dialogue. Finland´s exceptional track record in national sustainable development work, and well elaborated national analyses of SDG challenges and priorities, gives a solid bases for facilitating discussions about prioritization of SDG finance allocations, too.

Developing sustainable finance in Finland should be **driven by clear objectives**, which also allow **tracking progress** and regularly **evaluating impacts** and any need for adjustments, e.g., as is the case for tracking national climate action in Finland.[20] Having in place such a process (see right hand column in Figure 7) helps gear public finance in priority areas of highest SDG value-add, and where private funding is not able to operate alone without efficient risk-sharing mechanisms.

[20] With the Government submitting annually its Climate Report to the Finnish Parliament.

Key actors - coordination elements

Three key coordination elements are suggested, to provide structure and advance cooperation in practice. First, it is recommended to form a **"Finland's Sustainable Finance Coordination Group"**, which would steer and monitor the national efforts in sustainable finance. Currently Finnish public sector organizations are taking first steps in more systematic sustainable finance efforts, and there is increasing readiness for coordination between ministries, departments, and public finance actors. However, pilot ecosystem findings highlight a clear need to develop stronger national level coordination in sustainable finance.

Second, it is recommended to form a **"SDG Finance Taskforce"**, which would gather key financing organizations around the same table. The Taskforce would provide an operational layer, utilizing existing capabilities, and its core objective would be to ensure that public sector financing organizations have a shared view of the needed SDG finance and that they cooperate efficiently. A thematic approach, i.e. focusing periodically on selected SDG transformations, could provide a backbone for bringing different actors together.

Third, it is recommended to form a **"Coordinated SDG finance hub and services for recipients"** (the so-called "one-stop-shop")**.** Finland has a growing number of companies developing, scaling and commercializing SDG solutions both for the Finnish and international markets. Based on the pilot ecosystem findings, currently many companies lack access to funding and have insufficient understanding of potential public sector financial instruments that could help them. Moreover, financial recipients consider it challenging to get information and access to financial instruments (see recommendation 4. in Chapter 2.2).

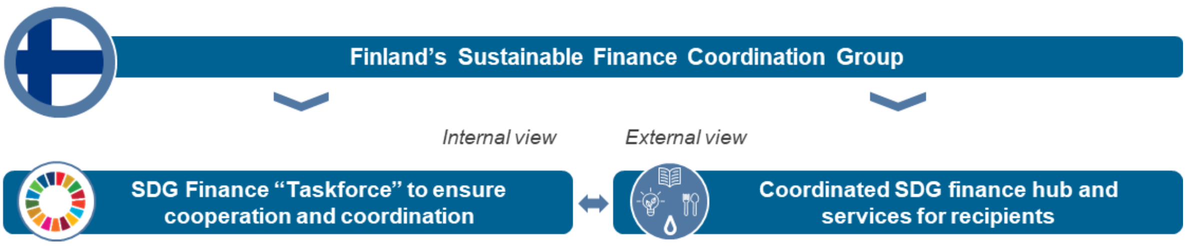

Figure 8 Three key coordination elements that provide structure and advance cooperation.

Obviously, a central question in defining the role and tasks is to ensure a constant dialogue with private finance stakeholders – and here the experiences from the Dutch Sustainable Finance Platform (see Box 1) or insights from the Scottish Taskforce for Green and Sustainable Financial Services[21], could be valuable. Hence, efficient information exchange between all relevant parties, as well as constant capacity building are at the core of the framework (see figure 7, pyramid at the centre of framework). Each public sector financing organizations needs to strategically focus on building ESG, SDG and sustainable finance capabilities. The suggested overall framework would also support the development the skills and capabilities of individual organizations, and ownership steering should play an active role to advance this development.

[21] The Scottish Task Force was launched in February 2022.

Box 1. International example: DNB Sustainable Finance Platform (the Netherlands)

DNB Sustainable Finance Platform (the Netherlands)

The former Executive Director of Supervision of the Dutch Central Bank (DNB – De Nederlandsche Bank), Frank Elderson, currently Board member of the European Central Bank (ECB) and Chair of the Network for Greening the Financial System (NGFS) took the initiative to set-up the Sustainable Finance Platform in 2016 in order to lead the debate on the role of central banks and supervisory authorities within green transition in the financial sector in the Netherlands. The Sustainable Finance Platform is a cooperative venture, under DNB's leadership, of the Dutch Association of Insurers, the Federation of the Dutch Pension Funds, the Dutch Fund and Asset Management Association, the Dutch Banking Association, the Ministry of Finance, the Ministry of Economic Affairs and Climate Policy, the Sustainable Finance Lab and the Dutch Authority for the Financial Markets.

The Platform's mandate is to promote and increase awareness of sustainable funding and make the financial sector, supervisory authorities and government ministries work together on sustainability initiatives. The Platform functions as an umbrella of different working groups established by Platform members and participants dealing with a specific environmental theme. Each working group represents a wide range of parties from the financial sector with a genuine interest to drive the specific agenda of the working group. The Platform discusses the findings of the working groups during bi-annual plenary meetings and adopts positions and publishes definitive position reports and guidance materials. Currently, there are dedicated working groups active on Climate Risks, Circular Economy, Biodiversity, SDG Impact Assessment, Carbon Pricing and PCAF, among others.

Over the past two years in particular, the Platform has launched various impactful publications, such as the Circular Finance 2030 Roadmap, which get uptake in the financial sector and are used as reference material in European and international fora. More information on the Platform, its working groups and recent publications can be found here: https://www.dnb.nl/en/green-economy/sustainable-finance-platform/

3.2. Recommendations for national level sustainable finance coordination

This chapter provides more detailed information and recommendations regarding the three key coordination elements presented briefly above, i.e. i) forming Finland's Sustainable Finance Coordination Group, ii) forming SDG Finance Taskforce, and iii) developing a Coordinated SDG finance information channel and service forum.

Finland's Sustainable Finance Coordination Group

"Finland's Sustainable Finance Coordination Group" should have a key role in i) developing a national vision for sustainable finance and defining its focus areas, based on the national sustainable development goals, as well as in ii) steering and evaluating the development of sustainable finance efforts on the national level. A national Coordination Group that would be cross-sectoral and cross-governmental, would be a more strategic and high-level actor than the suggested SDG Finance Taskforce, which is more operative.

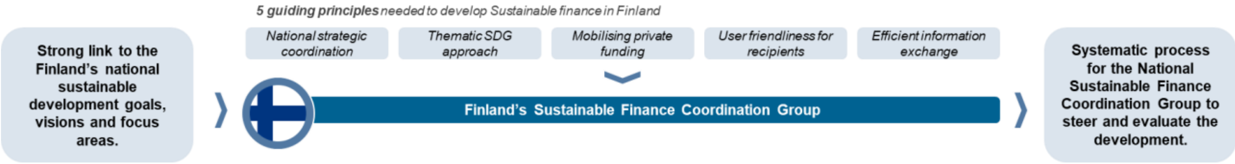

Figure 9 Finland's Sustainable Finance Coordination Group

Key assets of the Coordination Group:

The high-level coordination group should be established in manner allowing it to benefit from:

- **Long-term orientation:** Enhancing SDG solutions and strengthening national sustainable finance requires long-term orientation, which goes beyond governmental term of office. This will bring continuity and consistency to the work.
- **Cross-sectoral:** To date different ministries and administrative branches have been advancing rather separately their own approaches and focuses on sustainable finance. Solving complex SDG challenges requires crossing traditional sector and value chain boundaries.
- **Monitoring and reporting:** The coordination group would have access to regular monitoring and assessments, in order to assess progress and consider any required changes in national vision and priorities.

Experiences from other national coordination groups can serve in refining the position, mandate and operationalization of a SDG finance coordination group, if established. The SDG Finance Roadmap (2021) and discussion during pilot ecosystem work have noted the option of positioning such a group at the Prime Minister's Office.

Organisation and Initial elements for work programme

While further discussion on a potential coordination group should be led, and the coordination group should eventually contribute to finalizing its agenda, a number of initial steps and tasks can be suggested for the group, based experiences from the project so far:

Step 1. Defining SDG finance focus areas

- The Coordination Group shall help ensure that public sector sustainable finance efforts and focus areas are linked to Finland's national SDG priorities – noting Finland's potential to help address key SDG challenges in Finland and internationally. The future technologies and innovations addressing SDGs will develop quickly.
- For each potential SDG finance focus area, ensure access to solid foresight information, and help understand what kind of investments are needed and where public finance could have most private finance leverage potential & SDG impact.
- Based on the chosen focus areas, form a national understanding of the needed finance amounts and types.

Step 2. Identifying key public sector stakeholders in specific SDG focus area

- The coordination group helps form and update a view of the overall ecosystem and identify relevant public sector organizations to operate in the ecosystem.
- The group assesses the roles, positions, exposures, and value added of various funding agencies in the ecosystem. Each SDG ecosystem is different by nature, so it is important to systematically assess and ensure public finance value and functionality in a specific area.
- The assessment shall also cover the capabilities and skills to address SDG aligned financial needs in the ecosystem. New thematic SDG areas might require new skills that do not yet exist in these organizations.

Step 3. Evaluate mandates and instruments

- When needed, the group could review and evaluate the mandates and instruments, whether they allow funding organizations to successfully target investments in specific ecosystems.
- Regularly evaluate the need to update mandates or adjust financial instruments to ensure that sustainable finance is aligned with national SDG focus areas and national SDG goals.

SDG Finance Taskforce (public sector internal view)

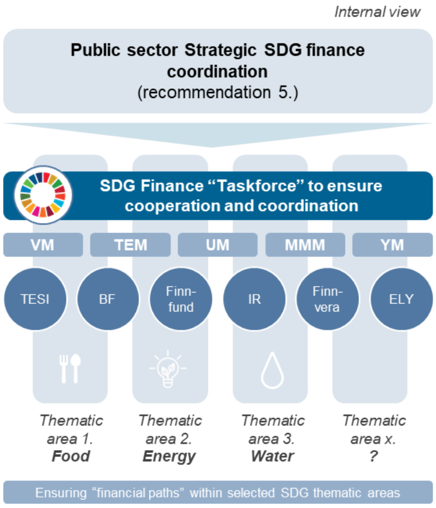

Figure 10 SDG Finance Taskforce (public sector internal view)

A **SDG Finance Taskforce** will complement the national Coordination Group (with a focus on strategic level decisions and ownership steering) by providing an operational layer to implementing and systematically developing sustainable finance in Finland. The work within the pilot ecosystems (see recommendation 5. presented in the chapter 2) highlighted the need for increasing strategic as well as operational SDG -finance cooperation between public sector financial organisations.

A priori, the Taskforce could focus on i) bringing regularly together key stakeholders for structured and objective driven dialogue (e.g. proposing national KPIs for SDG aligned investing), ii) building and maintaining an overview of national sustainable finance and SDG financing needs in different ecosystems, and iii) ensuring interaction of financial instruments and organizations for selected SDG thematic areas to build functional financial paths for recipients. Naturally the mandate and working programme of the Taskforce should be discussed in further detail together with the key stakeholders.

Organization of the taskforce

The Taskforce should host all relevant Ministries and agencies to concretely enhance the collaboration. The participants optimally possess a solid understanding of financing as well as SDG needs. The group could be gathered from the existing major public sector financing organizations, including Tesi, Business Finland, Finnfund (including Finnpartnership), The Finnish Climate Fund, Finnvera, ELY-centers, as well as from a pool of experts from other public sector organizations needed to form a holistic view to sustainable finance and sustainable development.

The Taskforce would operate under the guidance and monitoring of the national Sustainable Finance Coordination Group. This ensures that the ownership steering, organizations' mandates and instruments allow the Taskforce participants to actively build stronger collaboration and together find solutions to enhance sustainable finance.

As noted above, building the mandate and work programme around prioritized SDG themes could provide structure for the Taskforce´s activities. The pilot ecosystem experiences provide useful examples for how to bring stakeholders together around a joint SDG theme (such as sustainability transformation linked to food, energy, water or vocational education).

The practical work of the Taskforce could build upon:

- **Taskforce steering:** Provided by the Coordination Group, having overall responsibility to ensure that the Taskforce meets its objectives and provides the Coordination group with required input for its discussions and national level decision making.
- **Taskforce main group:** The main body of the Taskforce's work with all participants presented having regular (e.g. 2-4 times annually) meetings to discuss national sustainable finance, the role of each funding actor, any new/amended actions needed, providing updates from thematic SDG working groups.
- **Thematic SDG working groups:** Based on pilot ecosystem experiences, a more thematic approach can improve public sector understanding and capabilities to finance needed SDG investments in specific SDG areas. It can serve to jointly build full funding pathways, and hence accelerate scaling of Finnish solutions with value-add in certain themes (as outlined by the Coordination Group, and national SDG priorities). Establishing SDG working groups, linked to national focus areas, would ensure that public sector financing organizations are well placed to serve the needs of these ecosystems. All relevant administrative branches and organizations should be included in the working groups.
- **Private sector round tables:** While the public sector funding organisations constantly serve private sector clients, it is essential to ensure that an in-depth dialogue is constantly on-going with private funding actors, noting the need for better interplay in de-risking, blended approaches, and to prepare the ground for up-scaling. See Chapter 3.3. *Information exchange*, for further information.
- **Issues specific groups:** Finnish SDG solutions are often targeted directly to emerging markets. Based on national priorities, the Taskforce could also establish ad hoc working groups, e.g. in case a specific market is rapidly raising attention (e.g. the

application of IT to specific novel SDG challenges), and /or if geographically a specific region is in need of SDG investments, and where Finnish SDG solutions would have particular value-add (e.g. in the case reconstruction in post-conflict areas).

Following the organization structure, each organization should have at least one main responsible person participating in the main group and potentially other participants to join the working groups. These persons could also be responsible for coordinating and developing sustainable finance efforts within their own organizations.

Coordinated SDG finance hub and services for recipients (public sector external view)

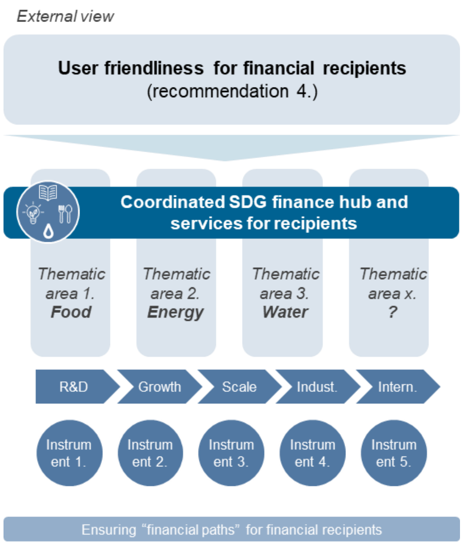

Figure 11 Coordinated SDG finance hub and services for recipients (public sector external view)

Establishing a **Coordinated SDG finance hub and services for recipients,** could focus on improving public sector offering, communication and services to potential recipients of SDG finance across all relevant public sector organizations (see recommendation 4 presented in chapter 2). The hub would provide one entry point and dedicated public sector SDG finance service (including "SDG finance agents") with responsibility to enhance customer experience and ensure that recipients have the relevant information easily available.

Whereas Taskforce improves the "internal coordination" of sustainable finance in Finland, a Coordinated SDG finance hub would improve the "external" accessibility and supply of the sustainable finance. These two recommendations are strongly linked to each other, as public sector first needs to organise itself around sustainable finance and define potential SDG focus areas, in order to be able to offer funding and services conveniently and efficiently to SDG finance recipients.

Organization of the SDG finance coordination hub and service

From financial recipient point of view, it is currently challenging to form an overview of what kind of potential instruments and services are available. The idea of Coordinated SDG finance hub is to provide recipients one clear entry point and contact for public sector sustainable finance offering. This would require creating a new "joint service layer" that complements and covers existing public sector financing organizations.

One option to design the Coordinated SDG finance hub and provide structure to its work, is to utilize similar thematic SDG areas as the Taskforce would do. For the most important national (sustainable finance) SDG focus areas, public sector should offer proactively information of the thematic funding options. If an SDG finance recipient falls under a specific thematic SDG area (e.g. solar energy in market x), that actor would be directed to a specific public sector thematic focused "SDG service agent" that can help to understand and evaluate potential financing options in that specific area. This would improve the customer experience significantly. For example, a company having a food innovation would be directly able to discuss about the suitable funding options and pathways with a dedicated public sector expert, with sufficient understanding of the SDGs and food ecosystem.

A priori, providing these coordination services would not require massive additional resources. However, it would require readiness and capacities for stronger coordination and collaboration within the public sector financial ecosystem. Providing "a joint offering" would require developing more thematic mindsets, boost certain prioritised skills and capabilities, and it would require developing more customer-oriented processes and services.

A light way to implement this new "joint layer" is to build on existing services (including Team Finland efforts, Business Finland EU finding advisory services, national initiatives to build capacity on EU sustainable finance taxonomy etc.) and create a national SDG finance hub & webpage and build information around few well selected SDG thematic areas. Combined with a simple process and few dedicated "SDG service agents", the new service could be piloted to assess the potential demand for these kinds of services. The four pilot ecosystems could be used as a starting point for service design. Many of the recommendations developed during pilot ecosystem work would benefit and mutually reinforce the work of such *SDG finance coordination hub & services*.[22]

3.3 Recommendations for information exchange and knowledge sharing

This chapter highlights opportunities for improving national information exchange and knowledge sharing related to SDGs and sustainable finance. The measures for improving information exchange and strengthen relevant capacities and skills need to address at least the following five levels, as presented in the Figure 12:

1. Between public sector financing organizations and broader societal SDG developments and respective institutions
2. Between different public sector financing organizations
3. Between public sector financing organizations and SDG finance recipients
4. Between public sector financing organizations and private finance institutions
5. Related to the systematic development of skills and capabilities needed.

The suggested improvements are discussed in more detail under figure 12, below.

[22] Naturally it could help boost Team Finland work See recommendation 9: Boost the effectiveness of Team Finland network to support international scaling, presented in Chapter 2.2. In the longer-term "SDG service agents" could also help recipients to form contacts with Team Finland network to help in international scaling. Likewise, this coordination service could also help in pipeline development, (see recommendation1: Enhance SDG-focused thematic research and development funding, presented in chapter 2.2) with improved thematic expertise allowing to identify potential R&D results and start-ups for pipeline development.

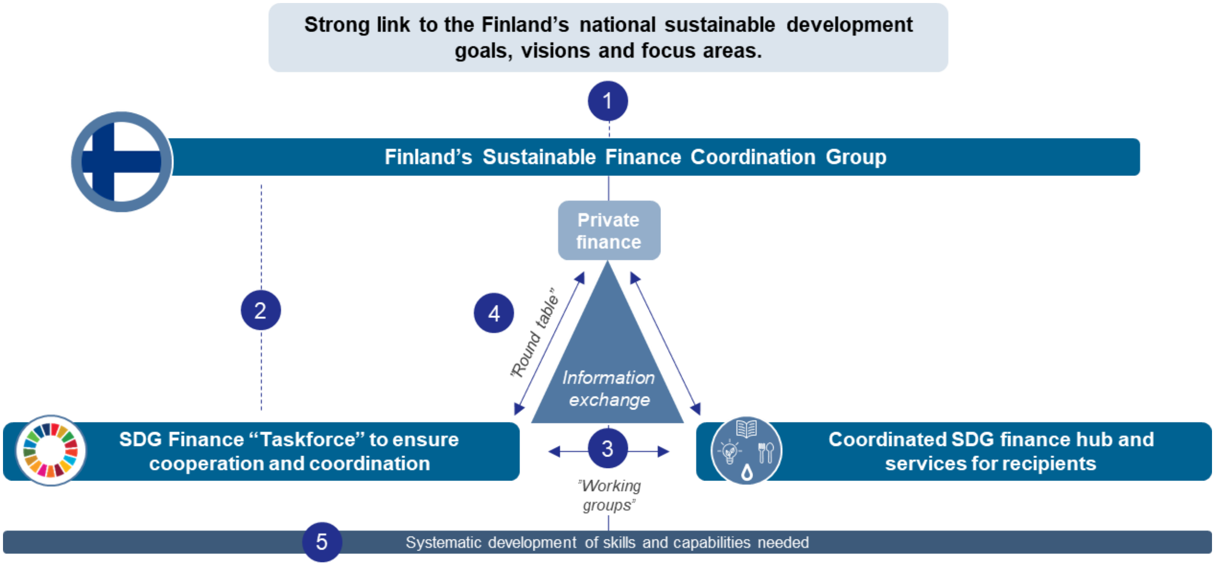

Figure 12 Mapping of information exchange and capacity building needed in Finnish sustainable finance field.

Between public sector financing organizations and broader societal SDG developments and respective institutions

Sustainable finance should be a tool and enabler for advancing national sustainable development and SDG goals, also covering Finland´s global responsibility for Agenda2030. To know what the national focus areas are and where future investments are needed, it is important to build strong connections between the financial institutions and other institutions advancing SDGs. The national **Coordination Group** would be responsible of ensuring the sustainable finance field is up to date with these broader societal ambitions.

Between different public sector financing organizations

Currently there are no joint platforms for different public sector financing organizations to systematically approach sustainable finance and share information and knowledge. The recommended **SDG Finance Taskforce** fills this gap and brings different organizations together at a more operational level. Similarly, the national **Coordination Group** improves the information exchange at strategic and ownership steering levels by bringing different administrative branches and their respective points of view together.

Improving the internal dialogue among the public sector plays an important role to ensure the sustainable finance ecosystem functions well and is able to provide sufficient funding for areas where SDG aligned investments are most needed. Most of these actors, have only in the past few years started to systematically build their sustainability related understanding, capabilities and offering. The peer learning and sharing of best practices, as well as finding synergies to jointly better understand the market and SDG solutions, could be beneficial to support the internal learning processes of these organisations.

Between public sector financing organizations and SDG finance recipients

Public sector needs to take a more active role in accelerating finance and mobilising private finance towards SDG related solutions. The potential pipeline for Finnish SDG aligned investments is already notable and is expected to further grow significantly during the next decade. To efficiently harness this growing number of Finnish SDG solutions, it is highly important to improve information exchange and knowledge sharing in this area. The suggested **Coordinated SDG finance hub and services for recipients** would be one concrete way to improve the information flow from public sector to SDG finance recipients.

The objectives for information exchange in this area are two-fold. First, to ensure that recipients have a good understanding and easy access to public finance. Second, provide capacity building and knowledge sharing related to sustainable finance and SDGs. For example, the SDG Finance Taskforce could proactively research and target attractive SDG areas with major green growth opportunities and SDG impact potential and share this information through a Coordinated SDG finance hub. Figure 13. provides examples of potential themes that could be included on a thematic SDG webpage, to improve information exchange.

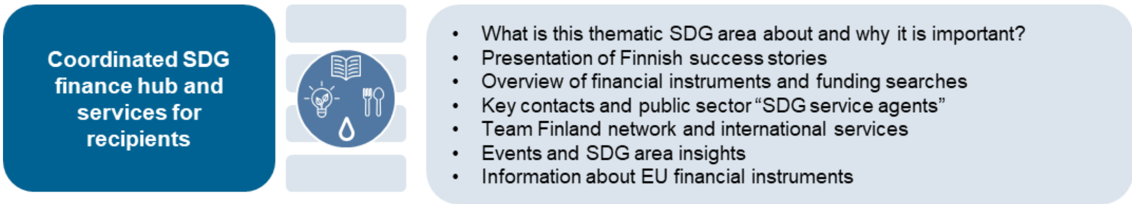

Figure 13 Examples of potential elements to include in thematic SDG webpages

Between public sector financing organizations and private finance institutions

It is clear that the key objective for developing Finnish sustainable finance ecosystem is to enhance mobilization of private finance. A rapidly growing share of private financial organizations is strongly committed to sustainable finance. Combining the forces in terms of information exchange and knowledge generation could boost considerably the overall awareness, development and concrete upscaling of sustainable finance.

One alternative to deepen the cooperation between public and private sector is to utilize SDG Finance Taskforce as a host for **"Public-private Round tables"**. Taskforce could bring key private finance stakeholders at the same table systematically and periodically, e.g. two to four times per year. Again, the experiences from international peers could provide interesting input for these processes.[23]

Related to the systematic development of skills and capabilities needed

Work within the four pilot finance ecosystems in Finland highlight a clear need to address skills and capabilities across the sustainable finance landscape overall and specifically within thematic SDG ecosystems. Both the public sector organizations as well as financial

[23] See chapter 3.1, referring among other to Dutch and Scottish experiences. In addition a rapidly increasing number of countries are developing green / sustainable finance taxonomies.

recipients need support to improve their skills in various areas of sustainable finance, as also highlighted in the SDG Finance Roadmap (2021). In operationalising this recommendation, it is essential to review the existing landscape of providers of awareness raising, capacity building, skills development. A priori multiple existing stakeholders could jointly deliver many of these services, including several universities currently boosting their curricula related sustainable finance, NGOs with increasing readiness to engage responsible/SDG-aligned private investments into their partnerships, finance sector member organisations (such as Finance Finland) as well as Finland's Sustainable Investment Forum (Finsif) and the Centre of Expertise for Impact Investing with explicit mandates to advance SDG aligned and/or impact driven investments.

4. Concluding remarks and next steps

4.1 Several key elements are in place

Finland has overall a well-functioning public sector finance ecosystem and a broad set of financial instruments in place already. However, this ecosystem has not been developed from the start with sustainability or SDG impact in mind or as main objective. The organizations and their personnel still operate largely under the "traditional" financial focus, while trying to increasingly implement new skills and capabilities required to also develop sustainability and impact mindsets as well as needed organization capabilities.

The national level recommendations presented in this report can be grouped under three main categories. First, there is a clear need to develop organization and coordination of sustainable finance nationally. Forming a **Sustainable Finance Coordination Group** and **SDG Finance Taskforce** are key recommendations presented to improve the overall structure and mobilisation of sustainable finance in Finland. To complement this public sector "internal perspective", it is also recommended from "external perspective", to make the public sector **SDG finance offering and services more customer oriented (Coordinated SDG finance hub)** by service designing the process and services for financial recipients (Figure 14 Summary of recommendations. While many key elements for a functioning SDG finance system are in place, the current ecosystems will not be up to task, if Finland wishes to proactively address key SDG challenges and opportunities).

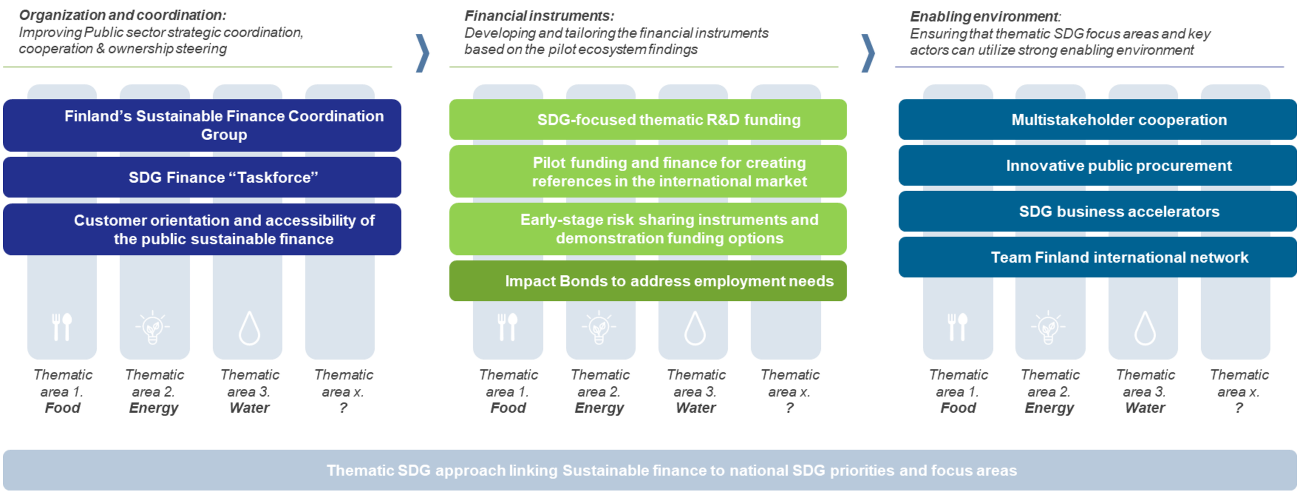

Figure 14 Summary of recommendations. While many key elements for a functioning SDG finance system are in place, the current ecosystems will not be up to task, if Finland wishes to proactively address key SDG challenges and opportunities

Together by combining these internal and external perspectives, it is possible to improve sustainable finance coordination and information exchange between key stakeholders and raise the overall understanding and recognition of sustainable finance in Finland.

4.2 Ambition requires action in several areas

The first set of **organisational recommendations** highlights the importance to ensure ambitious national coordination. To date several actors and funding agencies have initiated "bottom-up" efforts to align their mandates or approaches towards better SDG -alignment. There is clearly a need and a wish from a high number of stakeholders to complement these efforts with a more strategic, national ("top-down") coordination function. All public sector financial organizations are needed on board to build an efficient and well-functioning SDG finance ecosystems that serves the needs of Finnish SDG solutions both nationally and internationally.

Second, there is room for improvements in the approaches and **financial instruments** available for Finnish SDG solutions providers. Recommendations focus on SDG focused thematic R&D funding, improving pilot funding and finance for creating references, and developing early-stage risk-instruments and demonstration funding. The public sector has an important role to share risk and help the most attractive SDG solutions to accelerate their business. In some cases, the lack of skilled labour can be a significant bottleneck for redirecting investments into more SDG aligned solutions. Such bottlenecks could be address by results based funding mechanisms, making use of extensive Finnish experiences in social impact bonds.

Third, a key finding from the pilot ecosystems is that the **enabling environment,** broadly speaking, **can be a critical bottleneck or a highly effective accelerator for SDG finance**. For example, developing offshore wind power requires a strong political will, vision and right legislation in place. Without, e.g., a clear permitting process, it does not matter how much sustainable finance is available. National stakeholders are also key in bringing together different stakeholders to jointly address complex bottlenecks. Hence, public sector can play an important role to support *multi-stakeholder cooperation* and help build strong SDG consortiums and joint offerings. *Innovative public procurement* can support SDG solutions nationally, especially in areas where there is a need to boost demand. *SDG Accelerators* can help companies to develop their business case by combining technical, business, and SDG skills and mindsets. Many Finnish SDG solutions providers need support in understanding and accessing emerging markets. Utilizing *Business Finland networks* and *Team Finland as* a way to generate leads and improve the understanding of the local markets should serve many Finnish actors in multiple different SDG ecosystems.

Finally, based on pilot ecosystem work, working thematically on selected SDG challenges - utilizing a **thematic SDG approach** - can be an effective way to engage key stakeholders (including funding agencies, SDG solutions providers, R&D stakeholders, NGOs etc.), around a joint objective - that is prioritized also within national SDG roadmaps and/or government programs.

Annex I Harnessing results-based finance for SDG transitions

Introduction

As noted in chapters 2 and 3, even if the Finnish finance ecosystem is rather comprehensive, in some cases the Finnish SDG finance ecosystem could be complemented by innovative finance approaches and instruments to address specific gaps.

Results-based finance instruments have gained increasing attention during the past decade, with various applications developed internationally. This annex presents one potential instrument that could help address a specific gap in financing the Finnish energy transition, in particular by helping to address a critical skills and capacity related bottleneck (i.e. one type of barrier in the overall enabling environment). This annex outlines the reasoning and provides an initial assessment of the potential outcomes (including cost- and benefits) of an impact bond serving the energy sector, which could serve as basis for a more in-depth analysis, allowing decision to be taken about the applicability in Finland.

Setting the scene and terminology

According to the UK Government Outcomes Lab, impact bonds (IBs) are outcomes-based contracts. They use private funding from investors to cover the upfront capital required for a provider to set up and deliver a service. The service is designed to achieve measurable outcomes specified by the commissioner. The investor is repaid based on achieved outcomes. IBs differ from traditional contracts by focusing on the outcomes, rather than the inputs and activities. Impact bonds are differentiated from other forms of outcomes-based contract by the explicit involvement of third-party investors. (Golab 2022)

Impact bonds have usually been named according to their key objectives, with SIBs (Social Impact Bonds) focusing on the prevention of social problems and EIBs (Environmental Impact Bonds) on environmental challenges. Thematic naming is also used, for example, the education-SIBs focus on improving learning outcomes. In energy transitions, both SIB and EIB can be considered justified.

The impact bond landscape in Finland

Although the number of SIBs in Europe is growing and European Investment Bank is supporting the growth through the European Investment Advisory Hub, the markets in different countries are at different stages of maturity. The Finnish impact bond market is sufficiently developed to be exploited fast to tackle social and/or environmental challenges in a rapidly changing environment.

To date SIBs have been used to scale up outcome contracting especially from a proactive and preventive point of view. The first SIB, Tyhy-SIB focusing on occupational wellbeing, was launched in Finland already in 2015 and ended 2020. The second, Koto-SIB focusing on employment of immigrants, was implemented 2017-2019 and its evaluation period ends 2022. An employment SIB is running until 2025 and Children SIB I and Children SIB II are running until 2031. Children SIB I and II are funds including several commissioners (municipalities) and every commissioner has a unique SIB-contract.

At least EUR 30 million of investment money has been / will be raised for ongoing and completed SIB-projects[24] (excluding Children SIB II, for which estimate is not yet available) in Finland. So far, obtaining investment money has not been an obstacle to starting SIB-projects in Finland. Several SIB- and EIB -projects are also under construction, with an up-to-date list to be found on the website of the Centre of Expertise for Impact Investing, https://tem.fi/en/sib-projects. From the point of the public sector, impact bonds are especially useful in solving complex challenges requiring fast, tailored and/or innovative approaches and where outcomes should be visible within 2-7 years.

Figure A.1 presents a typical structure of a Finnish impact bond. The Finnish IBs use always multiple complementary service providers to work together to achieve an impact. Because, in IB, only outcomes are purchased and measures to achieve outcomes are not predetermined in the procurement, it is possible to work in very flexible and innovative ways with complex issues. Only the fund manager must be selected through a tender, but the fund can replace or supplement service providers during the contract period if it is considered to improve the performance. As the IB pays all the costs of service providers, and the IB gets back capital and return only from outcome-based payments, optimal incentive structures are rather easy to design over the whole chain where every actor's return is based on the achievement of outcomes, i.e., how effective the whole chain is, not based on a particular actor´s performance only. This serves as a clear incentive and directs service providers to collaborate, rather than optimizing their own part.

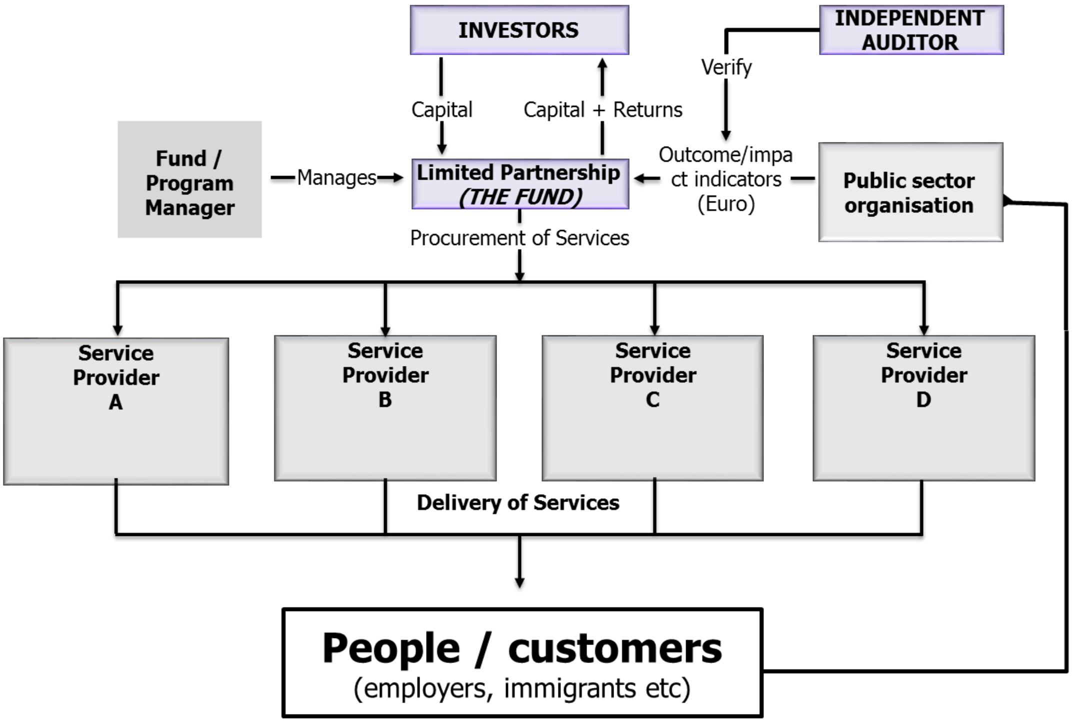

Figure A.1: Structure of typical impact bond (source: The Finnish Innovation Fund Sitra)

[24] https://tem.fi/en/sib-projects (reference Dec 16th 2021)

Initial analysis of feasibility and impact potential

Based on additional literature review, as well as stakeholder consultations in Finland, including discussions conducted as part of "Developing Finland's Sustainable Finance Ecosystems"- project and in particular within its pilot ecosystem focusing on offshore wind power, **the issue of labor shortages has been identified as one of the relevant bottlenecks preventing rapid scaling of wind power investments in Finland.**

As the project is looking for financing solutions to key sustainable transitions in Finland, impact bonds (IB) have been recognized as a potential solution to address the bottleneck at required scale and pace. The benefits of an impact bond would come among other from an increase in the degree of domestication of the planning, construction and maintenance of wind farms and hence resulting increase in employment related tax revenues and savings in unemployment benefits. This study provides an initial analysis of such benefits, while noting that several stakeholders have also highlighted other potential benefits from scaling up Finnish wind power investments. Stakeholders have highlighted potential business development and competitiveness benefits for Finnish wind power solutions on a rapidly growing international market but, the analysis of such sector/national wide benefits is outside the scope of this study.

According to wind power experts the lack of suitable work force is already hampering sector development and measures to address this bottleneck should be launched rapidly.

By spring 2022, 11 social impact bond (SIB)-projects have been implemented in Finland and they have performed well, for example an employment-related impact bond, the "Koto-SIB", has clearly outperformed traditional employment measures. Impact bonds are especially effective solving complex problems requiring fast, tailored, and innovative approaches. Hence their potential for reducing labor shortages in wind power industry should a priori be of interest.

If current wind power capacity need forecasts materialize in Finland, up to 10,600 new direct jobs are expected to be created by 2030, naturally depending on share of domestic workforce (versus international workforce). The total cumulative new full time employment years 2021–2030 is estimated at 41 500 - 77 000 and corresponding cumulative **income tax revenues 430 – 620 M€,** as noted above, **depending heavily on degree of domesticity** in planning, operating and maintenance. In addition, the property tax revenue increase can be estimated to 400 M€. Property tax revenues depend a priori on timelines, i.e. if wind farms can be built on schedule, but are not dependent on whether they are built with domestic or foreign labor.

If we assume that all the 10,600 employees needed for the new jobs should be trained from scratch in Finnish vocational schools and universities, the cost would amount to approximately 250 M€. It is important to note that retraining is likely to provide a faster and cheaper way to respond to labor shortages than training from scratch.

An impact bond helping to finance required investments in skilled employment capacities (Energy Transition Impact Bond, ETIB), could contribute considerably in tackling labor shortages. If well planned and implemented, it could also help take into account the fairness aspects of the green transition, while securing that the public sector gets more tax revenues than it pays out.

While this annex highlights initial analysis of the potential of impact bonds to address one of the identified bottlenecks, it presents an example of interesting potential instruments that should constantly be investigated when developing a country´s sustainable finance ecosystems.

NOTE: The full pre-study “ Innovative finance solutions to accelerate sustainability transitions - Scoping study on the potential role of Energy Transition Impact Bonds (ETIB) to address rapidly increasing wind power employment needs 2022 ”is available on the project website .