FINANCING FOR SDGs :

THE CASE FOR BLENDED FINANCE IN STI

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OECD

BETTER POLICIES FOR BETTER LIVES

Presentation Outline

- Introduction
- Financing for STI: Current efforts not enough
- Blended finance as potent
- Blended finance in STI
- Conclusion: Policy implication

How we got here

- Previous CSTP activities

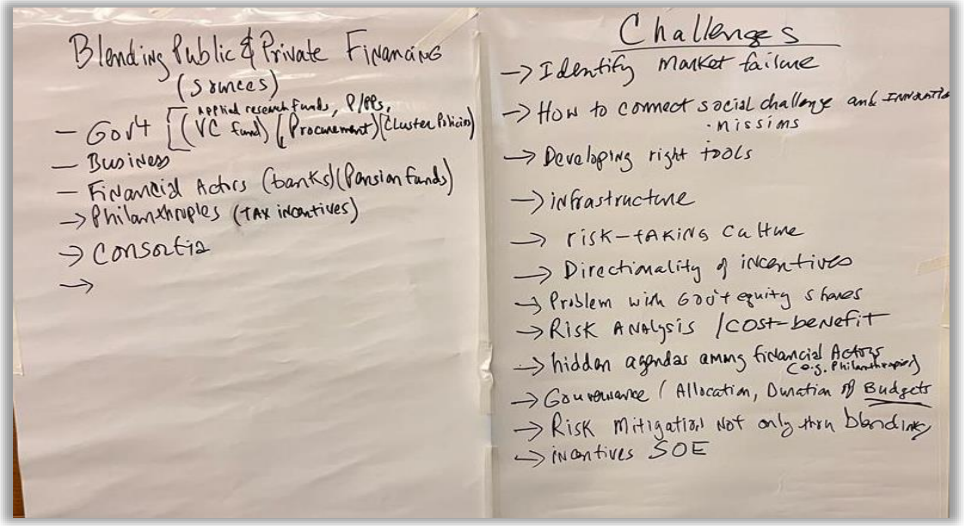
- STI Financing for the SDGs:

Global health and Climate Transition

Learning From Others	Exploring financial innovation for SDGs
Raising Awareness	Making case for blended finance in STI

CSTP engagement & Steering group

S&T Policy Dialogue
5 April 2022



121st CSTP Breakout Session
26 October 2022

Addressing SDGs requires STI and Finance at Scale

SDGs investment gap is significant

❑ SDGs and STI

- Biopharmaceuticals and microbiome-based approaches for diseases
- Human aging
- Mental disease

- Carbon capture: transforming CO_2 into bio-based chemicals and fuels
- Development of drought-resistant crops through genetic engineering

❑ SDGs investment gap*

SDGs financing gap could increase 70%

USD 2.5 Trillion

Pre-Covid

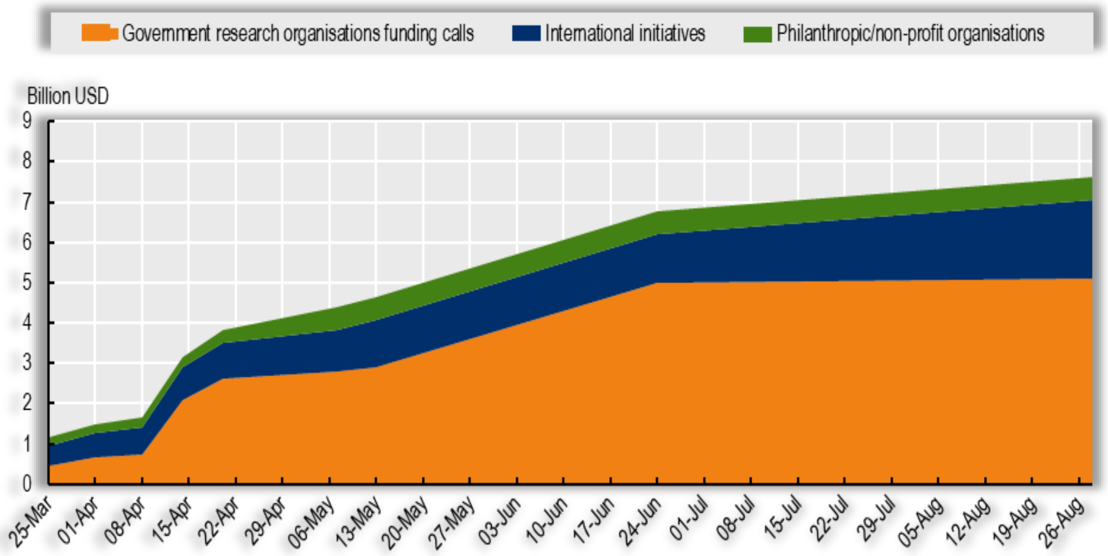
USD 3.9 Trillion

Covid-19

* low-income and other developing countries

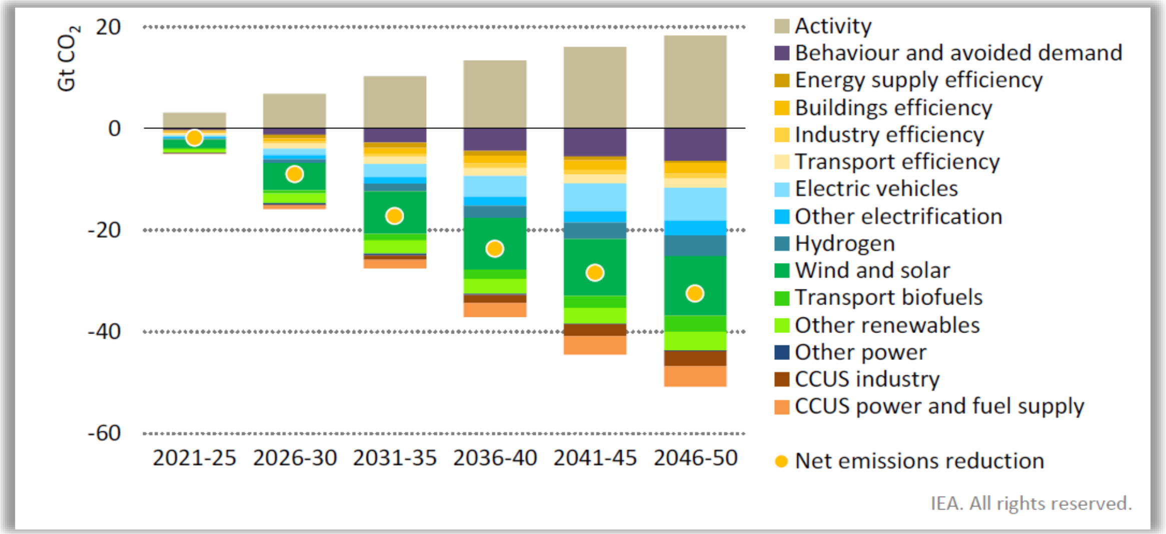
STI plays an integral role for achieving SDGs

- Rapid mobilization in STI enabled combating Covid-19



Evolution of COVID-19 research funding programmes and pledges March-September 2020 (OECD)

- Climate neutrality requires a massive, system-wide technological shift



Sources of CO2 emission reductions in IEA's net-zero scenario (IEA)

Financing for STI:
Current efforts are not enough

SDGs as a framework for transformative STI policy

- **SDGs could contribute to making up transformative STI policy framework** for sustainable and inclusive transition.
- **STI investment** should be **scaled up** and **STI funding needs more directionality** toward sustainability goals.

bpifrance

Rijksoverheid

The National Growth Fund

Science Foundation Ireland sfi For what's next

Zero Emissions Challenge

SUSTAINABLE DEVELOPMENT TECHNOLOGY CANADA

TECHNOLOGIES DU DEVELOPPEMENT DURABLE CANADA

GHIT Fund

Global Health Innovative Technology Fund

KOPERNIKUS PROJEKTE

Die Zukunft unserer Energie

GRAND CHALLENGES ISRAEL

Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy

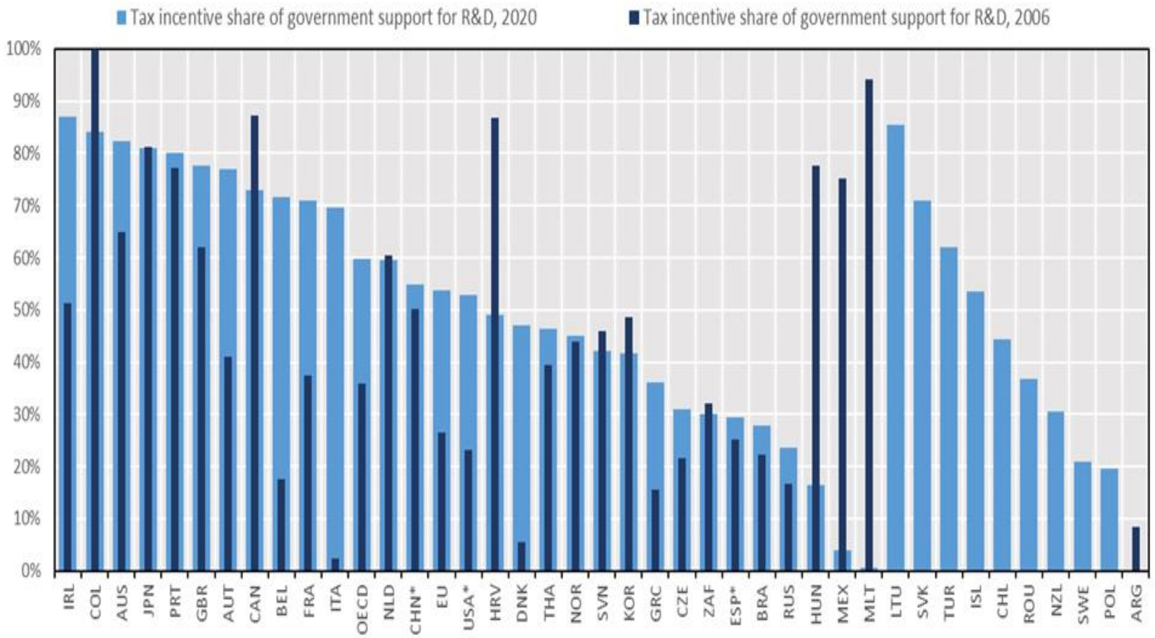
Green Platform Initiative

A European Green Deal

Striving to be the first climate-neutral continent

Challenges and Opportunities

- Much of STI support relies on tax relief and over the last 15 years there has been a gradual **shift from direct funding to more tax relief**.



- **Mission Oriented Innovation Policies (MOIPs) opens new opportunities** for mobilising new financial resources and new actors to address SDGs.

- However, MOIPs have not fully been implemented with cross-sectoral and institutional collaboration. MOIPs also must be accompanied by an **equally transformative STI financing**.

Blended finance as potential

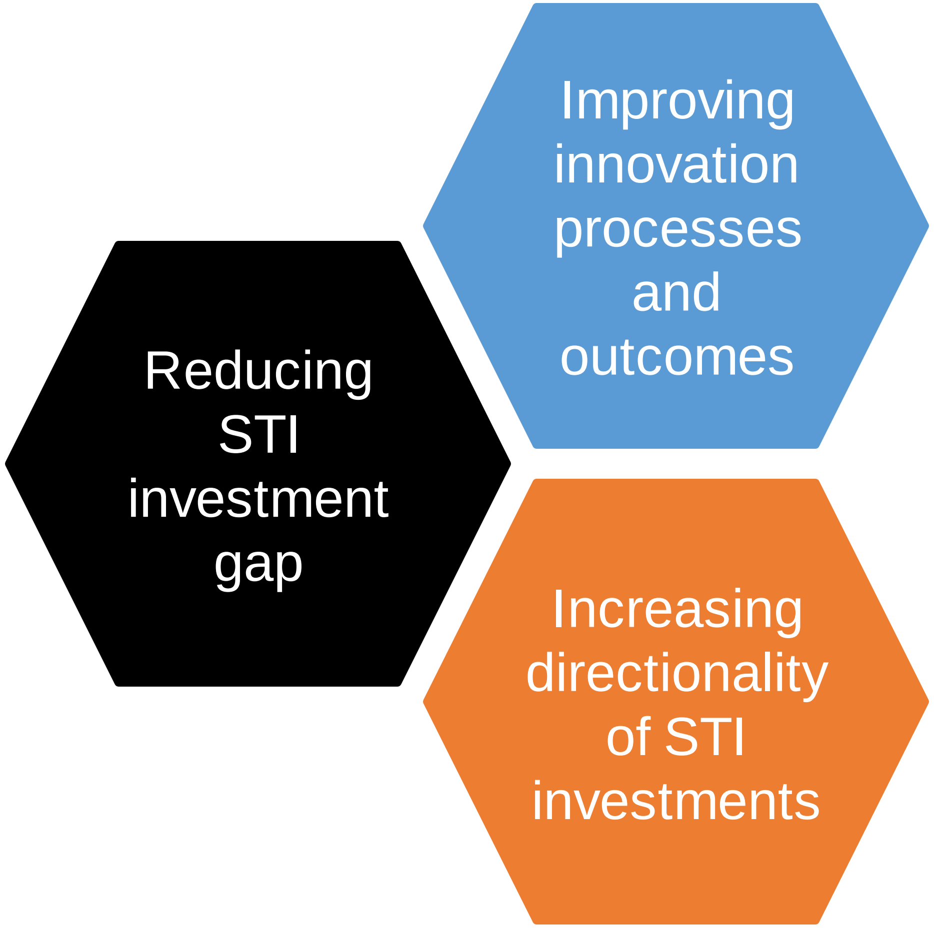
Why we need innovative financial solution for STI?

❑ Innovative finance

A range of strategies to make effective use of and/or generate financial resources to achieve SDGs. This includes **blended finance**, impact investment and outcomes-based finance.

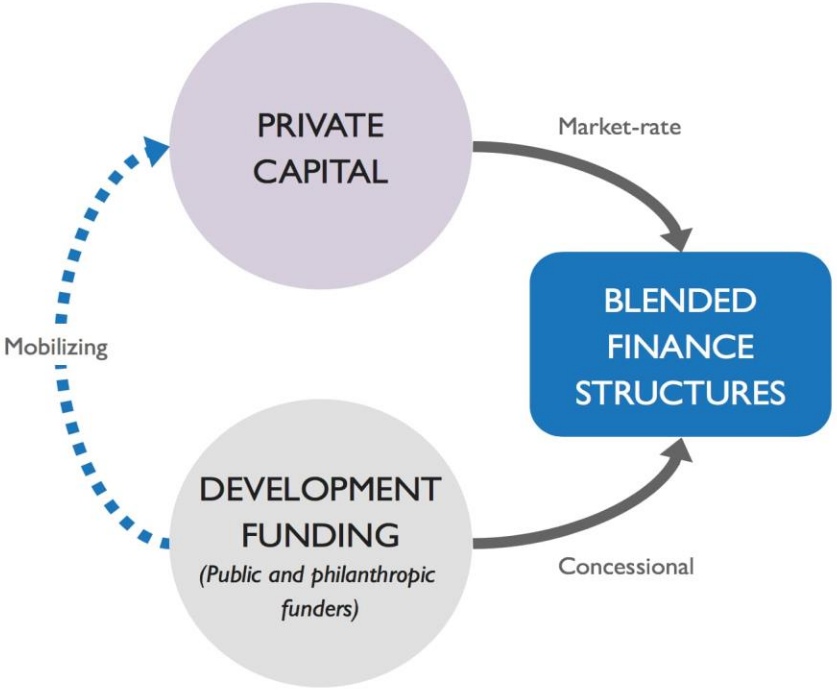
- **Mobilise additional resources** by looking beyond conventional mechanisms or by engaging new partners
- **Increase effectiveness and efficiency** of financing by linking financing to results, redistributing risk, improving availability of working capital, and leveraging technology

❑ Mandate of blended finance in STI



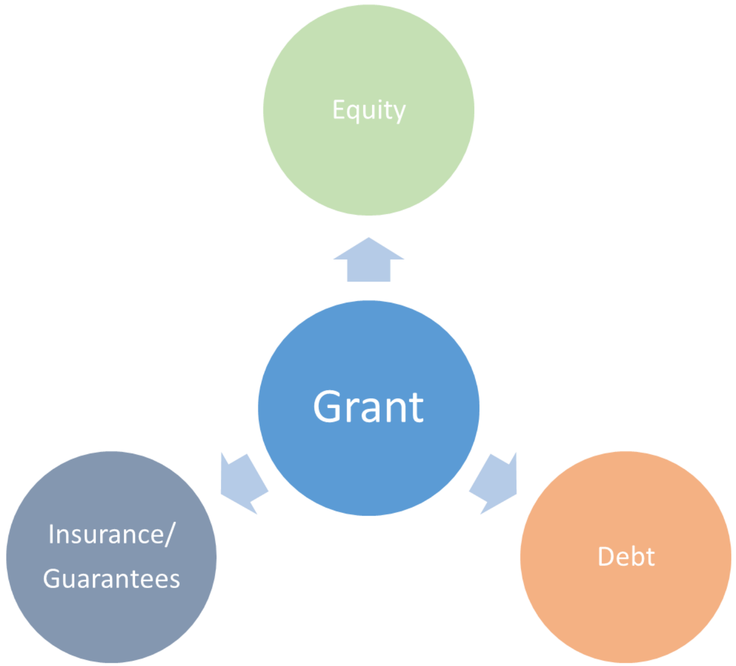
Blended finance? In definition

- Development finance context



The strategic use of official development finance for the mobilization of additional finance towards the SDG. (OECD DAC)

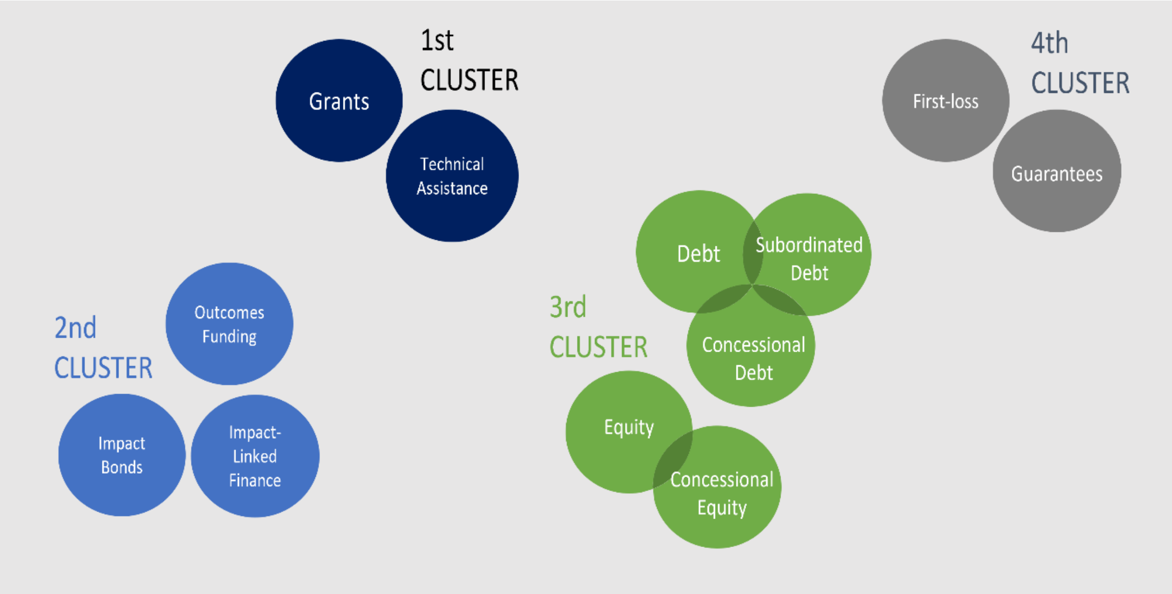
- STI finance context



Blended financial instruments are defined as a combination of grant with equity, debt investment or insurance-like products from either the public or private sectors. (EIB)

Blended finance? In practice

- **Combining financial instruments** in ways that allow participants in the blending to respect their respective mandates and risk/return preferences within an agreed upon contractual structure



- **Balancing between risk and return** is the essential for designing and practicing the blended finance.

Blended finance? Barriers and disincentives

Lack of awareness and capacity

- Shifting from a grant/philanthropic mindset to an investor will require education/training.
- Successful case studies over time can have a positive demonstration effect.

Underlying market failure

- Blended finance can act as a bridge, but if there is no line of sight to policy changes or market shifts to support future commercial markets, it may not provide a sustainable solution.

Risk of crowding out

- Private sector may have concerns about government participation in blended finance replacing policy action.
- Governments worry about displacing commercial investments.

Challenge to align objectives

- Different parties have different incentives/barriers to participation.

Blended finance in STI

STI initiatives with blended finance should be tailored

SDGs context

- Blended finance must be adapted to different sectors that require different financing approaches.

Financial structure

- Different funding and financial actors take different views on risk and return, blending multiple funding sources inevitably creates more complex financing schemes, including its investment criteria.

STI activities

- The extent of risk in STI will differ along the innovation cycle.

Tailoring the blending instruments in STI

Blending within a transaction

- Financing for deployment
- Financing for technology development
- Financing with a portfolio approach
- De-risking through guarantees

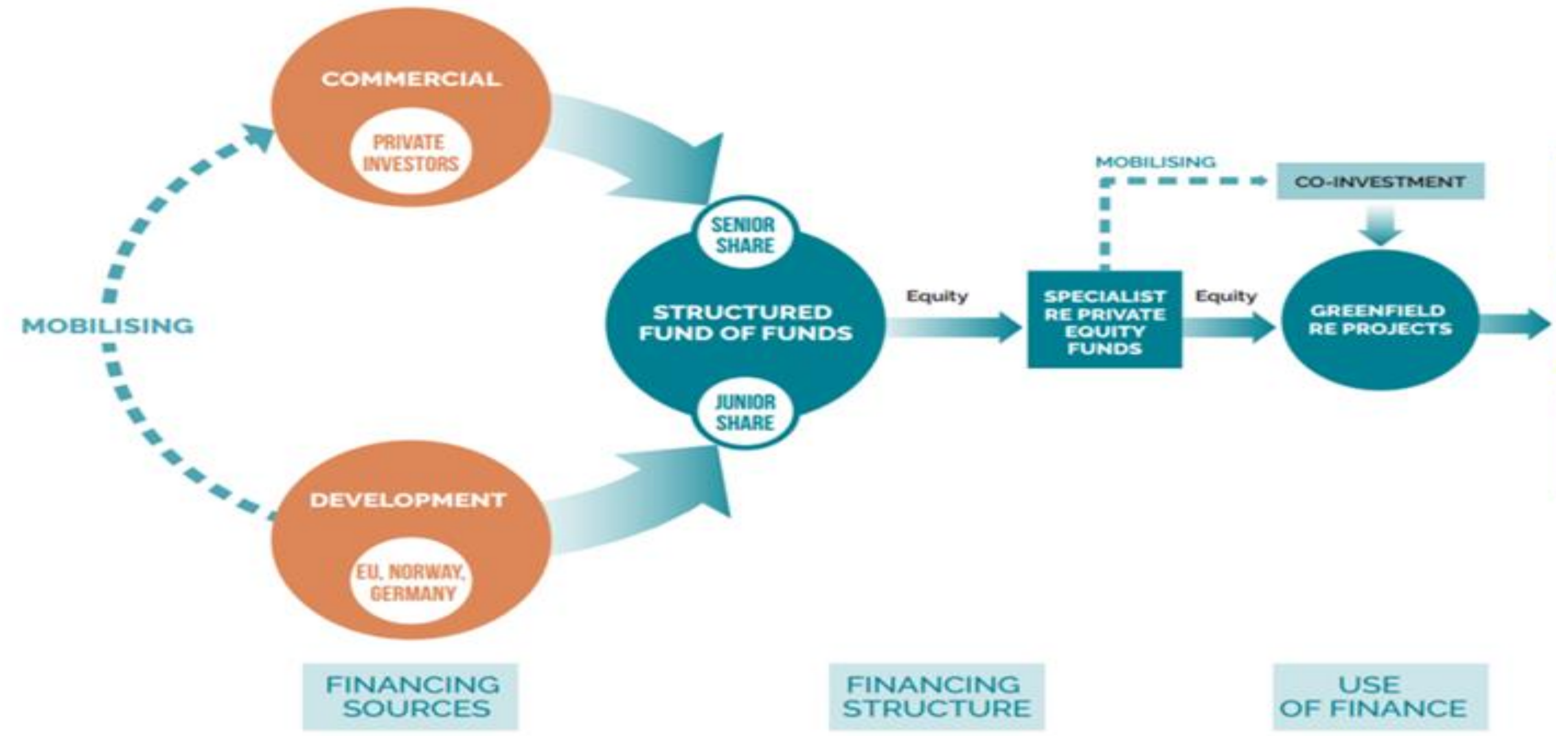
Blending over time

- Financing for the innovation chain
- Blending for scaling

Blending for deployment

Blending
within a transaction

- Blended finance could play a key role in providing financial resources focusing on **later stages of the innovation process** such as **demonstration and diffusion**.



Deployment of energy efficiency and renewable energy technology

30% High risk,
50% Medium risk,
20% Low risk

Global Energy Efficiency and Renewable Energy Fund

Financing for Technology Development

Blending within a transaction

- ❑ Blended finance could also play a role in **financing early stages of technology development**.
- ❑ Catalytic capital is typically made up of public and/or philanthropic.
- ❑ Catalytic capital aimed at seeding as well as scaling plays the role as a first loss element or accepts the risk or low returns private investors will not accept.

ASEAN

High-Level Technology Fund

- Multi-donor trust fund
- Provides grant financing to promote the integration of HLT and innovative solutions into ADB-financed projects through the project cycle

Germany

High-Tech Gründerfonds (HTGF)

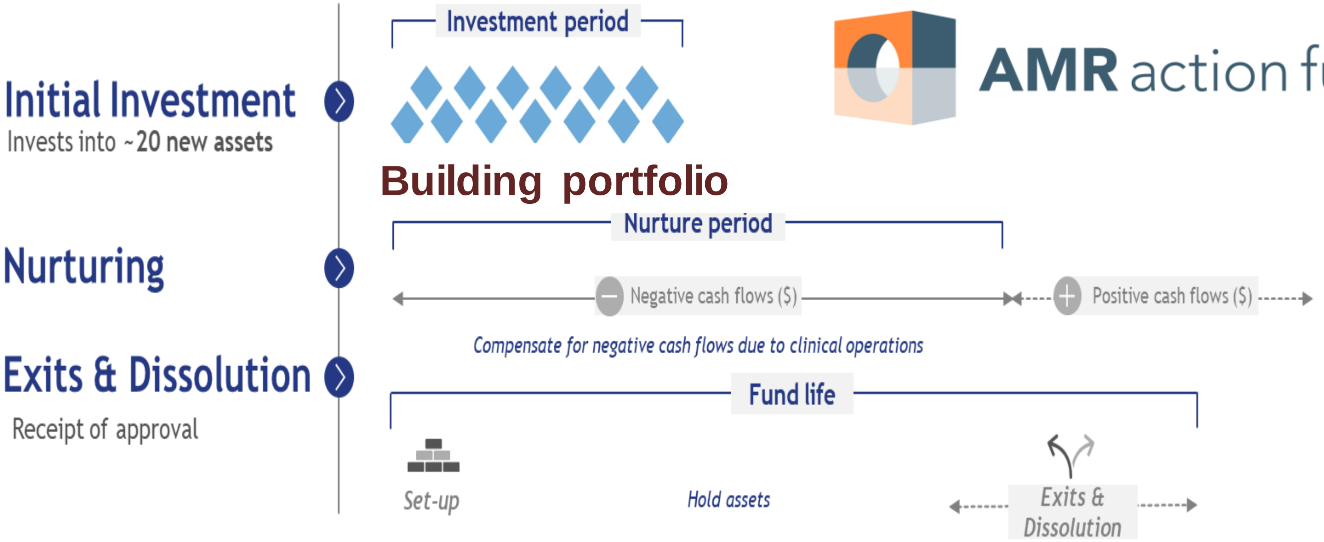
- Targeting 350 million euro with more than 30% crowded in private investors
- Focusing on technology development in seed phase

Financing with portfolio approach

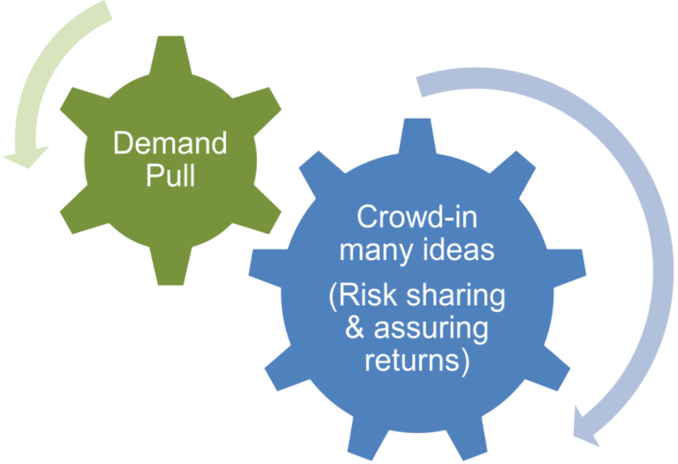
Blending
within a transaction

- ❑ Blended finance could be used for **crowding in many ideas or projects in the financial solution** (reducing the reliance on few "winners").

- ❑ **Combining demand pull mechanism** such as AMC* could incentivize innovators to move the most promising candidate through the pipeline.



AMR action fund



*** AMC (Advanced Market Commitment)**
Government assess the need and place advance commitments to purchase making private investment feasible

De-risking through guarantee

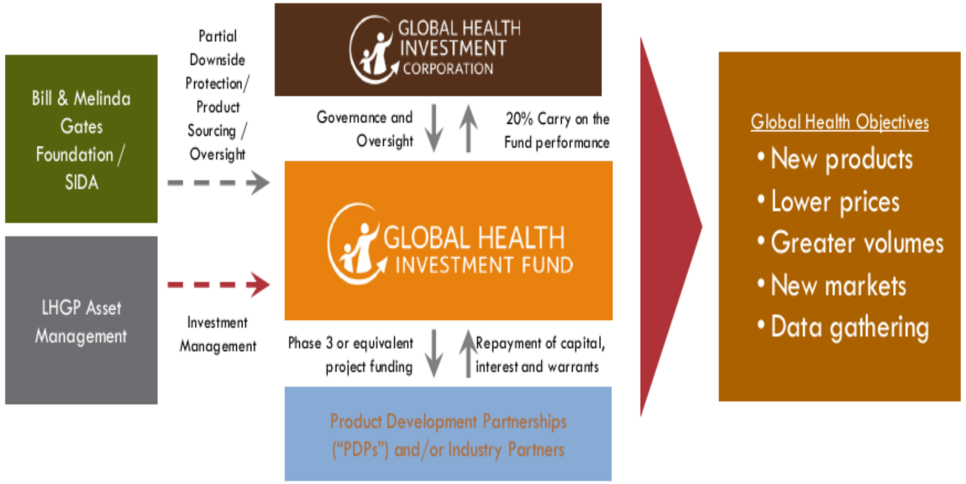
Blending

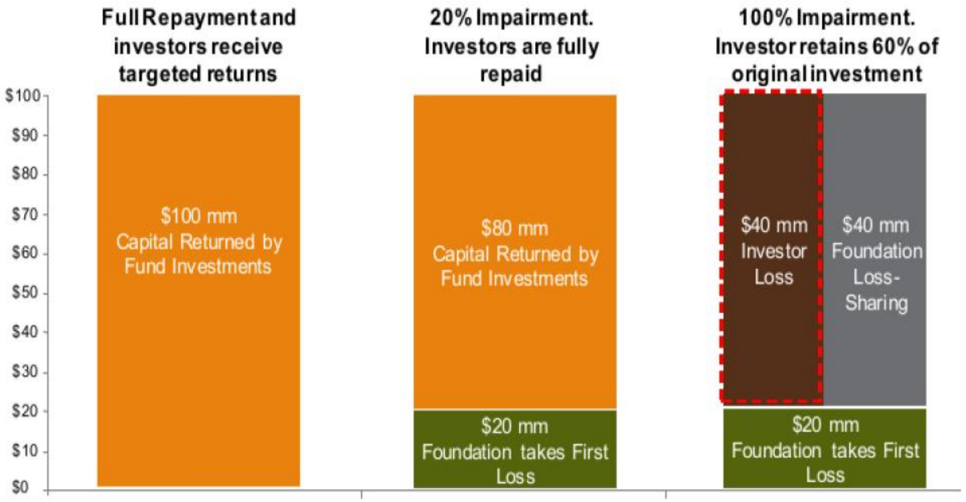
within a transaction

- **Guarantee** can play a role in **blending STI finance as a risk mitigation mechanism**.

- The Global Health Investment Fund (GHIF) is supported by a partial guarantee **enabling transaction with a lower risk adjusted internal rate of return**.

- The guarantee takes a first loss position in case of impairments.

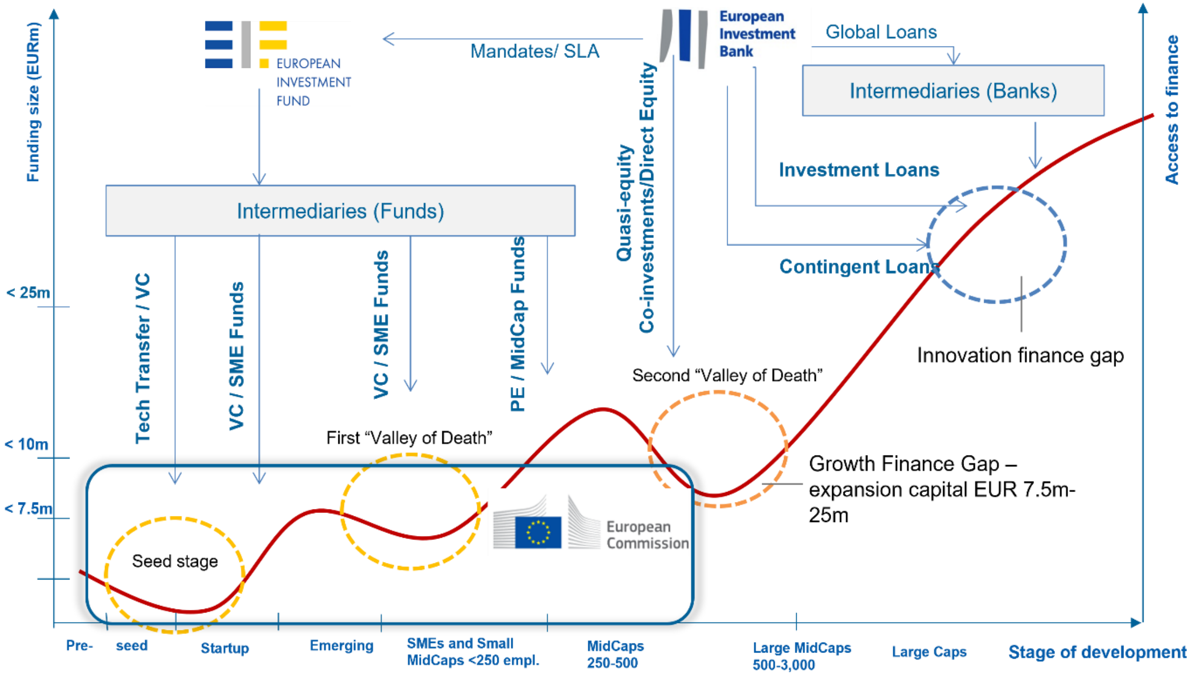




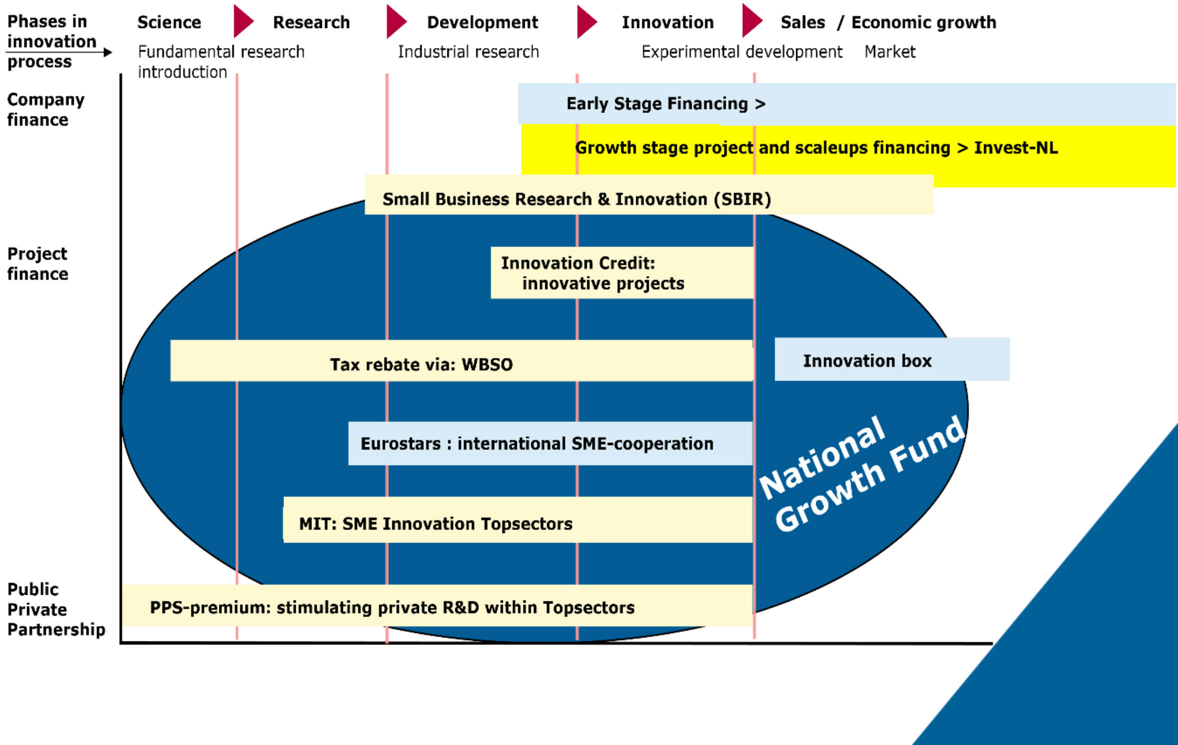
Financing for the innovation chain

Blending
Over time

- Blended finance could be **structured to adapt** to a prolonged process of **differentiated risk and capital needs along the innovation chain**.



- The different stages meet **different challenges and risks and need different blending arrangement** with different partnerships.

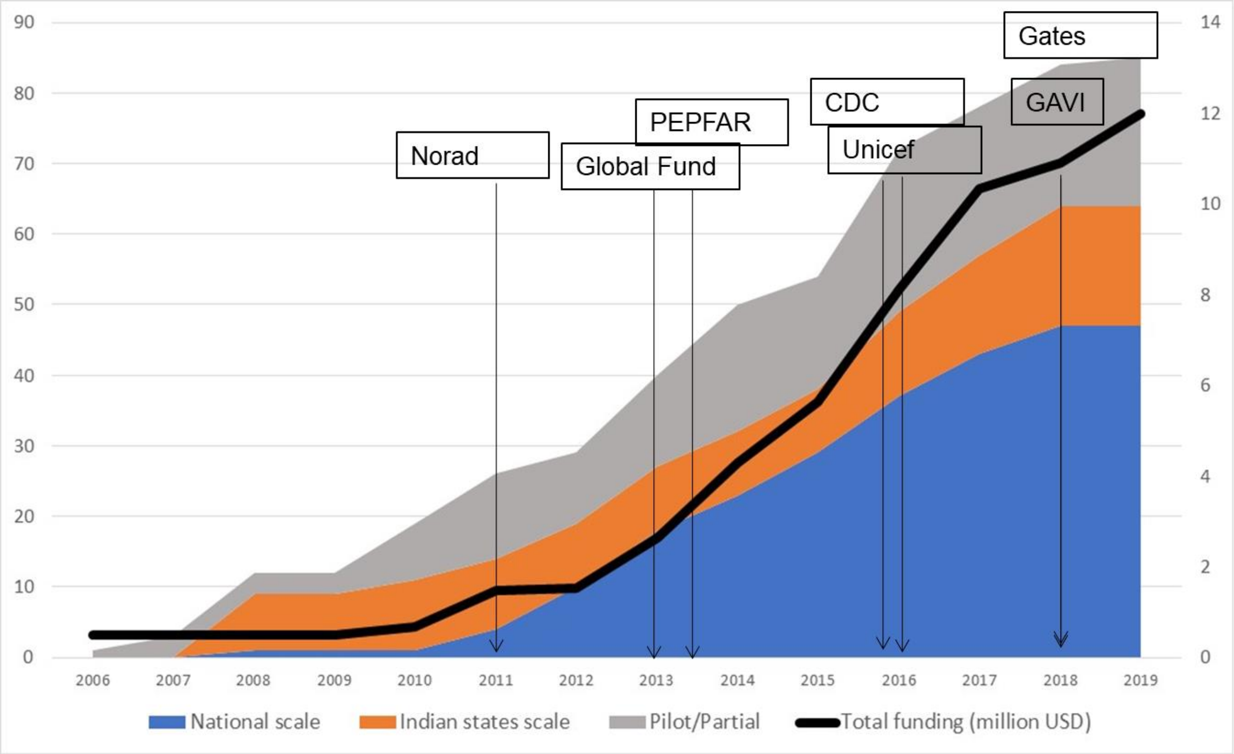


Blending for scaling

Blending
Over time

- Blended finance solutions could be **designed to accompany the growth of a project**.

- **Early stages** of a project might be **financed by a single entity**, but after maturing and growing, the viability of the project will produce a track record, represent less risk, and **financing might include additional investors with different risk acceptance.**



The Digital Health Information Software 2 (DHIS 2)

Conclusions:

Policy implication with selected imperatives

Policy implications and selected imperatives # 1

- Adopting blended finance in STI will **necessitate expansion of public support to R&I beyond the traditional channels** of direct grants or R&D tax credits.

  - ✓ *R&D funding agencies should reinvent funding practice to be more dispersed and engage in catalytic structures and collaboration with other financial intermediaries to raise capital.*

- **New partnership with financial community** should be stimulated to overcome typical cultural differences and associated communication challenges.

  - ✓ *More transparency on indicators, measurement, management frameworks will enhance the effectiveness of partnerships.*
  - ✓ *Develop meeting places, venues and events to better communicate with and learn from the financial community, their expectations and demands*
  - ✓ *Develop with the financial community pilot models and contingent financial architectures for selected types of projects to ease negotiations and establish transactions*

Policy implications and selected imperatives # 2

- **Better cross-government co-ordination and co-operation** is needed to improve the basis for large scale STI investments to tap into the blended finance.

  - ✓ *Develop better framework conditions across policy sectors to incentivize the use of innovative finance, such as tax relief schemes for private contributions to STI/SDG funds.*

- **A better integration between STI and ODA** is warranted.

  - ✓ *Better and more effective governance of international cooperation governance could provide an opportunity to align national STI policy with SDGs.*
  - ✓ *STI-related institutions should define a clear role in STI investment for SDGs with strong commitment on their priorities and budget.*
  - ✓ *Developing countries should be included as full partners to support innovation eco-systems both for science and innovation. This represents an important shift in capacity building at present most STI-related ODA goes.*

FINANCING FOR SDGs :

THE CASE FOR BLENDED FINANCE IN STI

- **Why?** Addressing SDGs require finance and STI at scale
- **But,** Financing for STI: Current efforts not enough
- **What?** Blended finance as potent
- **How?** Tailoring Blended finance for STI
- **Then,** New partnership and better coordination in need

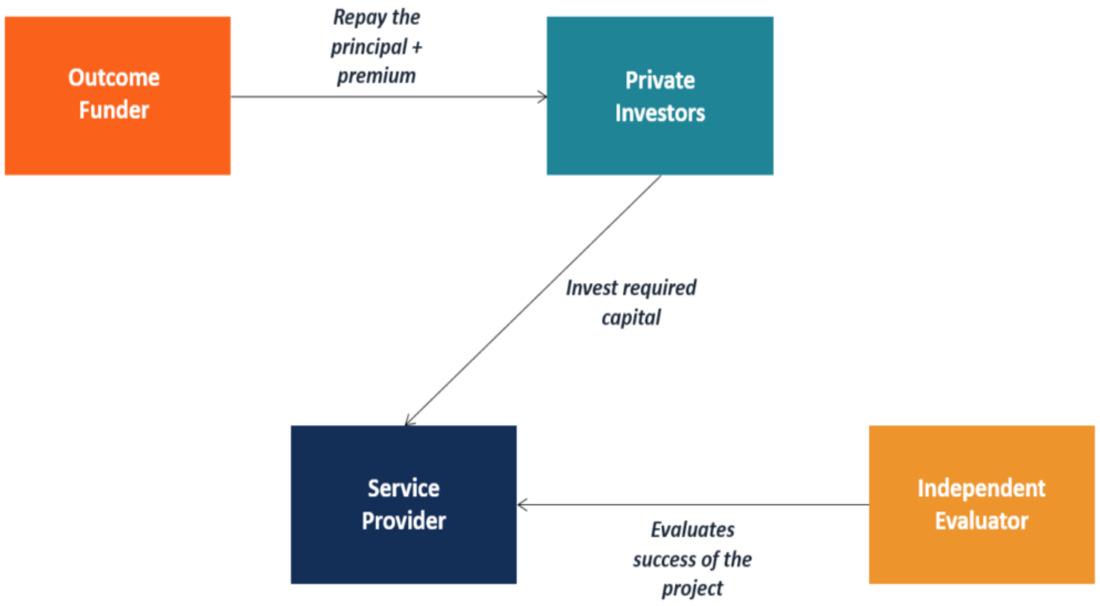
Thank you for your attention!

Financing to achieve impact

- Impact investors often take part in blended finance structures and use blended finance instruments in their own strategy.

- Impact investment itself does not create a return directly, like in a commercially viable or marketable product that generates a revenue stream.

Basic structure of impact investment bond



- Outcome funder decides on a socially beneficial outcome, and the investor is paid by the outcome funder when or if agreed targets have been met.