

# Module 5. Innovative financial instruments for Circular Economy

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Luz Fernandez  
Programme Officer  
SWITCH-Asia RPAC  
[luz.fernandezgarcia@un.org](mailto:luz.fernandezgarcia@un.org)



# What are we going to talk about?



Why do we need innovative financial instruments for CE?



Types of financial instruments



Typical sources of CE/SCP finance



New financial products developed to support CE/SCP



Climate Finance



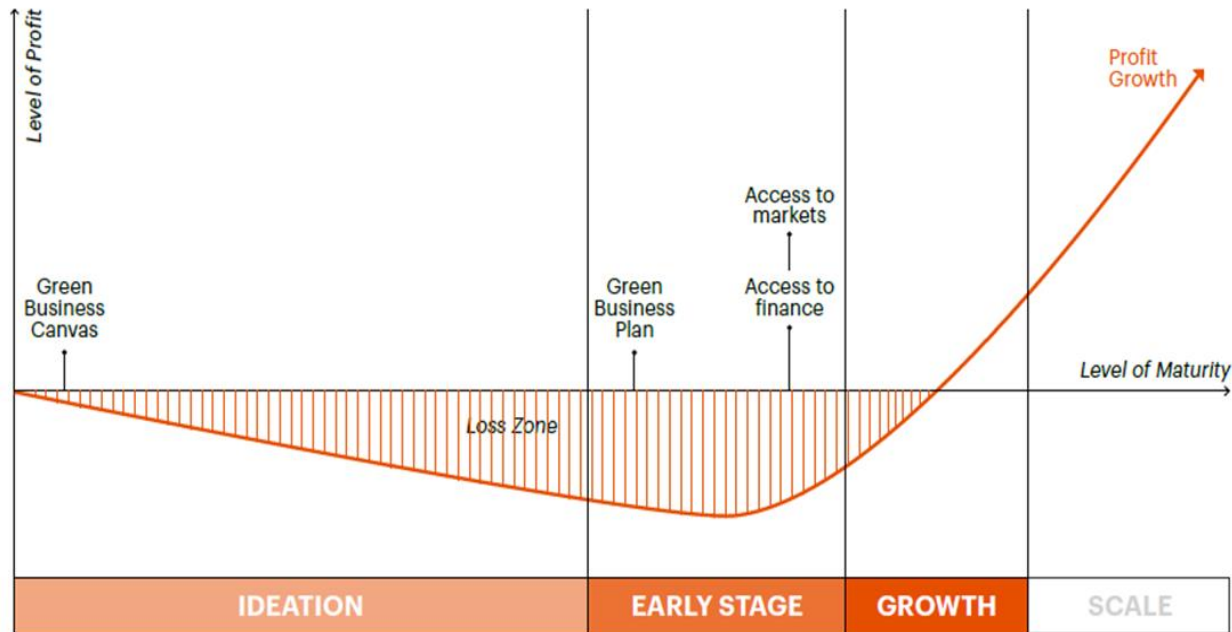
# Why do we need innovative financial instruments for Circular Economy?



# Obstacles to financing SMEs

It is almost impossible to find complete circular business models in stock-listed companies.

SMEs and startups face several obstacles to accessing finance.



“Valley of death”

# SWITCH-Med CE start-ups survey results



An important gap green start-ups and green and social innovators must overcome is access to finance.

**73%** consider access to finance as the top challenge

**56%** not finding investors

What are they asking for? **70%** grants – **61%** equity – **37%** loans

# Main factors leading to SME access to finance challenge



Lack of regulations/ frameworks



Lack of financial capability and access to support services for SMEs



Lack of CE/ SCP awareness of financial institutions



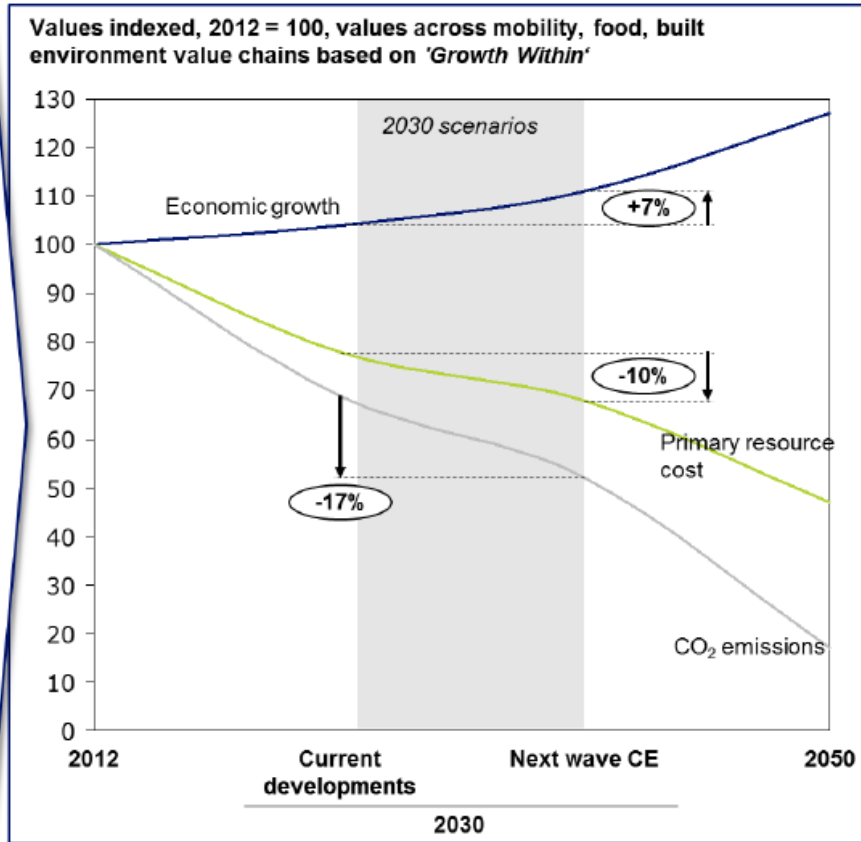
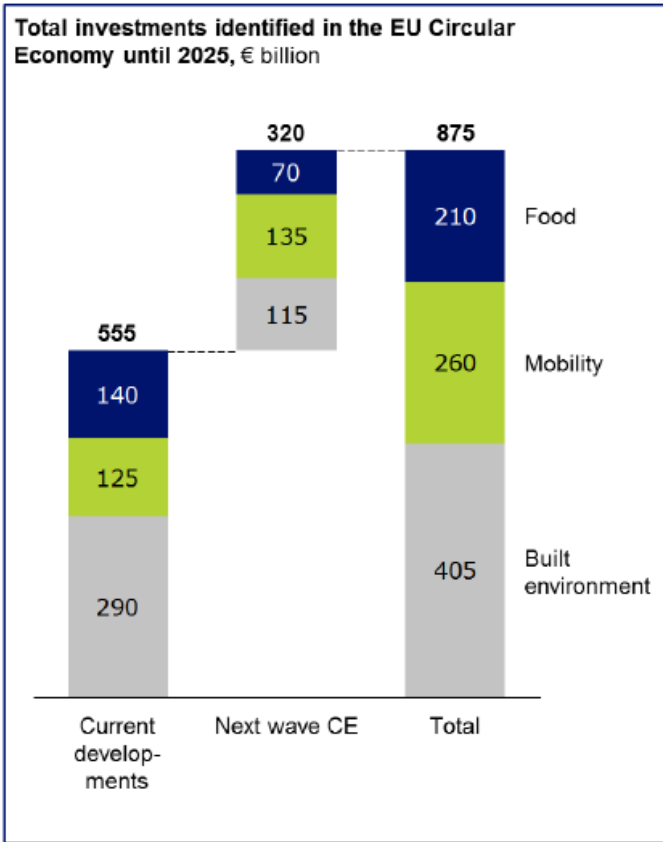
More guarantees and/or high interest rates



Applying for finance is a long difficult procedure

# CE is also an opportunity!

€320 billion of circular investments expected by 2025 in Europe



## MOBILITY | 135 €bn

- modally integrated shared mobility systems
- transitioning to circular car designs
- ramping up the reverse value chain for vehicles through focusing on remanufacturing

## FOOD SYSTEM | 70 €bn

- fully regenerative agricultural practices
- closing organic nutrient loops
- scaling high-productivity indoor urban farming opportunities
- developing next-wave protein sources

## BUILT ENVIRONMENT | 115 €bn

- designing and constructing buildings based on CE principles
- closing loops on building constr. and demolition materials
- building circular cities



# Key investment themes in Asia

Industrial Resource Efficiency

Sustainable Agriculture

Waste & Water Management

Green Vehicles

Green Buildings






Renewable energy



- Ongoing assessment SCP/CE investment opportunities in Asia. Finance in motion (SWITCH-Asia grants beneficiary)



# Types of financial instruments

-  Debt
-  Equity
-  Mezzanine Financing: between debt and equity
-  Guarantees
-  Reimbursable Grants / Contingent Recovery Grants



# Debt

- **Definition:** money borrowed by one party (borrower) from another (lender).
- **Use:** corporations and government use it to make **large investments/purchases** they could not fund directly themselves
- **Debt seniority:** *senior* lenders have priority of repayment over the others (*junior* lenders)
- **Concessional debt:** Debt provided **below market rates**, or with more advantageous terms

# Equity

- **Definition:** is the process of raising capital through the sale of shares in an enterprise.
- In **project finance**, equity is generally referred to as the portion of the investment **provided upfront by the sponsors** (equivalent to a down-payment to buy a house).
- It is typically used as “seed” money
- **Features:**
  - generally a **higher risk / higher return** profile vs. debt
  - gets **repaid last** in the payment waterfall
  - Lenders generally require a **minimum equity %**

# Mezzanine: between debt and equity

- **Definition:** hybrid of debt and equity financing that gives the lender the right to convert to an equity interest in the company in case of default.
- **Features:**
  - **highest-risk type of debt** but also offers the highest returns for providers
  - typically **more expensive** than senior debt for the project sponsor, with interest rates around 12-20%/year
  - takes **priority over equity** in case of liquidation of the assets
  - Similar to junior debt, but can participate in equity upside



Highest Risk Highest  
Return

EQUITY

5% to 20% of funding

Medium / High Risk  
Medium High Return  
10% – 15%

MEZZANINE DEBT  
or  
PREFERRED EQUITY

10% to 15% of funding

Lower Risk  
Lowest Return  
5% – 8%

SENIOR DEBT

60% to 80% of funding

# Guarantees

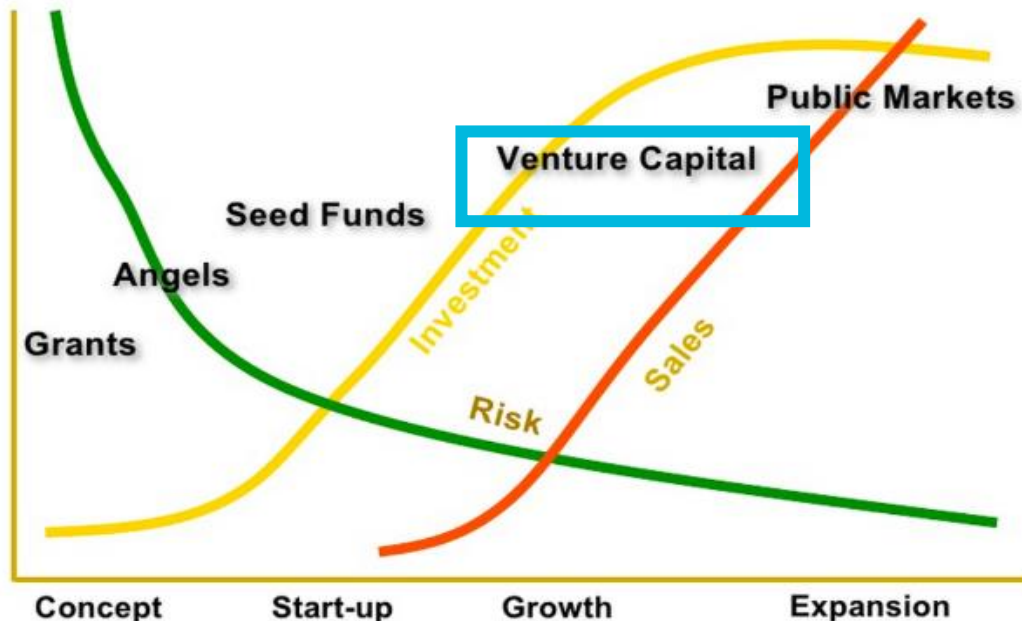
- **Definition:** risk mitigation instrument provided by a financial institution (or Sovereign Government) **against a fee**, ensuring that the liabilities of a debtor will be met.
- **Types:**
  - **Credit Guarantee:** protects the lender from the risk of default of borrower, its generally *partial* and be *first* loss, *second* loss, etc
  - **Performance Guarantee:** protects from the project's underperformance (e.g. in energy efficiency contracts)
  - **Political Guarantee:** mitigates risks arising from the adverse actions—or inactions—of governments
  - **Credit-enhancement Guarantee:** used to increase credit rating of securities (e.g. green bonds)

# Reimbursable / Contingent Recovery Grants

- **Definition:** hybrid instrument that some providers of concessional climate finance can award to projects in consideration of **specific risk circumstances** (generally binary in nature)
- **Features:**
  - Best used when the **trigger** for the possible repayment is **outside the control of the recipient** (otherwise better to use result based finance - RBF)
  - Example: **early-stage geothermal** development

# Venture capital

- VC is **financing** that investors provide **to startup companies** and small businesses that are believed to have **long-term growth potential**.
- The high risk is compensated by potentially high payoffs.



- **Private equity VS Venture Capital:** buy different types of companies, invest different amounts of money, and claim different amounts of equity in the companies in which they invest.



# Green Bonds

**What is a bond?** A bond is a type of loan which companies, governments, and banks use to finance projects. The issuer of the bond (the borrower) owes the holder (the creditor) a debt and, depending to the terms they agree on, is obliged to pay back the amount lent within a certain amount of time and with a certain interest.

**What is a Green Bond?** A Green Bond is where proceeds are allocated to environmental projects. The term generally refers to bonds that have been marketed as “Green”.

Key opportunities for green bonds **cover elements of the circular economy**, including:

- Renewable energy
- Energy efficiency (including efficient buildings)
- Sustainable waste management
- Sustainable land use (including sustainable forestry and agriculture)
- Clean transportation

**Who issues these bonds?** Largely corporations and state-owned rail companies, with some from multilateral development banks and some asset-backed bonds.

**Green Bonds can't solve all the problems!**

# Green Sukuk

A sukuk is bond in compliance with the **Sharia law**.

An advantage of green sukuk as it has the potential to attract both green investors and those with Shariah-compliant mandates.

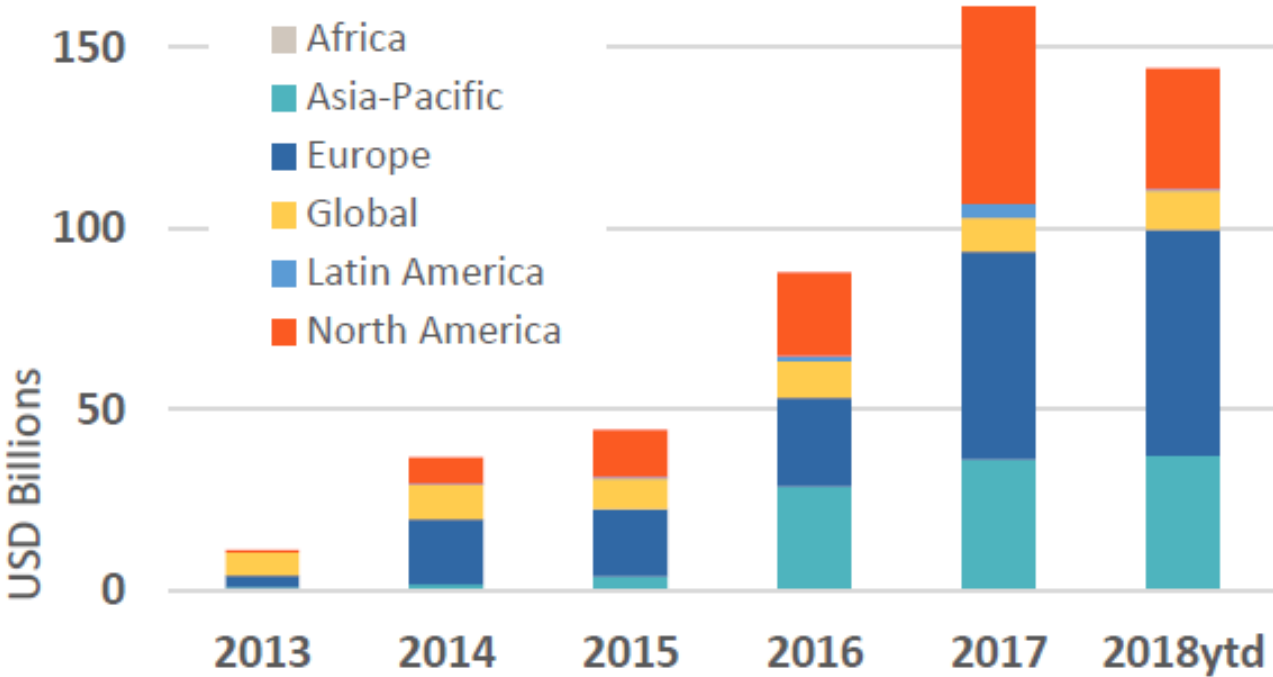
The Republic of Indonesia's USD1.25bn green sovereign sukuk is the largest green sukuk to date, as well as the first green sovereign bond from Asia.

The green sukuk market has the potential for scaling up significantly, especially in **Indonesia and Malaysia**.

This instrument is well positioned to fund **solar projects, low-carbon buildings, water and wastewater management, low carbon vehicles and public transport**, as well as other mitigation and adaptation investments.

# Green Bonds in Asia

Asia-Pacific issuance represents 22% of global total



**Note:** Total global issuance (2007 - Nov 2018): USD497bn  
Asia-Pacific issuance since first issue in 2013: USD108bn

# ASEAN – Green Bonds Market

**USD 5 bn** as of the end of November 2018

**First green bond deals in 2016** in the Philippines and Vietnam

Indonesia, Singapore and Malaysia are the top three countries for labelled green bond issuance

Indonesia is the largest regional green bond issuer with its USD1.25bn sovereign green sukuk

**Buildings** is the largest category financed by green bonds (43% of the market by volume), followed by **energy** (32%)

<https://www.climatebonds.net/resources/reports/asean-green-finance-state-market-2018>





# Typical sources of Project Funding

## Debt Financing

- Commercial banks
- Institutional Investors
- Export Credit Agencies
- Development Finance Institutions
- Multilateral Institutions

## Equity Financing

- Institutional Investors
- Impact Investors

**Internally Generated Cash:** Cash generated by the project before the project full completion, for instance, through the commissioning of a first tranche of a toll-road, which contributes to pay for the following tranches.



# Institutional Investors, Impact Investors

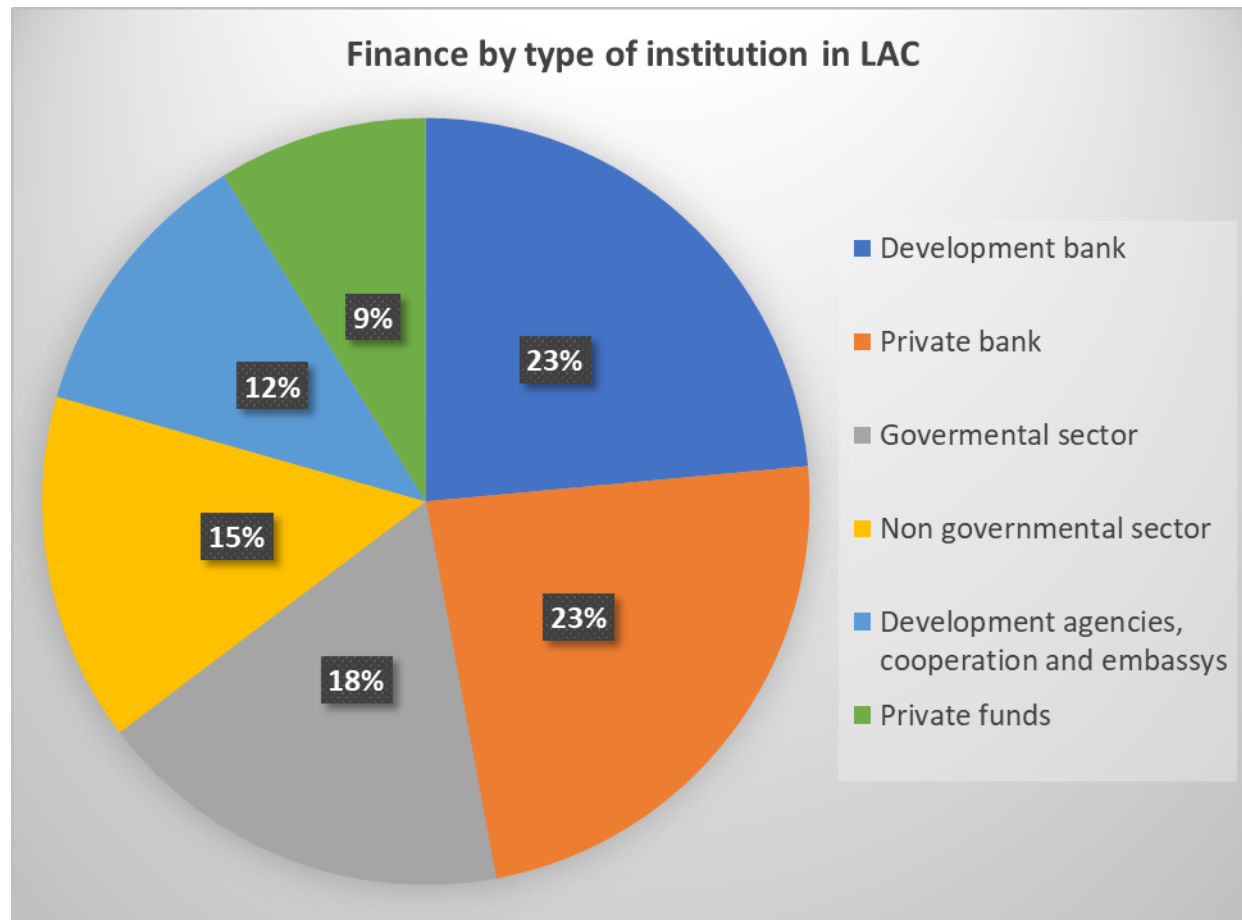
- **Institutional investors:**

- organizations that invests on behalf of its members, who as professional investors, faces **fewer protective regulations**.
- Include commercial banks, mutual funds, hedge funds, pension funds and insurance companies.

- **Impact Investors:**

- refers to investments made into companies, organizations or funds to **generate social or environmental impacts**, alongside financial returns.
- can target a range of returns **from below-market to above-market rates**, and cover **different asset classes** such as private equity/venture capital, debt, and fixed income (bonds).

# Type of institution that currently finances CE/SCP in SMEs



Banks (development and private) are the institutions that are most willing to finance investments but often, these are initiatives that arise from a **cooperation between different types of actors**, both private and public, cooperation agencies and entities of the non-governmental sector.

**\*Ongoing study for Asia**



Exercise: 10 mins in groups

*Are there existing financing instruments that already support circular economy in your country/region?*







## **New products developed to support CE or SCP**

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**What has been done?**

# BlackRock (Luxembourg)

**Investment fund** for circular Economy (the Fund invest globally at least 80% of its total assest in the equity securities of companies that benefit from, or contribute to, the advancement of the CE)

**BlackRock** Products Themes ETFs & Indexing Insights Education

**EQUITY** [KIID/KID](#) [Prospectus](#) [Download](#)

## BGF Circular Economy

Class A2 (USD) (Accumulating) ▼

NAV as of 29-Nov-19 **USD 10.45** 1 Day NAV Change as of 29-Nov-19 **0.00 (0.00%)**  
52 WK: 9.89 - 10.50

Overview Performance Key Facts Managers Holdings Pricing Literature

### Investment Approach

The Fund aims to provide a return on your investment through a combination of capital growth and income on the Fund's assets. The Fund invests globally at least 80% of its total assets in the equity securities (i.e. shares) of companies globally that benefit from, or contribute to, the advancement of the "Circular Economy". The Circular Economy concept aims to minimise waste by considering the full life-cycle of materials, and redesigning products and operations to encourage greater re-use and recycling. The Fund will aim to invest in line with the principles of the Circular Economy as determined by the Investment Advisor (IA) (having regard to specialist third party information sources as appropriate).

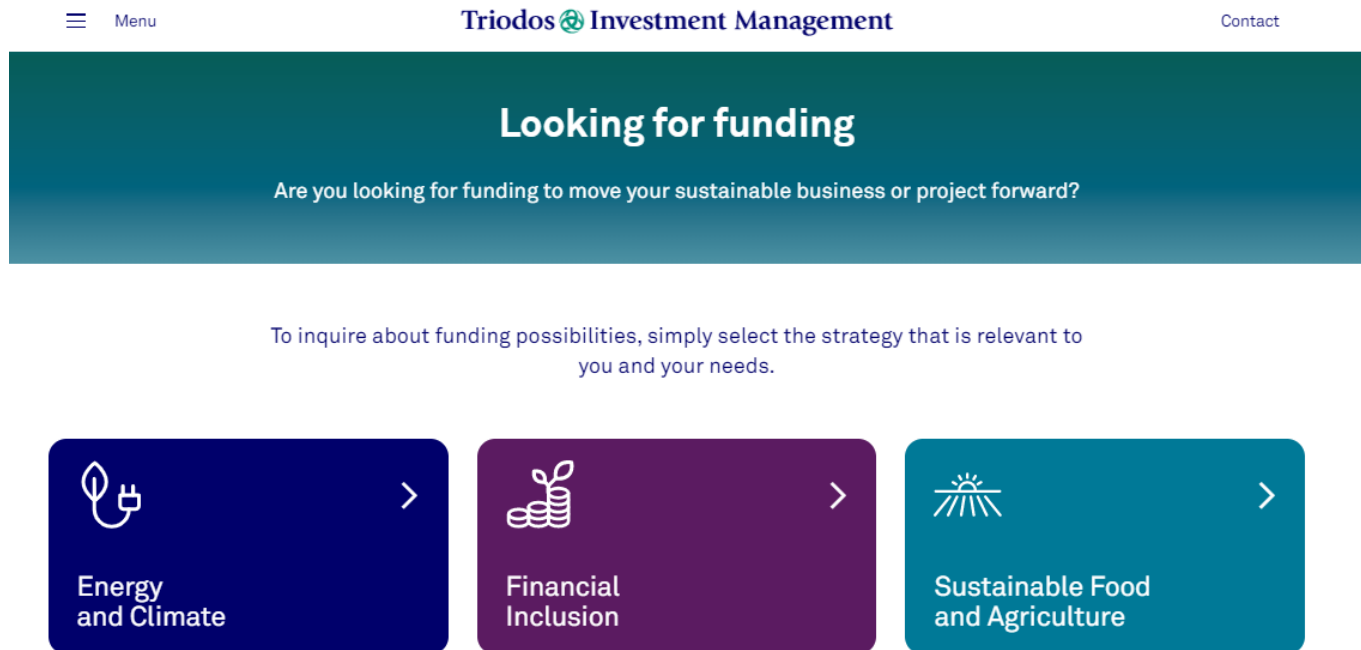
- Size of Fund (as of 02-Dec-19) **USD 21.08 M**

<https://www.blackrock.com/lu/intermediaries/products/310165/>



# Triodos Investment Manager

- Impact investor
- Selects companies that develop solutions to the world's most critical sustainability challenges
- They have included CE as one of the key topics they finance



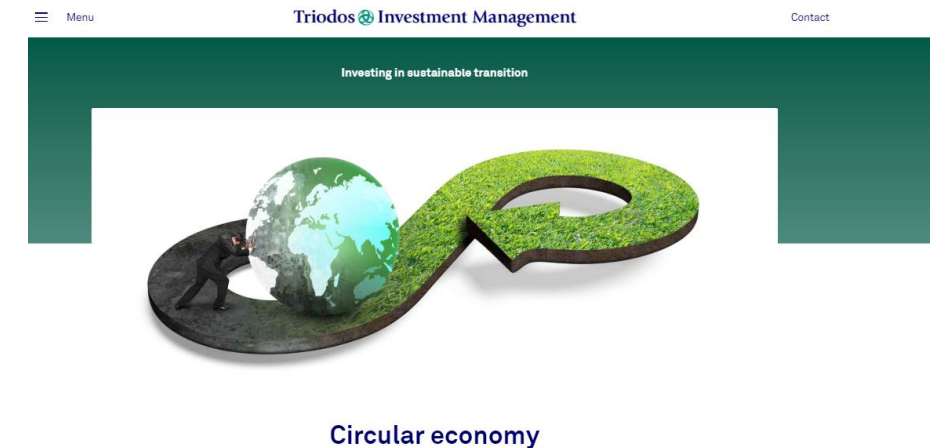
Menu **Triodos Investment Management** Contact

## Looking for funding

Are you looking for funding to move your sustainable business or project forward?


To inquire about funding possibilities, simply select the strategy that is relevant to you and your needs.

- Energy and Climate
- Financial Inclusion
- Sustainable Food and Agriculture



Menu **Triodos Investment Management** Contact

Investing in sustainable transition



Circular economy

<https://www.triodos-im.com/looking-for-funding>

<https://www.triodos-im.com/articles/2019/triodos-im-transition-themes---circular-economy>



The screenshot shows the ABN-AMRO website header with the logo, navigation menu (Home, About ABN AMRO, Newsroom, Investor Relations, Careers, Contact), and utility links (ABN AMRO websites, Search, EN, Online Banking). The main content area features a breadcrumb trail: Home > About ABN AMRO > In society > Sustainability > Our focal points > ABN AMRO boosts circular economy. Below the breadcrumb is the article title 'ABN AMRO boosts circular economy' and a 'Share' button. The central image depicts a person in a dark suit holding a glowing orb containing a green landscape with a tree. Surrounding this central orb are five other glowing spheres, each labeled with a principle of the circular economy: 'Reduce', 'Repair', 'Reuse', 'Recycle', and 'Reject'.

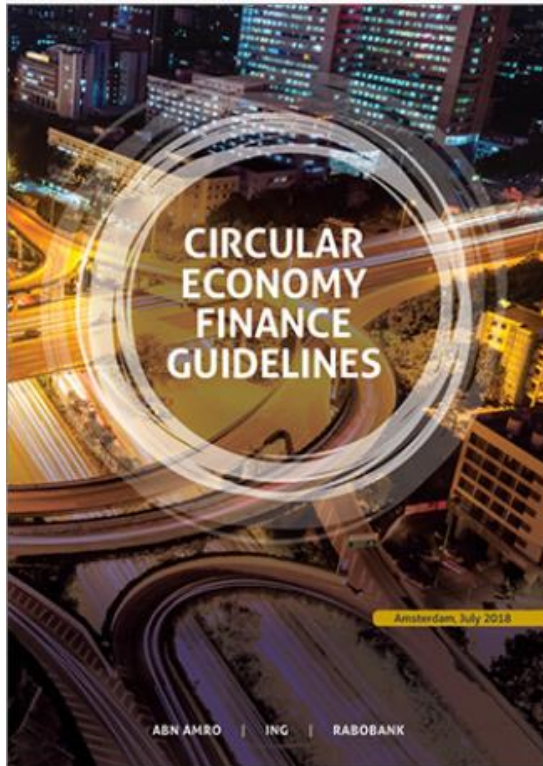
- They present themselves as “a bank with an impact”
- Goal by 2020
  - finance 1 billion euros in circular assets,
  - finance 100 circular loans,
  - cut CO2 emissions by 1 million tons.

<https://www.abnamro.com/en/about-abnamro/in-society/sustainability/our-focal-points/circular-economy/index.html>

# Banks join forces to support a circular economy



Rabobank



The Circular Economy Finance Guidelines aim to promote and develop the key role that finance can play in the transition towards a CE.

The guidelines offer a joint framework to pick just the right type of finance for every circular initiative

[https://www.abnamro.com/en/images/Documents/040\\_Sustainable\\_banking/Publications/ABN\\_AMRO\\_Circular\\_Economy\\_Finance\\_Guidelines\\_2018.pdf](https://www.abnamro.com/en/images/Documents/040_Sustainable_banking/Publications/ABN_AMRO_Circular_Economy_Finance_Guidelines_2018.pdf)

## Rabobank and EIB – Impact loans in the Netherlands



EUR 250m for front-running SMEs with one of the selected quality marks for environmental performance.



The facility follows three earlier “impact loans”, for a total of EUR 350m, that have supported nearly 300 Dutch SMEs.



Selected SMEs will enjoy an interest rate discount from 0.30-0.70% thanks to EIB backing.

<https://www.eib.org/en/press/all/2018-206-rabobank-and-eib-expand-support-for-environment-conscious-entrepreneurs>



Helps to **redefine business strategies** and **provide financial support** for investments addressing the re-design of the industrial system.

**5 billion Euro credit facility** to support businesses adopting circular business models.

A team from the **Ellen MacArthur Foundation** worked with Intesa Sanpaolo to define the selection criteria for access to the credit facility.

# The SwitchersFund

Business support services to existing and future green, circular and social entrepreneurs in the **Mediterranean Region**.

Works as a **catalyst of innovative** ideas and its role is to identify innovative projects and **connect** them with financiers.

The SwitchersFund provides initial **seed finance** and **technical assistance** to help the Switchers test new products and enter new markets.



<https://www.theswitchers.eu/en/>

# Switch-Med

## Financing partnerships...



[Watch the story](#) on the SwitchMed YouTube Channel!

## ENABLING ACCESS TO FINANCE FOR GREEN ENTREPRENEURS IN SOUTHERN MEDITERRANEAN COUNTRIES

AVAILABLE OPTIONS AND POTENTIAL INNOVATIONS



Union for the Mediterranean  
Union pour la Méditerranée  
الإتحاد من أجل المتوسط



The UM Secretariat  
is co-funded by the  
EUROPEAN UNION

With financial  
support from



Sweden  
Sverige



Regional Activity Centre  
for Sustainable Consumption  
and Production

febea



RPAC plans to replicate the study in Asia



Are you aware of any  
bank in your countries  
providing specific  
finance for SCP/CE?



# Circular Economy Tackles Climate Change



<https://www.ellenmacarthurfoundation.org/publications/completing-the-picture-climate-change>

# Why Climate Finance is relevant for CE?

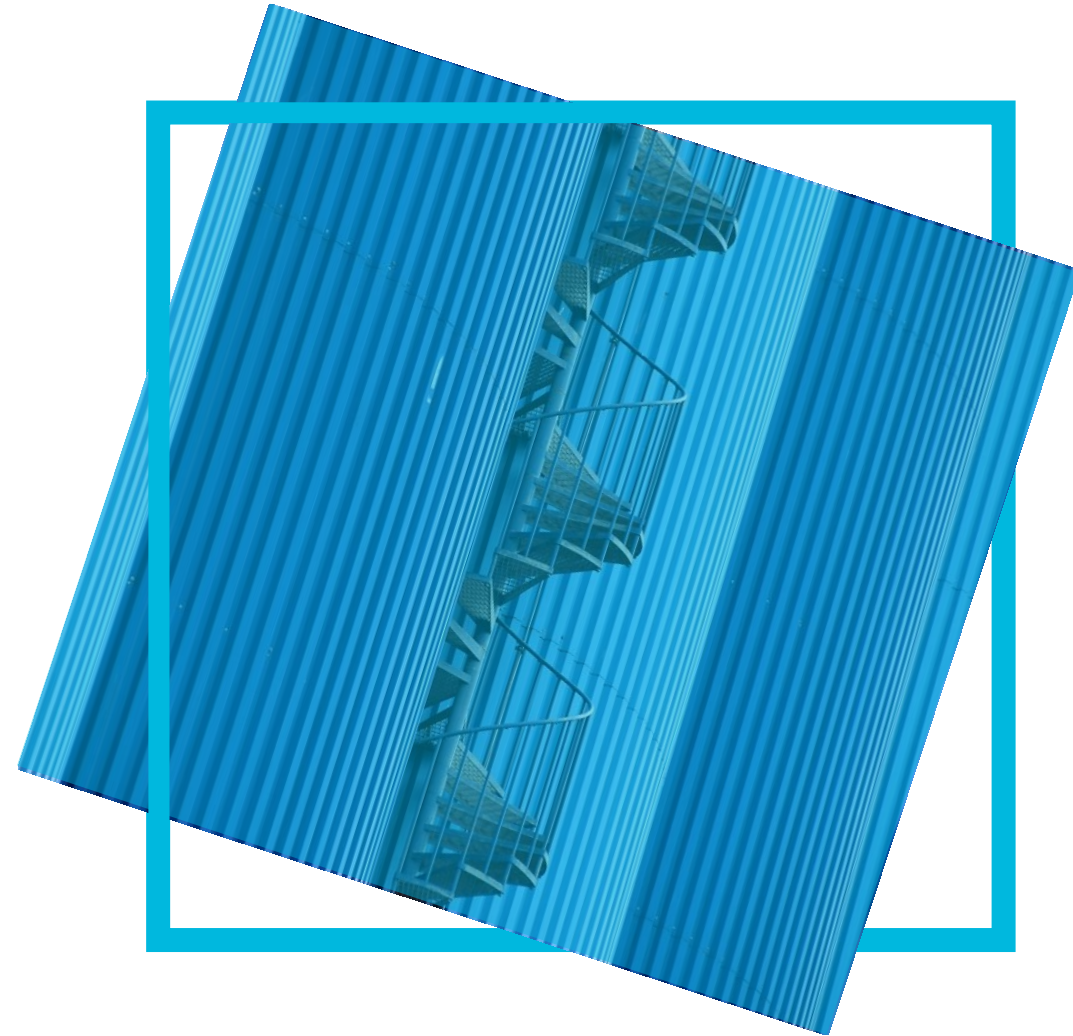


- Existing commitments: NDCs
- High level political engagement
- Need of Bankable Projects!



# What is a bankable project?

A project become “bankable” when it has sufficient collateral, future cashflow, **and high probability of success, to be acceptable to a financial institution or private investors for financing.** Project bankability is therefore a broad concept that refers to **all project dimensions** (country, sector, scope, market conditions, etc) and consider **all project risk** (credit risks, technology and performance risk, construction and operation risks, political risks, etc) **and benefits** (potential to generate returns for investors and/or for the host country).





# Principles of Climate Finance



Additionality



Minimum Concessionality



Commercial sustainability

# Additionality

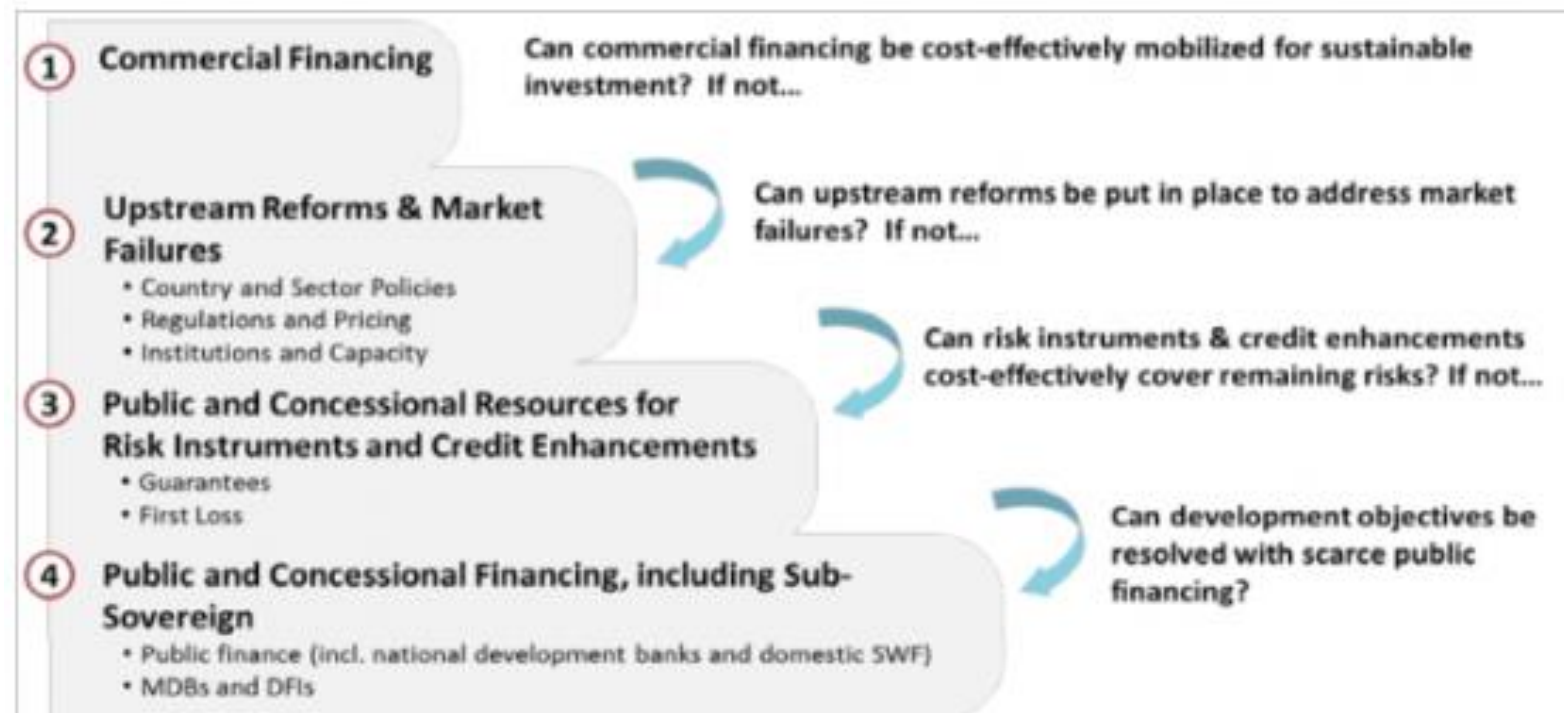
- **question to ask is:** would the project be financed *anyway without* the provision of concessional finance? (→ *counterfactual*)
- **relates to** the *rationale/economic case* for using blended concessional finance
- **public sector:** additionality argument considers sources already available at country level and if the country can spend scarce public resources to achieve the stated climate objective (*qualitative analysis*).
- **private sector:** can consider firm's WACC, an investment metric/threshold (NPV / IRR) and comparators – (*quantitative analysis*)

# Minimum Concessionality

- Use of **scarce public** resources should aim to achieve the **highest possible level of cost-efficiency** in climate investments.
- It should also aim to **catalyze** as much **private finance** as possible.
- Minimum concessionality means **avoiding *over-subsidization***
- Use of grant element **not be greater than necessary** and **sized based on obstacle** to overcome.

# Minimum concessionality in the selection of financial instruments

## World Bank's *Cascade* Approach

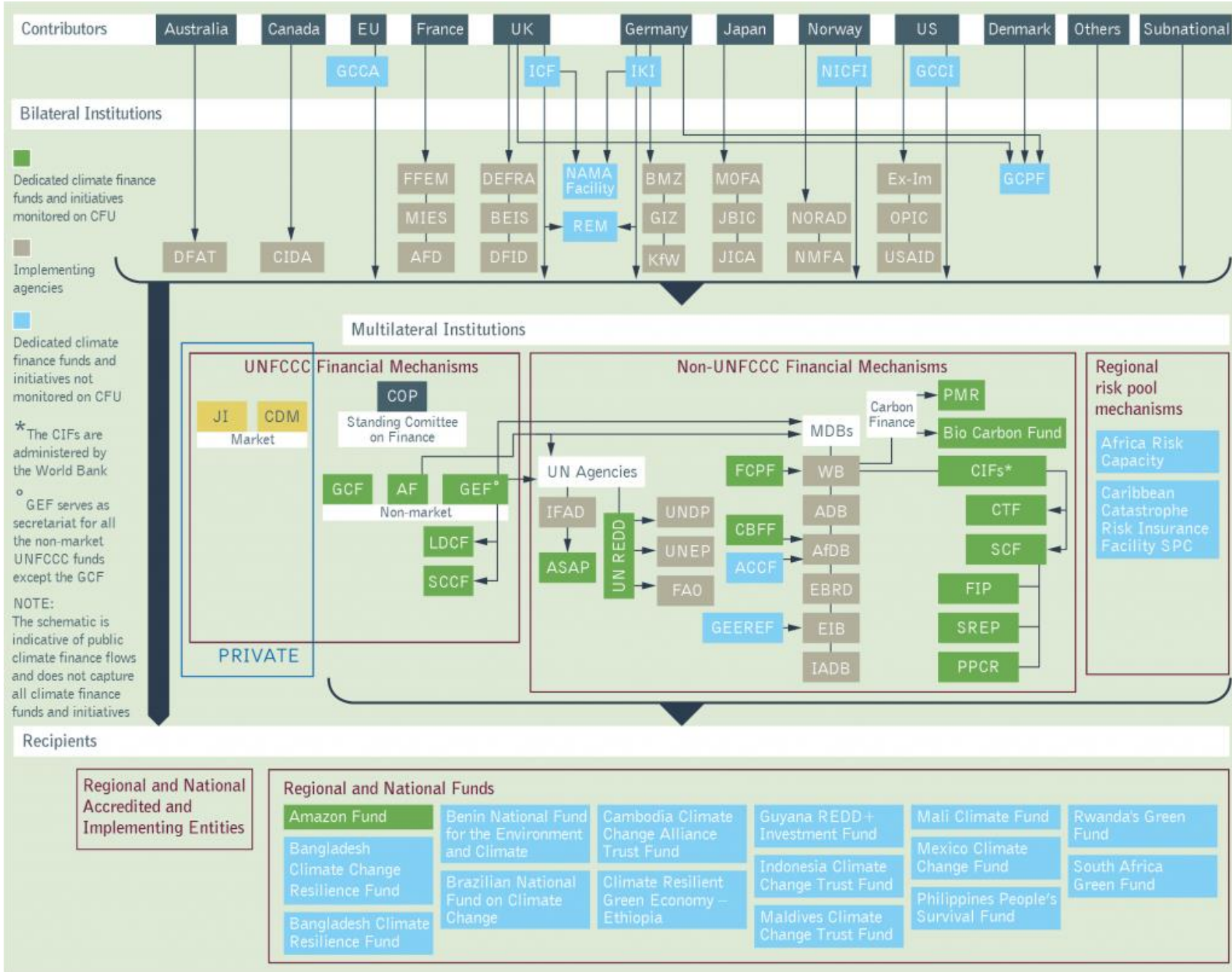


<https://publicpolicy.wharton.upenn.edu/live/news/2133-the-importance-of-public-private-partnerships-in>

# Commercial Sustainability

- Broad concept signaling the **need to ensure** financial and economic **sustainability** of climate related financial-aid.
- **Private sector operations** supported with concessional funds should be designed promote **commercial sustainability** of the relevant client, activity or sector.
- Also, **avoid creating permanent dependency** on long-term support and prevent rent-seeking behavior among private beneficiaries.





<https://climatefundsupdate.org/wp-content/uploads/2019/02/Architecture-2018-1024x805.png>



# The need for holistic approach



- Credit information bureau
- Insolvency and creditor rights reform
- Secured transaction registries for movable properties
- Payment systems (including electronic)
- Banking and MFI laws

- 
- Partial credit guarantee systems
  - Leasing framework
  - Factoring and discounting of bills receivable framework

- 
- pre-bank financing infrastructure for early stage finance to survive the “valley of death”



- 
- Ease of doing business (registration, licensing)

**Regulator & financial infrastructure support**

**Financial Institution support (MFI, Banks, Funds)**

**SME improved access to formal financing**

**SME support**

- Corporate governance assessments (incl. for equity)
- Skills, knowledge, networks, standards adoption
  - financial capabilities, awareness raising on broad spectrum of financial instruments,
  - non-financial services for FI clients,
  - retailer and supplier development in corporate value chains
- Technology upgrade (e.g. POS)

- Trade & supply chain finance
- Risk management, corporate governance, E&S standards advisory
- Segmentation and product bundling (e.g. women, sustainable energy finance, agri-finance)
- Digital finance
- Capital market instruments
- Human capital development (e.g. FI academy, or wholesale sector academy)





# Economic incentives (regulatory support)

- Taxes
- Charges (e.g. charge on single-use plastic bags)



European countries urged to use economic incentives in next step towards circular economy

<https://www.zerowasteeurope.eu/wp-content/uploads/2017/07/Rethinking-economic-incentives2.pdf>

Thank You 

*Implemented by*