Promoting eco innovation in SMEs:

Developing FIs to incentivise commercial uptake of new low carbon solution

Brussels 26 March 2013

Clean innovation to support climate change objectives

- EU RDI funding: as an overall objective should reach 3% of GDP (EU currently at 1.5%, but US and Japan at approx. 3% of GDP) but limited insights into eco-innovation in existing data

- Continuing market gaps and deficiencies in debt and equity markets for financing of innovative enterprises, and especially SMEs
    - 75% of SMEs dependent on external financing
    - 'access to finance' the second most pressing problem for Eurozone SMEs, right after getting customers
    - Venture capital fundraising and investment levels at one quarter of 2006 levels

- Importance of innovation to tackle climate change but require a long-term perspective

Transition to new technologies – market imperfections

High uncertainty / risks

- **Technology**:
  - Risk of technical failure;
  - Technical obsolescence;
  - Lack of consistent regulatory framework.
- **Market / demand**
  - ”Choice” between competing technologies;
  - Life cycle costs, residual value;
  - Affordability.

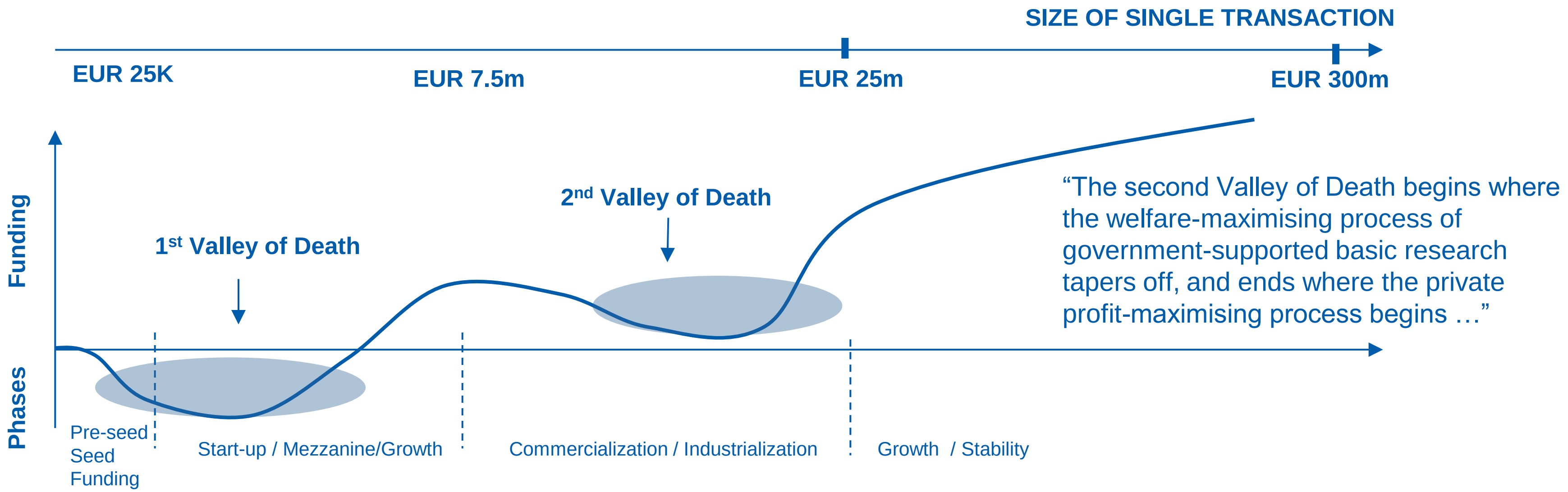
High investment costs

- **Technology:**
  - Integrated Manufacturing processes.
- **Manufacturing sites**
  - Economies of scale.
- **Infrastructure**
  - Prohibitive for single private investor.

Long time horizons

- **R&D long lead times**
- **Flat learning curves at the early stages**
- **Integration with existing/competing systems**
- **Gap between innovative and exisitng commercialized technologies**

Innovation lifecycle and funding needs of SMEs and Midcaps

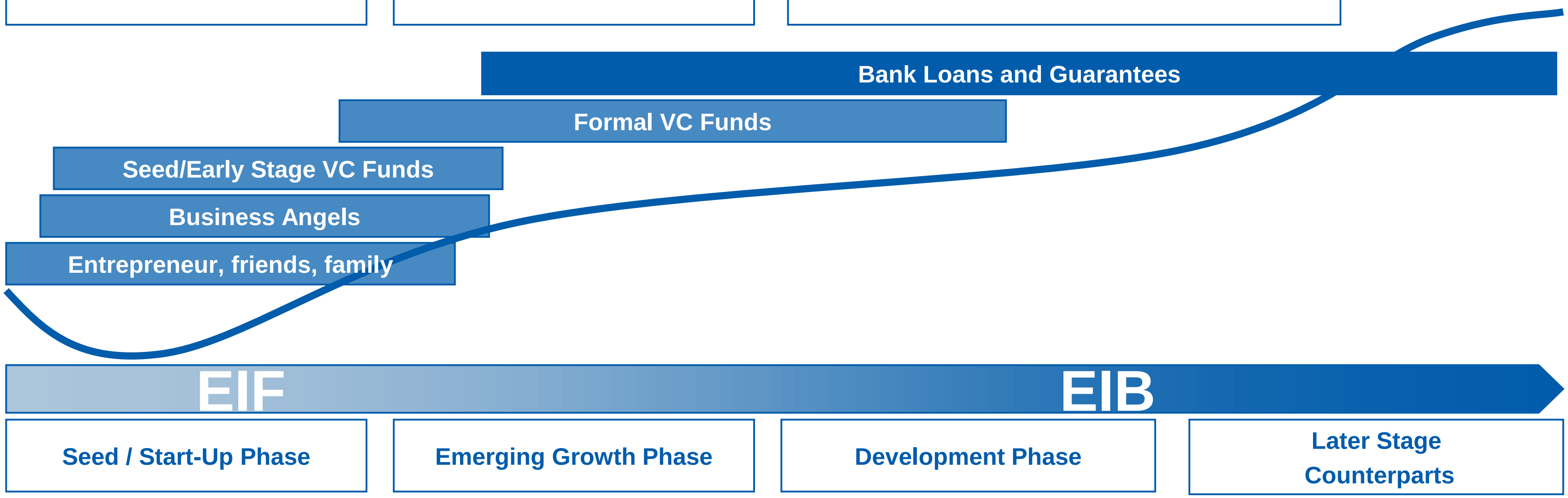


- Policy papers and research studies identify two troughs in the supply of capital to innovative SMEs and mid-caps. The **first Valley of Death**, whose existence is attributed to a lack of early stage risk capital for start-ups, is currently addressed by the EIB Group via the EIF products (Seed, TT, VC).
- The **second Valley of Death** inhibits innovation’s transition from technical and economic feasibility to commercial production. The occurrence of the second Valley of Death at the intersection of these two stages in the innovation sequence is due to the dearth of financing available to RDI projects during the post-creation venture capital stage. This results in businesses being financially ill-equipped for the creation of new value chains, upscaling, demonstrations, testing and co-developing with end-users.

The European Investment Bank Group

EIB Group Product Offer – RDI and Growth

Knowledge transfer, Early-stage	Equity for Venture Capital, Mezzanine Funds	Debt
- Facility: Competitiveness and Innovation Programme (CIP), Ecotech, EIB Risk Capital Mandate - Purpose: IP financing, technology transfer, seed financing, investment readiness, early-stage VC - Target Group: VC Funds, Business Angels, Universities	- Competitiveness and Innovation Programme (CIP), EIB Risk Capital Mandate, Fund of funds mandates - Growth financing for SMEs, mid-caps - Formal VC Funds, Mezz funds	- RSFF, RSI (RSFF for SMEs; new product in development) EIB loans, CIP - RDI financing, growth financing - SMEs/MidCaps, Banks, PE Investors (sub-investment grade), Corporates, Public Sector entities - Loans (incl. Mezzanine), Funded Risk Sharing Facilities with Banks



Risk Sharing Finance Facility principles

European Investment Bank
EUROPEAN INVESTMENT FUND

RSFF
[up to EUR 10bn assuming leverage of 5.0x]

EU

Direct Lending

1 Corporate / Project Financing
- *Senior Loans (pari passu)*
- *Subordinated Debt*

Indirect Lending / Financing

2 Financial Intermediaries (extend lending capacity)
- *Risk Sharing*
- *Co-financing*

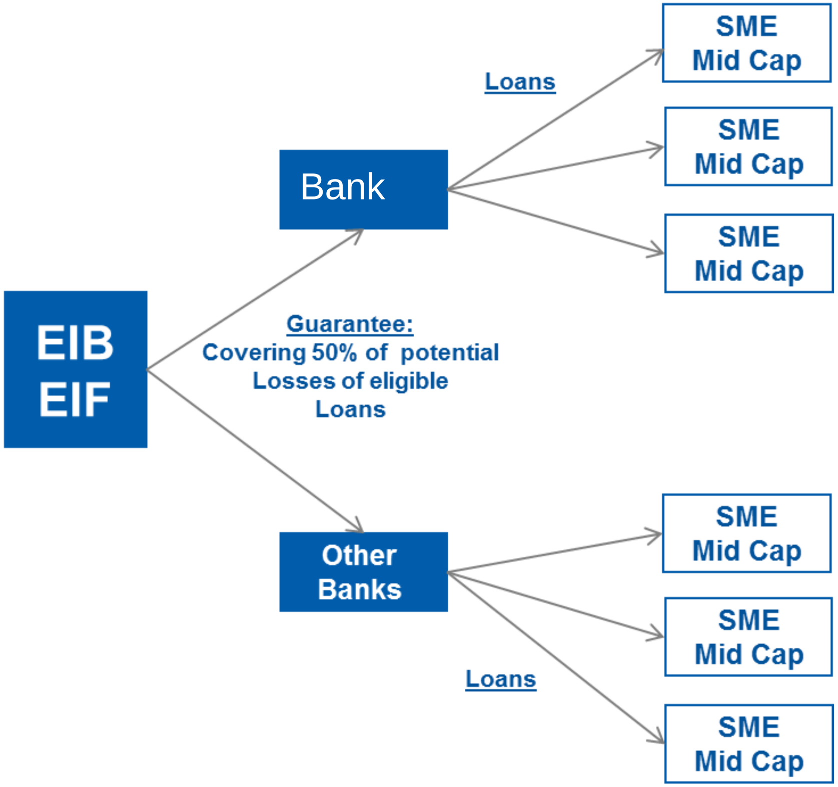
Aaa	Aa	A	(Baa3)	Ba	B

RSFF Value Added Proposition

Complementary stable funding source	Strong technology/industry expertise
Long Maturities of up to 10 years	No cross selling / Take and hold strategy
Large single loan sizes (< EUR 300m)	Signaling Effect: EIB as quality stamp

RSFF Indirect Financing: RSI pilot operation

Product Structure Chart



Product Rationale: Improve senior debt lending capacity in the field of RDI financing.

RSI/MCI Facilities under RSFF:

- Under the indirect financing approach, the EIB Group shares risk of up to 50% of loans from house-banks to innovative SMEs and small Mid Caps (up to 500 employees) under RSI. A new product (MCI; under development) could cover companies from 500 to 3,000 employees.
- Loan amounts can range from:
  RSI: EUR 25,000 to EUR 7.5m
  MCI: EUR 7.5m to EUR 50m
- Loan maturities range from 2 years to 7 years;
- The key operational handling of the product is designed to be straight forward to operate and manage (simplicity is key);
- The product provides capital relief for the financial intermediary.

The Cleantech Venture Capital market

- Cleantech EU ecosystem not completely mature: most of the cleantech VC launched 5-6 years ago

- Cleantech or ecoinnovation not a sector per se but an investment thematic covering various sectors

- State of play
  - Lack of expertise of generalist VC funds especially to address the early-stage market segment
  - Shift to later stages targeting more mature companies without significant technological risks
  - Emergence of specialized funds in niche market (e.g. Powerfund) and cooperation with corporates providing the expertise to evaluate the development and commercialization risks

- Since young market, limited visibility in terms of VC cleantech performance and hence limited appetite from investors for this market segment

- EIF track record: investment in 9 eco-innovation funds

Future developments

- Create the appropriate framework conditions
  - ❑ A workable definition of eco-innovation
  - ❑ A time-consistent regulatory policy
  - ❑ An appropriate mix of instruments: regulations, taxes, standards/labels, grants and FI
  - ❑ An action on the demand and supply-side

- Reinforce the expertise in the financial sector to assess eco-innovative projects

- Develop a portfolio of financial instruments for eco-innovation:
  - ❑ RSI and MCI through RSFF
  - ❑ Leveraging on structural funds, e.g. JEREMIE PACA energy efficiency
  - ❑ Deepening of the EU VC cleantech market
  - ❑ Corporate innovation platform with a compartment on eco-innovation/sustainability
  - ❑ Non-banking instruments

Backup slides

Transition to new technologies – potential policy responses

	Dos	Don'ts
Uncertainty / risks	Define clear & transparent long-term regulatory framework	Picking winners at the R&D stage (both technologies & companies)
	Partially compensate customers for technical & fuel cost risks	Providing 100% of external funding
	Compensate companies for R&D "spillovers"	
Investment costs	Emphasis on cost reduction & integration with other technologies; avoid duplication	Equity stakes
	Allow horizontal & vertical cooperation (competitors & upstream suppliers)	Concentrate support on one investment
	Support through grants & long-term financing to complement private investors	
Long time horizons	Improve transparency of price signals	Favour one energy vector
	Parallel focus on technologies, storage & infrastructure	
	Integration across the innovation process	

Blending instruments: the full picture

Total EU funds MFF 2007-13 for EIB/EIF instruments
EUR 5.75 bn

	EU2020 Flagships	EIB/EIF Financial Instruments	
Research, Development & Innovation	Innovation Union Digital Agenda Resource Eff. Europe Industrial Policy	**Risk Sharing Finance Facility – EUR 1.27bn** **Individual Senior Debt (EUR 1.0 bn)** Mid Caps / Large Caps / Universities **Risk Sharing Instrument (RSI) EUR 0.27 bn** Portfolio guarantees to support loans to innovative SMEs & small Mid Caps	
Growth, Jobs & Social Cohesion	Resource Eff. Europe Industrial Policy New skills & jobs	**Competitiveness & Innovation Program (CIP) - EUR 1.1bn** **SMEG** (portfolio guarantees) + **GIF** (equity investments) **PROGRESS Microfinance - EUR 0.1bn** Guarantees, loans, equity to microfinance institutions	**Structural Funds EUR 2.8bn** **JESSICA** (EUR 1.8 bn) **JEREMIE** (EUR 1.1 bn) **Others** (Greater Anatolia Guarantee Facility; Western Balkans Platform; etc.)
Infrastructure	Resource Eff. Europe Digital Agenda	**Infrastructure Risk Sharing - EUR 0.48bn** **LGTT (EUR 250M)** **PROJECT BONDs Pilot (EUR 230 M)**	

Joint Management by EIF/EIB | Mainly EIF Managed Instruments | Mainly EIB Managed Instruments