



Financial Instruments for RDI and Growth

**(specific focus on current FP7
and future COSME and Horizon 2020)**

Jean-David MALO

**European Commission - DG Research and Innovation
Head of Unit RTD C-03 – Financial Engineering**

Paris, 12 October 2012

Fuel Cells and Hydrogen JU – 5th Stakeholders' General Assembly

*Presentation prepared on the basis of contributions made by
DG ECFIN Unit L2 - Financing of competitiveness, innovation and employment policies
DG ENTR Unit E3 – Financing innovation & SMEs
DG RTD Unit C3 – Financial engineering*

Introduction

What? Why? When?

What are EU Financial Instruments?

Equity/risk capital: e.g. venture capital to SMEs with high growth potential or risk capital to infrastructure projects

Guarantees to financial intermediaries that provide lending to e.g. infrastructure projects, SMEs, persons at risk of social exclusion

Other risk-sharing arrangements with financial intermediaries in order to increase the leverage capacity of the EU funds

or a combination of the above with other forms of EU financial assistance

EU Financial Instruments: Why?

- ❑ An appropriate tool in times of budget constraints
- ❑ 3 types of benefits
 - ❑ **Leverage/Multiplier effects** – multiplication of scarce budgetary resources by attracting additional finance
 - ❑ **Policy impact** – financial intermediaries pursue EU policies
 - ❑ **Institutional know-how** – EU can use the resources and expertise of financial intermediaries
- ❑ A political priority (Europe 2020 strategy, Communication on a Budget for Europe 2020)
- ❑ Effective and efficient way to support Europe 2020 objectives of smart, sustainable and inclusive growth

EU Financial Instruments: When?

Guiding principles include:

1. Addressing **sub-optimal investment** situations
Funding gaps e.g. due to general economic uncertainty, high business/innovation risk, high transaction costs, asymmetric information
2. Ensuring **EU value added**
 - ☐ Effective targeting of policy goals
 - ☐ Catalytic effect on existing similar MS schemes or private investment, no crowding out
3. **Leverage effect**

Financial Instruments 2007-2013: SMEs & Innovation

☐ SME Guarantees (SMEG)

- ☐ 2007-2011: approx. EUR 300m of EU budget generated 9.4bn of lending
- ☐ 155.000 SMEs reached, volumes are increasing fast
- ☐ Target of 315.000 SMEs is attainable

☐ Equity: High Growth and Innovation (GIF)

- ☐ 2007-2011: so far, EUR 344m of EU resources generated EUR 1.9bn of total investment volume, amounts growing fast.
- ☐ 190 SMEs covered so far

☐ Risk-Sharing Finance Facility (RSFF):

- ☐ EUR 2bn of EU and EIB resources expected to generate over EUR 10bn of lending to RDI projects. By end 2011 approximately EUR 7.5bn of lending already signed and EUR 5bn disbursed to final beneficiaries. Dedicated RSI facility for SMEs and Small-Mid-caps launched in 2012 (efforts expected to be doubled in 2013 with counter-guarantees for promotional banks/guarantee societies).

☐ European Progress Microfinance Facility (EPMF, est. 2010)

- ☐ by 2020, the EU contribution of EUR 100m is expected to have generated EUR 500m of micro-loans.

RSFF and SET Plan

What is the RSFF?

- An innovative **loan finance instrument** co-developed by the EC/EIB and supported by FP7
- Operational since 2007 and available until the end of 2013
- Provides loan finance for **Research, Development, Demonstration and Innovation** in EU Member States and FP7 Associated Countries
- Can support **riskier but creditworthy RDI projects** through risk-sharing between the EU and the EIB
- Is **demand-driven**: projects supported on a “1st come, 1st served” basis (no grant procedures, no expert panels)

EU/EIB Risk-Sharing and mobilisation of RSFF Finance

FP7 Contribution:
up to € 1 billion



EIB Contribution:
up to € 1 billion

up to € 2 billion
for **Risk coverage** for potential losses
(non-repayment of RSFF loans by borrower/ beneficiary)

allows EIB Group to provide up to € 10 billion
of **RSFF loans and guarantees**

for Research, Development & Innovation investments

RSFF Eligible Costs

Fundamental research

EC window

Definition stage / feasibility studies

EC window

Industrial research

EC window

Pre-competitive development activity

EC window

Pilot and demonstration projects

EC window

Innovation

EIB window
partly EC window

RSFF results and portfolio

since Mid-2007

Volumes (end August 2012):

- **Approved** loans (by EIB): **EUR 10.55 billion**
- **Signed** loans (loan contract EIB – borrower): **EUR 8.04 billion**
- **82 signed projects** in **21 European countries** (19 MS & 2 AC)

Main sectors (end 2011):

- Engineering/ Industry 37%, Life Sciences/ Chemicals 29%,
Energy 16%, ICT 14%, Research Infrastructure 5%

RSFF signed loans for SET Plan technologies (Energy)

RSFF has, in particular, supported projects in the following sectors:

- **Concentrated Solar Thermal** power plants featuring innovative components
- **Offshore wind farms** with new components
- **Corporate RDI programmes**

Note: RSFF is technology-neutral

Project Name	First-of-its kind technology and/or components	Sum of Project Cost	Sum of Amount Signed EUR
ANDASOL SOLAR THERMAL POWER		296.2	60.0
SOLUCAR SOLAR THERMAL POWER		173.6	50.0
ANDASOL SOLAR THERMAL POWER II		298.0	60.0
ABENGOARDI LOAN		145.9	49.0
SOLNOVA 1&3 CONCENTRATED SOLAR POWER		542.9	110.0
THERMOSOLAR GEMASOLAR SPAIN		245.2	80.0
GAMESA WIND POWER RDI II		453.5	200.0
GLOBAL TECH I OFFSHORE WINDPARK		1,806.4	100.0
ACCIONARDI		378.3	185.0
INGETEAM GREEN ENERGY TECH RDI		113.9	45.0
BORKUM WEST II OFFSHORE WINDPARK		797.1	100.0
		5,251.0	1,039.0

RSFF in the context of the SET-Plan implementation

- RSFF loans can, in principal, be used to finance notably larger-scale **demonstration projects and first-time industrial application** of new technologies
- RSFF is **technology-neutral (market driven)** and can cover renewable energy projects
- RSFF can be **combined with other public and private sources of funding** including grants (EEPR, NER-300 Programme) as well as equity finance (for instance, through the “Marguerite” fund)

RSFF loans & SET-Plan: opportunities and challenges

Opportunities

- RSFF loan finance can be used to support investments in **some projects part of the SET Plan implementation**: EU takes risk (vis-à-vis EIB) for eligible projects
- EIB can provide **long-term finance** under RSFF both to companies and stand-alone projects (project finance); **relatively large amounts** (up to EUR 200 million per project)

Challenges

- Project promoters need to demonstrate that they could repay an RSFF loan (**viability of projects**), with interest (**no soft loan conditions**; risk is priced = risk premium)
- RSFF can cover **up to 50% of eligible RDI costs**; promoters need to find **other sources of finance** (own resources, equity, grants etc.)

RSFF loans & SET-Plan: opportunities and challenges

Challenges/ potential hurdles/ current observations

- Decision-making (EIB and EC) on a case-by-case basis, no obligation to finance
- Projects must have an **R&D component or demonstration character** to justify EU risk-taking (to cover technology/ application risks)
 - Projects without clear new technology elements (no demonstration character), likely to be regarded as "just innovation" (e.g., on-shore large-scale wind projects)
 - Projects with technology and application risks, likely to be regarded as eligible demonstration projects (e.g., off-shore wind power)

Future Financial Instruments for RDI (2014-2020)

Next MFF: Simplification and Transparency

1. Fewer financial instruments (from 13 to 6)
2. Larger financial instruments ensuring critical mass
3. Minimisation of overlap between instruments
4. Standardised contractual arrangements including management structures, reporting, fees...
5. More transparent to stakeholders
6. Budget: No contingent liabilities
7. Dedicated regulatory framework (Title VIII of the Financial Regulation)

Legal Architecture

Horizontal legal framework		Sector rules
Norm	Content	Basic act
FR Title VIII (EP/Council Regulation)	Definitions, management modes, principles and conditions, limitation of liability, reflows, control, reporting, etc.	<p>Contains a general authorisation the use of a financial instrument. May define type, duration, specific features or targets of the instrument envisaged.</p> <p>The basic act may identify a specific entity entrusted with the implementation of the instrument</p>
Rules of Application (delegated act)	The delegated act is expected to supplement the FR in the following areas: combination of support, rules for direct/ indirect management, rules for fiduciary accounts, ex ante evaluation, management fees, etc.	
Operational requirements (equity and debt platforms):	A standard set of rules, provisions and templates, including homogeneous detailed provisions on governance, monitoring, , financial parameters, delivery modes, rules for dedicated investment vehicles (DIV), etc.	
Agreements with entrusted entities	Contractual conditions under which the Commission entrusts the implementation of a financial instrument to a financial institution in line with the above rules	

Financial Instruments included in proposals for 2014-2020 MFF

(*) Current price

Centrally managed by COM

Research,
Development
Innovation

Horizon 2020

Equity and Risk Sharing Instruments

EUR 4bn ()*

Growth, Jobs
and Social
Cohesion

Competitiveness & SME (COSME)

Equity & guarantees
EUR 1.4bn ()*

Creative Europe

Guarantee Facility
EUR 210m

Social Change & Innovation

Micro-finance *EUR 192m*

Erasmus for all

Guarantee Facility
EUR 881m

Infrastructure

Connecting Europe Facility (CEF)

Risk sharing (e.g. project bonds) and equity instruments

Budget not yet decided

Shared Management

Instruments under Structural and Cohesion Funds

EU level

Off-the shelf instruments

Tailor made instruments

*Significantly higher amounts
than currently*

EU financial instruments

current and new

EQUITY INSTRUMENT FOR SMEs 2007-2013

High Growth and Innovative SME Facility (GIF) under the Competitiveness and Innovation Framework Programme (CIP)

- GIF 1 – invests in seed, start-up and early-stage SMEs
- GIF 2 – invests in expansion-stage SMEs

EQUITY INSTRUMENT FOR SMEs 2014-2020

**EU Equity
Financial
Instrument for
EU enterprises'
growth and
RDI**

Equity Instruments for Research and Innovation

- Mainly early stage

Horizon
2020

Equity Facility for Growth

- Mainly expansion stage

COSME

EU financial instruments

current and new

DEBT INSTRUMENT FOR SMEs 2007-2013

- ☐ **SME Guarantee Facility (SMEG)** under the Competitiveness and Innovation Framework Programme (CIP)
- ☐ **Risk Sharing Instrument (RSI):** A dedicated compartment for SMEs under the Risk Sharing Finance Facility, created in 2011 and expanded in 2012/2013

DEBT INSTRUMENT FOR SMEs 2014-2020

Debt Instrument for EU Enterprises' Growth and RDI	Loan Guarantee Facility <ul style="list-style-type: none"> <input type="checkbox"/> Guarantees and securitisation on loans for all types of SMEs 	COSME
	RSI-II Facility <ul style="list-style-type: none"> <input type="checkbox"/> Guarantees on loans for R&I-intensive SMEs 	Horizon 2020
	Cultural and Creative Sectors Facility (new) <ul style="list-style-type: none"> <input type="checkbox"/> Guarantees for loans to creative and cultural entities 	Creative Europe

Debt and equity instrument for SMEs' growth and R&I

□ A support to Phase III of SME Instrument

- Via existing EU financial instruments
- Via existing national / regional instruments and investors

EU financial instruments current and new

DEBT INSTRUMENT FOR LARGE R&D PROJECTS 2007-2013

Risk Sharing Finance Facility (RSFF)

- ☐ under FP7
- ☐ provides loans and guarantees to R&D projects

DEBT INSTRUMENT FOR LARGE R&I PROJECTS 2014-2020

Loan & Guarantee Service for Research and Innovation

- ☐ Loans and guarantees to R&I (non-SMEs) activities of mid-caps and large firms, universities, research institutes, research infrastructures, etc.

Horizon 2020

Budget proposed

□ COSME – “Actions to improve SME access to finance”

- € 1 436 million in current prices
 - Equity Facility for Growth: € 690 million
 - Loan Guarantee Facility: € 746 million
- } indicative

□ H2020 (Industrial Leadership) – “Access to risk finance”

- € 3 768 million in current prices (net of adm. Costs) for financial facilities supporting all sizes of companies and types of entity (demand driven) + *additional budget possible for policy targets*
- At least 1/3 (ca. € 1.25 bn) likely to be absorbed by SMEs and small midcaps (no breakdown between equity and debt)

EU financial instruments

current and new

COHESION POLICY 2007-2013

- ❑ Currently approx. 5% of ERDF delivered through financial instruments

COHESION POLICY 2014-2020

- ❑ Implementation options:
 - ❑ Joint instruments: CSF funds may contribute to support financial instruments set up at Union level managed directly/indirectly by COM in line with FR. OP contribution to be ring-fenced for investments in regions and actions covered by OP
 - ❑ Off-the shelf instruments: pre-defined, ready to use instruments allowing swift roll out
 - ❑ Tailored instruments (existing or newly created)
- ❑ Clearer rules on the combination of financial instruments and other forms of support, e.g. grants.
- ❑ Cohesion Fund will for the first time be open to financial instruments
- ❑ Volume of ERDF resources that could potentially be delivered through financial instruments could increase up to three times

Implementation principles

- ❑ Commission delegates to Financial Intermediaries (*e.g. European Investment Bank Group (EIB, EIF) and/or other financial institutions*) (*direct and/or cascade*) the implementation of the Financial Instruments
- ❑ To be implemented in full compliance with the existing legal frameworks (FR, RAPs, Operational requirements), except decided otherwise by basic acts adopted by EP and Council
- ❑ Common governance (Financial intermediaries / EU)

Already preparing the future ...

TFA to be launched soon in RSFF !

Upstream Project-related Advisory

- Experience shows that high value RDI projects and programmes need to be well structured and prepared if they are to be able to utilise the available public and private sector financing mechanisms.
- A dedicated RDI Advisory Team is expected to increase the efficiency and effectiveness of the development of a RDI pipeline including projects with some level of public support from joint instruments as well as national sources so that such projects can then be handed over to the lenders for appraisal and financing.
- Priority sectors will be those that support Horizon 2020 objectives (SET; KET; LS; Clean Vehicles; ICT; etc...)
 - i. Upstream advisory work will be done by combination of in-house staff and external consultants and focus on creating the necessary conditions and foundation for projects to be financeable under RSFF and/or other funding mechanisms (e.g. PPP, ETPs + JTIs).
 - ii. The current pipeline of projects on which Promoters and RTD are seeking RDI Advisory support from EIB include TBVI, ESS, **JTI fuel cell and hydrogen infrastructure**. (see Annex 2)
 - iii. Requests for other upstream project -related advice are expected to come from ESFRI and Innovative Medicine Initiative.
- Clients for the upstream project-related advisory are expected to come from those public and private initiatives involving pilot projects as well as programmes such as those listed under priority objectives above. It is not intended that RDI Advisory will provide advice to the private sector clients for stand alone projects for which advice is available from alternative market sources.



**Upstream Project-related Advisory:
Accelerating Access to RSFF Financing and Implementation through Provision
of Sound Technical and Financial Advice**

1) **TBVI- Tuberculosis Vaccine Initiative**
▪ (...)

2) **ESS – European Spallation Source**
▪ (...)

3) **JTI Fuel Cell and Hydrogen Infrastructure Deployment; The JTI**

- Fuel Cells and Hydrogen (FCH) technologies are among possible strategic innovations that seem necessary in order to reach the EU's ambition of a low carbon economy. However, the upfront investment costs to deploy the necessary infrastructure are high and so far the overall risk profile cannot be financed from conventional sources. RDI Advisory has been requested by RTD to advise the technical and financial issues and assess if there are innovative financing mechanisms incorporating public support that could make some of these projects financeable under RSFF in conjunction with other public and private sector funding.
- RTD has requested EIB to help the JTI procure and manage external consultants to;
 1. Advise on the possible financing options and requirements suitable for building pilot hydrogen refuelling infrastructure in Europe
 2. Advise on the appropriate financing structures and joint instruments that would fund the deployment of Fuel Cell Electrical Vehicles and associated refuelling infrastructure in Europe by 2015

**Thank you for
your attention !**



More information

☐ Existing financial instruments (2007-2013)

- o SMEG and GIF
http://ec.europa.eu/enterprise/policies/finance/cip-financial-instruments/index_en.htm
- o RSFF
<http://www.eib.org/products/loans/special/rsff/index.htm>
RSI: http://www.eif.org/what_we_do/guarantees/RSI/index.htm

☐ Proposed (2014-2020)

- o COSME <http://ec.europa.eu/cip/cosme/>
- o Horizon 2020
http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=home

☐ General information on innovative financial instruments :

http://ec.europa.eu/economy_finance/financial_operations/investment/innovative_financial_instruments/index_en.htm