The challenge of substitution

Financial aid for research, development and innovation



Scoping the scene

- Substitution leads to challenges in terms of product performance, processability.
- In many cases, a Research and Development stage is required to develop a new product / process or service:
 - Adapting formulations with substitutes (controlling adverse effects, new reactions between components);
 - Defining new productions routes (activation of materials through primars, radically new production methods physical reaction instead of chemical reaction, etc)
- In some cases, efforts are required to implement innovative solutions.

What are the funding mechanisms available?



Available aid schemes for substitution

(Ministry of the Economy)

Type of aid schemes

R&D

- Industrial research
- Experimental development
- Can be mixed
- Technical challenge needs to be addressed (technological barriers)

Feasibility study

- Technical study
- Project assessment before the launch of an R&D project

Process and organisation innovation

Implementation of an innovative solution

Innovation aid

- Innovation aid for SMEs
 - Secondment of highly qualified personnel
 - Innovation advisory and support services (certification, labelling, data banks, etc)

SMEs and large enterprises

SMEs and large enterprises

Mostly SMEs

Only SMEs



Funding rates

Aid intensities as a percentage of eligible costs

	Maximum aid intensitie		LE	ME	SE
External costs	Innovation aid for SMEs (art. 7)		0%	≤ 50%	≤ 50%
Internal and external costs	Process and organisational innovation (art. 9)		≤ 15% (effective collaboration required)	≤ 50%	≤ 50%
	Feasibility Studies (art. 6)		≤ 50%	≤ 60%	≤ 70%
	Experimental development (art.3)	Collaboration bonus: + max 15% in case of an effective collaboration with a maximum of 80%	≤ 25%	≤ 35%	≤ 45%
	Industrial research (art.3)		≤ 50%	≤ 60%	≤ 70%



Decision Process

Submission of the application at the Ministry of Economy

– Research and Innovation
Department

Opinion of the State aid commission (in most cases)

Funding decision

Payment of the grant based on real costs associated to the RDI activity

Luxinnovation support for the application

Individual instruction for each R&D project

Funding agreement signed

State aid applications must be submitted <u>before initiating</u> the implementation of the project!



Principles of the financial aids

- Subsidies to encourage companies to carry out R&D and innovation activities
- Individual assessment of each single project
- The innovation fund budget is adapted to the needs of the projects (instead of distributing a budget to the best projects)
- Luxinnovation provides support services to help companies meeting the admission criteria

Law of 17 May 2017 for the promotion of research, development and innovation



Main Criteria to benefit from a financial aid (1)

Co-financing Capacity

Equity/free cash flow

Capital Increase

Bank Loans

Economic impact

Substance

Exploitation of assets resulting from the project activities

Incentive Effect

Application before start of works

∆ project

Innovation

Competitive advantage on the market

New or improved product, process, service

New marketing method/ New organizational method Scheme specific criteria

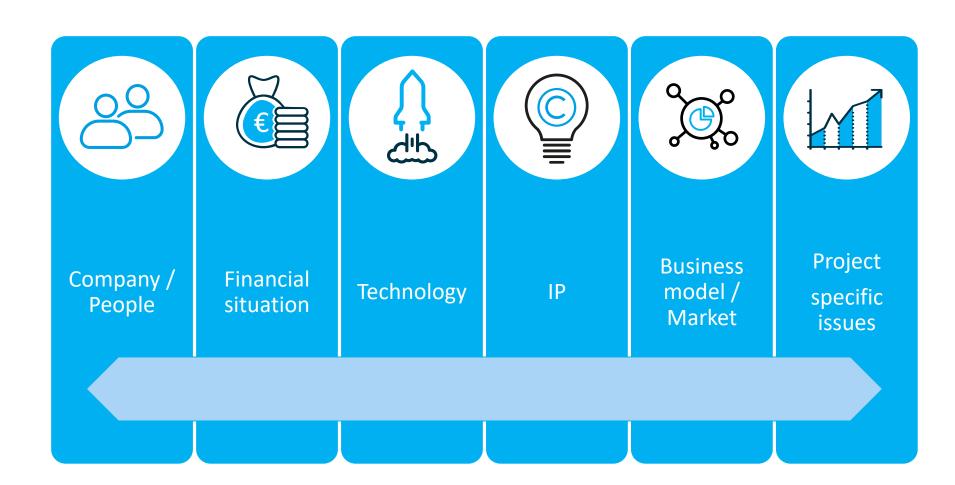
Technological challenges (R&D)

Risk of failure (IOS)

Scoping of R&D activities (feasibility)



Main Criteria to benefit from a financial aid (2)





Other route: Public private R&D collaborations

Strong governmental focus on the number and quality of research and development collaborations ("Public private Partnerships").

National Research Fund (FNR) and Ministry of the Economy offer complementary instruments to support different type of R&D collaborations.







Public private R&D collaborations

Support schemes

Cooperation between a company and a public research organization						
	R&D project	Industrial Fellowship	BRIDGES			
beneficiary	company	PhD Student/Post Doc contracted by Public research organization: - national; - foreign (on condition of cooperating with a Luxembourg based company)	Public research organisation in Luxembourg			
		Company authorised by the Ministry of Economy	Non profit organizations and R&D performing foundations, authorized by the Ministry of Research and Higher Education			
subsidy	15% increase in the aid intensity (R&D project)	85% of PhD Student/ Post Doc costs	Maximum grant 500k€			
deadlines	continuously open	20th April and 12 th October				



Luxinnovation
Support Services



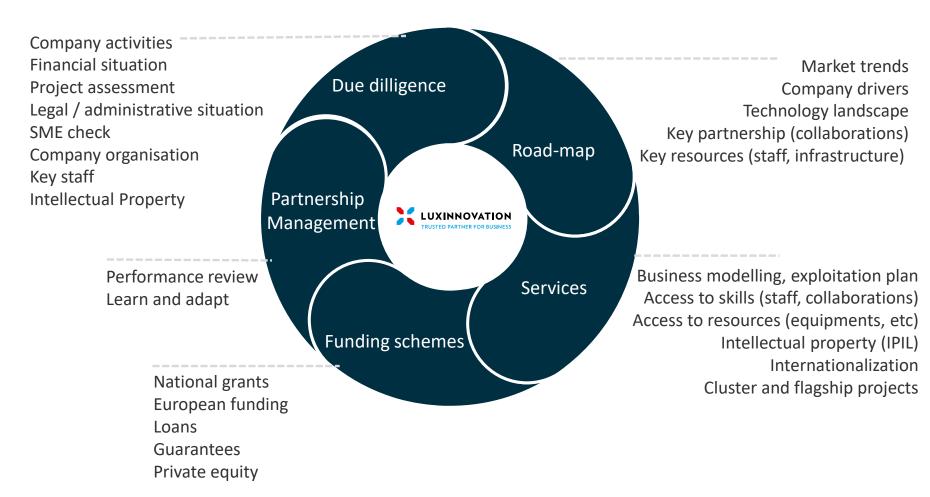


Luxinnovation support services...

- Initial evaluation of the company and of the project
- Accompanying project measures in terms of: intellectual property, business model, project scope and structure, research collaborations, national initiatives, infrastructures, exploitation of the project results and project financing (subsidies, loans, etc)
- Support in the preparation of state aid applications to the Ministry of Economy: identification of relevant aid schemes, verification of eligible costs, verification of the company's liquidity, etc...



... towards a win-win partnership





Get access to the guidelines

- French: lignes directrices
- English: guidelines
- German: Leitlinien

(to access the downloading website of the guidelines, click on the desired language)

<u>Site: www.innovation.public.lu (Heading "Finance your R&D project")</u>



Thank you!

Pascal, Fabing
Head of National Funding

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