

Horisontti 2020

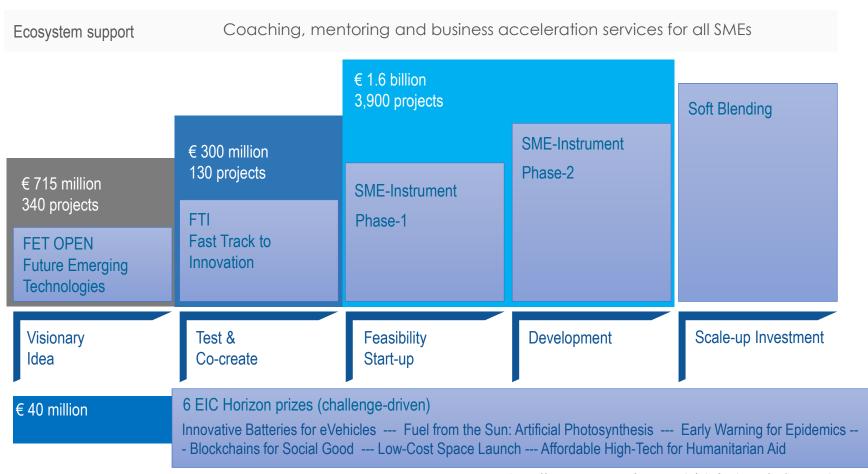
EU Funding and financing for Business Finland customers

Horizon 2020 – Structure and themes

| I Excellent Science | II Industrial Leadersh | hip III Societal Challenges | | |
|---|--|---|--|--|
| European Research Council (ERC) Future and Emerging Technologies (FET). a) Open b) Proactive c) Flagships 3. Marie Skłodowska-Curie (MSCA) – actions: training, career development and mobility for researchers 4. Research Infrastructures | 1. Leadership in Enabling and Industrial Technologies 1.1. ICT 1.2. nanotechnology 1.3. materials 1.4. biotechnology 1.5. manufacturing and processing 1.6. space 2. Risk finance: loans & equity funding 3. Innovation in SMEs 20% of the budget or pillars II + III SME Instrument(1/3) Collaborative projects (2/3) | Health, demographic change and wellbeing Food security, sustainable agriculture and forestry, marine, maritime and inland water research and bioeconomy Secure, clean and efficient energy Smart, green and integrated transport Climate action, resource efficiency and raw materials Europe in a changing world: inclusive, innovative and reflective societies Secure societies – protecting freedom and security of Europe and its citizens | | |
| Science wi | th and for society, Spreading excellence a | and widening participation | | |
| Joint Research center JRC | | European Institution of Innovation and Technology EIT | | |
| Nuclear research EURATOM | | | | |



Comprehensive Scheme



http://ec.europa.eu/research/eic/index.cfm?pg=prizes



SME Instrument - "Champions League"

Are you an innovative, high flying SME with European and global ambitions?

Looking for substantial funding to develop and scale-up your idea?

For-profit SMEs, including also young companies and start-ups, from any sector, no pre-defined themes, funding rate 70 % of eligible costs

Phase 1 (50 t€): Feasibility study, risk assessment, partner search, IP regime etc. -> outcome

International business plan & Ph2 proposal

Phase 2 (0,5-2,5 m€):

Innovation actions; demonstrations, trials, scaling up, market replication, R&D etc.

-> market readiness

Phase 3:

Coaching (3 pv + 12 pv) and mentoring

Business Acceleration services; networking/matchmaking, information, training, Overseas Trade programme

Promote instrument as quality label for successful projects

SME window in the EU financial facilities (debt facility and equity facility)

One proposal/project at a time

Innovations close to market

Cut-off 4 x /year Ph 1 & Ph 2



tutkimus- ja innovaatio-ohjelmat

SME Instrument cut-off dates 2018

| Phase 1 | Phase 2 |
|-------------------|-----------------|
| 08 February 2018 | 10 January 2018 |
| 03 May 2018 | 14 March 2018 |
| 05 September 2018 | 23 May 2018 |
| 07 November 2018 | 10 October 2018 |

Information about the outcome of the evaluation:

- Ph1 max 2 months after the corresponding cut-off date
- Ph2 max 4 months

Indicative date for the signing of grant agreements:

- 3 months from the final date for submission in phase 1 and
- 6 months from the final date for submission in phase 2.



Fast Track to Innovation (FTI)

FTI: emphasis on science-to-technology breakthrough and potential for market-creating innovation

- offers support for industry-driven close-to-market innovation actions; open for consortia with 3-5 legal entities from at least 3 different EU or H2020 associated countries
- EU funding up tp 3 m€ (funding rate 70 % of eligible costs)

Impact

- ✓ Solutions that can create new markets or disrupt existing ones are key targets
- ✓ Boosting (rapid) scale-up and competitiveness of European businesses

Excellence

- ✓ Bring important progress to or revolutionise an industrial sector, business practice or societal issue
- ✓ The degree of RISK

Three cut-off dates in 2018: 21 February 2018, 31 May 2018 and 23 October 2018

https://ec.europa.eu/easme/en/eic-fast-track-innovation-fti

FTI proposal template:

http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/pt/2018-2020/h2020-call-pt-fti-2018-20_en.pdf

Support services extended

All EIC funded SMEs eligible for new, extended coaching, mentoring and business acceleration services!



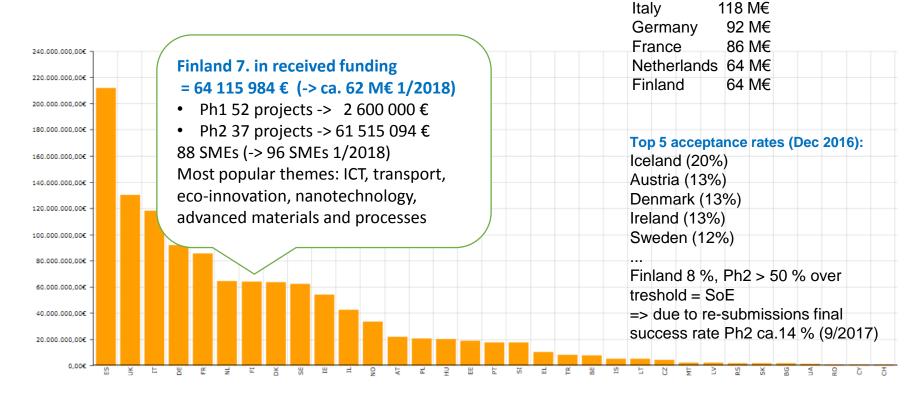
H2020 SME-instrument funding

H2020 SME Instrument data hub 23.11.2017

Phase 1: 2258 projects (2423 SMEs)

Phase 2: 658 projects (800 SMEs)

Total number of participating SMEs: 2961



Top performers in received funding:

212 M€

130 M€

Spain

UK

SMEI Phase 1 and Phase 2 funded projects (FI)

PHASE 1

ADAMATIC OY, ANGULAR VELOCITY OY, AURELIA TURBINES OY, BLACK DONUTS ENGINEERING OY, BRIGHTERWAVE OY, BRIGHTPLUS OY, COMMUNITY CONSTRUCTOR OY, CONEXBIRD OY, CONVION OY, COREORIENT OY, COSMETHICS OY, D&A EXPERIENCES OY, DB PRO OY, DIKTAMEN OY, DUST SHELTER FINLAND OY, EKO HARDEN TECHNOLOGIES OY, ELCOGEN OY, FAST BEAM OY, FILTRA GROUP OY, FINBIOSOFT OY, FLY NANO OY, GASEK OY, HITSEED OY, INRAY OY, JMV URAKOINTI OY, LABMASTER OY, LADIMO OY, LINKKER OY, LIPIDOMICS CONSULTING OY, LUKOTON EXPERIENCE OY, LYFTA OY, MEGA ELEKTRONIIKKA OY, MHG SYSTEMS OY, MONIDOR OY, NANOL TECHNOLOGIES OY, NATURVENTION OY, NAVIGIL OY, NETOREK OY, NEWICON OY, NORDIC 24/7 SERVICES OY, NUKUTE OY, NURMI CYLINDERS OY, OCEANVOLT OY, PHARMIA OY, PHYSILECT OY, PIXPOLAR OY, POLARSOL OY, PROMETEC TOOLS OY, QUANTUM ELECTRIC OY, REAGENA OY, RETAIL LOGISTICS EXCELLENCE - RELEX OY, SAMPO SOFTWARE OY, SANSOX OY, SCAFFDEX OY, SENSINITE OY, SERVICE-FLOW OY, SIGNMARK PRODUCTIONS OY, SILVERGREEN OY LTD, SOFI FILTRATION OY, SOLAR WATER SOLUTIONS OY, SUUNNITTELUTOIMISTO PERUSTE OY, TAMTURBO OY, TIMEGATE INSTRUMENTS

PHASE 2

ALLECO OY, ALPHASENSE OY, BIONOVA LTD, BRIGHTERWAVE OY, CLOUDSTREET OY, CODERSHIP OY, DUCTOR OY, ELASTOPOLI OY, ENEVO OY, FILTRA GROUP OY, FP-PIGMENTS OY, GASERA OY, GOODMILL SYSTEMS OY, HAPPYORNOT OY, HYDROLINE OY, ICEYE OY, INDOORATLAS OY, INRAY OY, KIOSKED OY, METGEN OY, MINIMA PROCESSOR OY, NETCYCLER OY, NORDIC 24/7 SERVICES OY, NORSEPOWER OY, NOVARBO OY, NUKUTE OY, OPTOMED OY, PAPTIC OY, PAUMAX OY, POLARSOL OY, REMOTEA OY, RETAIL LOGISTICS EXCELLENCE - RELEX OY, SPECTRAL ENGINES OY, SUPPONOR OY, TACTOTEK OY, UNIQ BIORESEARCH OY, WELLO OY, ZENROBOTICS OY

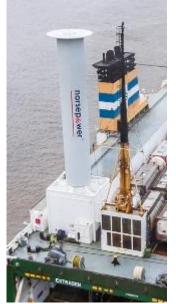


Tactotek, Injection-moulded structural electronics:

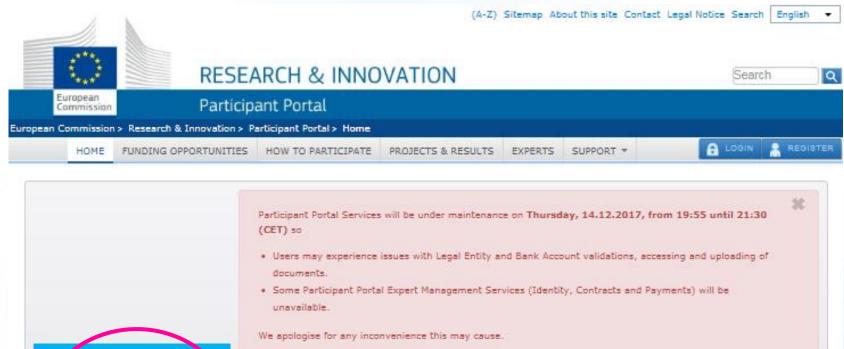
https://www.horisontti2020.fi/ajankohtaista/hankeesimerkkeja/caset/tactotek-eu-rahoitus-edisti-merkittavan-innovaationtuomisen-autoteollisuuden-tarpeisiin/

Norsepower, Fuel saving rotor sail solution: https://www.horisontti2020.fi/ajankohtaista/hanke-

<u>esimerkkeja/caset/norsepower-rakentaa-miljardien-markkinoita-</u> h2020-hankkeessaan/



http://ec.europa.eu/research/participants/portal





Horizon 2020 Funding Starting from 1/1/2014

On this site you can find and secure funding for projects under the following EU programmes:

- 2014-2020 Horizon 2020 research and innovation framework programme
- 2007-2013 7th research framework programme (FP7) and Competitiveness & Innovation Programme (CIP)
- 3rd Health Programme, Asylum, Migration and Integration Fund, Consumer Programme, COSME, European Statistics
 Programme, Hercule III Programme, Internal Security Fund Borders, Internal Security Fund Police, Justice Programme,
 Pilot Projects and Preparatory Actions, Promotion of Agricultural Products Programme, Research Fund for Coal & Steel,
 Rights, Equality and Citizenship Programme and Union Civil Protection Mechanism



Horizon 2020 Access to Risk Finance - Basics 1) What support will be on offer?

- Risk-sharing in the form of loans and guarantees
- Risk finance in the form of equity
- Accompanying measures

2)For who or what?

- RDI-driven/ innovative SMEs & small midcaps
- Ambitious RDI projects carried out by a variety of recipients (companies, standalone projects, SPVs, Universities, Research Centres etc.)

3)To serve which purpose?

- Stimulate more investment in research and innovation, notably by the private sector
- No market distortion: intervention only to address financing gaps in the R&D&I delivery chain (notably due to high risk), and as such help translate R&D results to the market (innovation)

InnovFin – EU Finance for Innovators

- "InnovFin EU Finance for Innovators" is a joint initiative launched by the European Investment Bank Group (EIB and EIF) in cooperation with the European Commission under Horizon 2020.
- InnovFin aims to facilitate and accelerate access to finance for innovative businesses and other innovative entities in Europe.
- One of the key factors constraining the implementation of R&I activities is the lack of available financing at
 acceptable terms to innovative businesses since these types of companies or projects deal with complex
 products and technologies, unproven markets and intangible assets.
- In order to overcome these difficulties, the EU and the EIB Group have joined forces to provide finance for research and innovation to businesses and other entities that may otherwise struggle to access financing.
- The European Investment Bank (EIB) provides loans to medium to larger companies, or guarantees to banks lending to them. It also provides a range of technical assistance and advisory services, in order to help project promoters to make research, development and innovation bankable. In addition, two thematic finance products were launched in 2015, for the support of combating infectious diseases and high-risk energy demonstration projects.
- The European Investment Fund (EIF) provides guarantees to banks lending to small and medium-sized firms and invests in venture capital funds providing start-ups and fast-growing firms with equity. List of intermediaries: www.access2finance.eu*)
- EIB and EIF play an important role in implementing a variety of financial facilities in cooperation with several EU programmes/funds such as COSME, Life+, Structural funds, EFS etc. *) see intermediary organisation list





| Early-Stage Enterprises | SMEs |
|---|---|
| Inno√Fin Technology Transfer | InnovFin SME Guarantee |
| InnovFin Business Angels | |
| Inno√Fin Venture Capital | |
| Inno√Fin Fund-of-Funds | |
| Early-Stage Enterprises, SMEs and Small Midcaps < 500 Employees | SMEs and Small Midcaps < 500 Employees |
| Intermediated Equity Financing | Intermediated Debt Financing |

| Corporate | Science | Thematic Finance |
|--|---|---|
| InnoVFin Emerging Innovators | Inno/Fin Science | Inno√Fin Energy Demo Projects |
| Inno√Fin MidCap Guarantee | | Inno√Fin Infectious Diseases |
| InnovFin Corporate Research Equity | | InnovFin Thematic Investment Platforms |
| | | |
| SMEs, Midcaps, Large Caps, SPVs | Research Institutes, Universities, Research Organisations | SMEs, Midcaps, possibly Large Caps, SPVs |
| Direct and /or Intermediated Financing (Including equity type) | Direct Financing (including equity type) | Direct and/or intermediated Financing (including equity type) |

Direct products





Indirect products Direct or Indirect products

Note: InnovFin Large Projects succeeded by InnovFin Emerging Innovators InnovFin MidCap Growth Finance is deployed under the European Fund for Strategic Investments (EFSI) since November 2016





How does the product work?



- Loan amount: min EUR 25k max EUR 7.5 m (only Senior Debt
- Loan maturity: min 1 year max 10 years
- Enabling over EUR 10.8bn of loans/ leases to innovative SMEs and Small Mid-Caps.
- Manufacturing, Retail trade, Wholesale trade, ICT Architectural and engineering activities





Two Products for Innovative Mid-Caps

1. <u>Indirect</u> Financing (Risk Sharing) for Senior Loans: <u>Mid-Cap</u> <u>Guarantee</u>



2. <u>Direct</u> Growth Financing (Mezzanine): <u>Mid-Cap Growth</u>



Growth Finance / Mezzanine EUR 25m Innovative Mid-Caps 3,000 Employees



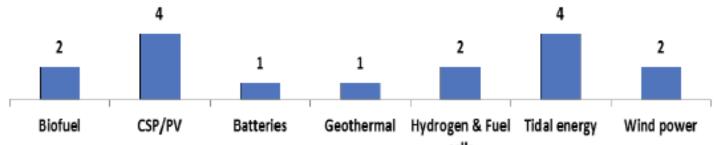




Which projects can be supported?

Sector breakdown - Projects still considered

InnovFin Energy Demonstration Projects provides loans, guarantees or equity-type financing typically between EUR 7.5 million and EUR 75 million to innovative demonstration projects in the fields of energy system transformation, including but not limited to renewable energy technologies, smart energy systems, energy storage, carbon capture and storage or carbon capture and use, helping them to bridge the gap from demonstration to commercialisation. The product is deployed directly by the EIB.



- Pre-commercial stage; technology needs to be scalable
- Loan: EUR 7.5m EUR 75m; EUR and local currency; maturity of max 15 years; EIB finances up to 50% of project costs.
- Comprehensive due diligence including project due diligence (technical, financial, economic)
- EIB standard documentation



Wave Energy Device

Project characteristics

- First-of-a-kind 350 kW wave energy demonstration unit
- Finnish company AW-Energy
- Installation near Peniche (Portugal)

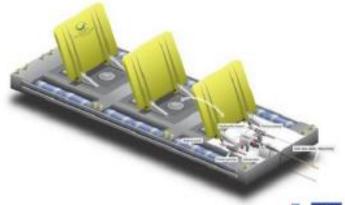
Finance

- EU loan: €10 million provided by InnovFin EDP
- Total project cost: €19 million

Technological development

- 2003 concept and first tests
- 2007/2008 prototypes
- 2009-2013 FP7 project "SURGE"
- 2012 Pilots deployed













Which projects can be supported?

Infectious diseases Innovative Medical and diagnostic Manufacturing Vaccines, drugs devices plants

- Projects which have passed pre-clinical stage and for which clinical validation is needed for further development
- Loan: EUR 7.5m EUR 75m; EUR and local currency; maturity of max 7 years; EIB finances up to 50% of project costs.
- Broad range of products from standard debt instruments (i.e. senior, subordinated, and mezzanine) to risk sharing instruments (RSL) with forgiveness options
- Comprehensive due diligence including project due diligence Project costs may include clinical trial costs, set-up of

(technical, financial, economic) commercialisation such as market access, development of prototypes or industrial roll-out of novel equipment, pre-clinical R&D costs and working capital requirement. EIB standard documentation

The product is being made available directly through EIB

Finnish InnovFin Midcap Growth Finance*) cases in 2014-2017

- Enevo (EUR 15m) investment in a revolutionary sensor technology and cloud based operations management platform for the waste and recycling industry
- Frosmo (EUR 8,5m) three-year investment programme for the internationalisation and product development of its B2C e-commerce optimisation solution
- Canatu (EUR 12m) developing revolutionary materials for foldable displays
- AW Energy (EUR 10m) the first ever company to benefit from the InnovFin"Energy Demo Projects" instrument. Supporting commercialisation of "WaveRoller" technology generating electricity out of the motion of ocean waves
- Mobidiag (EUR 15m) funding through the "Infectious Diseases Finance Facility" for scalingup the "Novodiag" diagnostics platform; an on-demand automated solution for small labs or decentralized units
- Valmet Automotive (EUR 20m) scaling up research, development and innovation (RDI)
- **Kiosked (EUR 15 m)** development of new online and mobile advertising platforms and building on company expansion over the next years
- Newicon (EUR 8 m) development and production of total pharmacy automation solutions
- Rovio (EUR 25 m) to enhance its games development

^{*)} The product is no longer available for new operations under InnovFin. The financing options it provides are still available through the <u>updated InnovFin product offering</u> or the European Fund for Strategic Investment (EFSI).

Interested in SMEs possibilities in Horizon2020 or H2020 supported access to risk finance?

https://www.horisontti2020.fi/

https://ec.europa.eu/research/eic/index.cfm

https://ec.europa.eu/easme/en/sme-instrument

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