



SolarPower  
Europe

# Compass document for PV manufacturing

Version April 2022

# EU funding

**Horizon Europe – Climate, Energy and Mobility pillar** TRL 1 to 8

**European Innovation Council**

**Pathfinder** TRL 1 to 4

**Transition** TRL 5 to 6

**Accelerator** TRL 7 to 8

**ESI Business Investment Platform** TRL 8 to 9

**Innovation Fund** TRL 6 to 9

**European Investment Bank**





# Horizon Europe: Climate, Energy and Mobility (TRL 2 to 8)

- **Description:** Horizon Europe is the umbrella term for a €95 bn funding programme (2021-2027) aimed at supporting research and innovation. It is run by DG RTD. The €15 bn **Climate, Energy and Mobility** fund is part of Pillar II of Horizon and encourages cross-disciplinary and cross-border *research* collaboration.
- **Scope and eligibility:** research projects with TRL 2 to 8. Less than 15% of applications are selected for funding.
- **Selection procedure:** open calls for proposals, selected on excellence, impact, quality/efficiency of implementation.
- **Type of support:** grant ranging from €2 to €15 million, access to international network and recognition to attract further investment.

**HORIZON EUROPE BUDGET**  
Horizon Europe programme structure

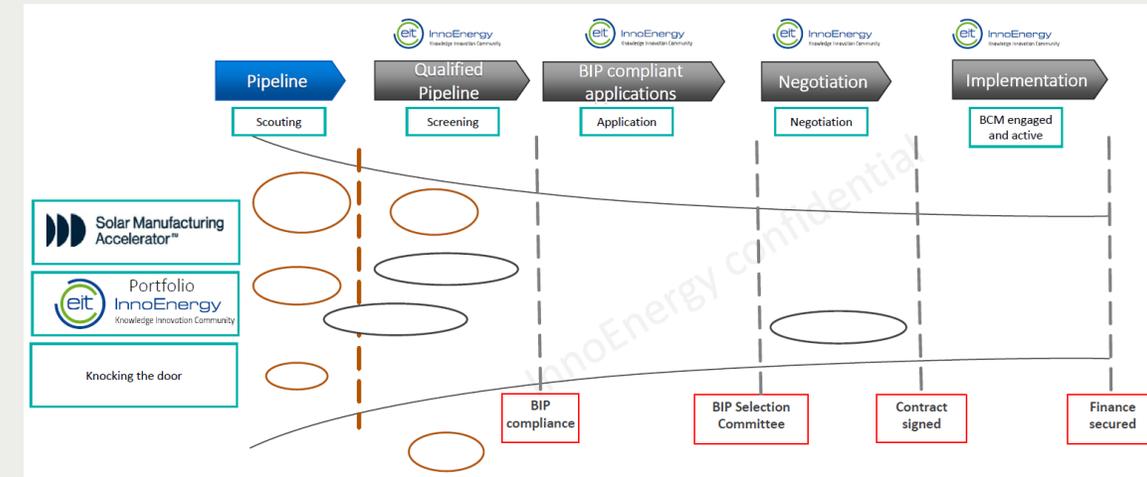
	Total in € million
<b>EXCELLENT SCIENCE</b> of which	25 011
The European Research Council (ERC)	16 004
Marie Skłodowska-Curie Actions (MSCA)	6 602
Research infrastructures	2 406
<b>GLOBAL CHALLENGES AND EUROPEAN INDUSTRIAL COMPETITIVENESS</b> of which	53 516
Health	8 246
Culture, creativity and inclusive society	2 280
Civil Security for Society	1 596
Digital, Industry and Space	15 349
Climate, Energy and Mobility	15 123
Food, Bioeconomy, Natural Resources, Agriculture and Environment	8 952
Non-nuclear direct actions of the Joint Research Centre (JRC)	1 970
<b>INNOVATIVE EUROPE</b> of which	13 597
European Innovation Council (EIC)	10 105
European innovation ecosystems	527
European Institute of Innovation and Technology (EIT)	2 965
<b>WIDENING PARTICIPATION &amp; STRENGTHENING THE EUROPEAN RESEARCH AREA</b> of which	3 393
Widening participation and spreading excellence	2 955
Reforming and enhancing the European R&I System	438
<b>TOTAL HORIZON EUROPE</b>	<b>95 517</b>

## How to apply?

- Funding calls are published regularly under [the Horizon Europe portal](#)
- Deadlines vary by specific call. For details, [see the work programme for Climate, Energy and Mobility](#)

# European Solar Initiative Business Investment Platform (TRL 8 to 9)

- **Description:** A unique platform that accompanies the development of comprehensive and competitive solar PV manufacturing projects in Europe and bridges the gap between project developers and investors. By applying to join the platform, project developers will be accompanied in the maturation of their project and in reaching out to financiers. Designed with public and private financing institutions and core industrial players, the platform draws on the successes the European Battery Alliance investment platform launched by EIT Innoenergy in 2019 and on the experience of the Solar Manufacturing Accelerator initiative.



- **Scope and eligibility:** All projects concerning the redevelopment of solar PV manufacturing activities in Europe
- **Selection procedure:** A pre-selection on the suitability of the project to the BIP is operated by the coordinator of the BIP, EIT InnoEnergy. The final selection is operated by the BIP Assessment committee including experts from the financing world, the industrial world and the solar technology world.
- **Type of support:** BIP label supporting access to finance, networking opportunities.

## How to apply?

- Send your application through the [ESI Business Investment Platform Portal](#)
- Get in touch with SolarPower Europe to signal your interest.

# European Innovation Council (EIC)



- **Description:** With a budget of €10.1 billion, the EIC supports game-changing innovations throughout the lifecycle from early-stage research, to proof of concept, technology transfer and the financing and scaleup of startups and SMEs.
- **Scope / eligibility:** SMEs, startups, research institutions, universities
- **Selection procedure:** Funding for any field of science or technology , and “challenges” for specific projects. Evaluation procedure approx. 6 months.
- **Type of support:**
  - [EIC Pathfinder](#): support for research teams for breakthrough technology (TRL 1-4)
    - Grants of up to €4 million
  - [EIC Transition](#): for market readiness (TRL 5-6)
    - Grants up to €2.5 million
    - To validate and demonstrate tech in application-relevant environment
  - [EIC Accelerator](#): scaleup funding for startups (largest program) (TRL 7-8)
    - Grants up to €2.5 million
    - Blended finance support from €0.5 to €15 million (grant and equity), through the EIC Fund

## How to apply?

- Funding calls are published regularly trough the [EIC Pathfinder Portal](#)
- Next calls closing 4 May 2022

# EIC Pathfinder (TRL 1 to 4)



- **Description:** EIC Pathfinder supports early-stage development of radically new technology (e.g. various activities at low Technology Readiness Levels 1-4), based on high-risk/high-gain science-towards-technology breakthrough research (including 'deep-tech'). "The main expected outcomes of Pathfinder projects are top-level scientific publications in open access and an adequate formal protection of the generated Intellectual Property (e.g. a patent application)". It includes two calls: the EIC Pathfinder Open and the EIC Pathfinder Challenges.
- **Scope / eligibility:**
  - EIC Pathfinder Open: any technology with a TRL 1-4
  - EIC Pathfinder Challenges: any technology with a TRL 1-4 responding to specific challenges.
- **Selection procedure:** the Pathfinder includes two types of calls, with an evaluation procedure of approx. 6 months:
  - EIC Pathfinder Open: annual calls published on the website
  - EIC Pathfinder Challenges: annual calls open on a specific topic. The most relevant are:
    - Systems integrated energy storage ([link](#))
    - Carbon dioxide and nitrogen management and valorisation ([link](#))
- **Type of support:**
  - EIC Pathfinder Open: contribution up to €3 million (grants), 100% of the eligible costs
  - EIC Pathfinder Challenge: grants up to €4 million, 100% of the eligible costs.

## How to apply?

- Funding calls are published regularly through the [EIC Pathfinder Portal](#)
- EIC Pathfinder Open: deadline 4 May 2022
- EIC Pathfinder Challenges: Open 15 June 2022, deadline 19 October 2022

# EIC Transition (TRL 5-6)



- **Description:** The EIC Transition aims at validating and demonstrating technologies in application-relevant environment and bringing products closer to market readiness (“transforming research results into innovation opportunities”). It includes two calls: the EIC Transition Open and the EIC Transition Challenges.
- **Scope / eligibility:** Technology with a TRL 5 to 6, which is based on results generated by EIC Pathfinder projects, Future Energy Technologies Flagship calls or European Research Council Proof of Concept projects.
- **Selection procedure:**
  - EIC Transition Open: annual call
  - EIC Transition Challenges: annual specific calls
    - Green digital devices for the future ([LINK](#))
    - Process and system integration of clean energy technologies ([LINK](#))
- **Type of support:**
  - Grants up to €2.5 million during 1 to 3 years, 100% of the eligible costs
  - Eligibility for the EIC Accelerator Fast Track scheme

## How to apply?

Apply in [Horizon portal](#)

- 1<sup>st</sup> cutoff: 4 May 2022
- 2<sup>nd</sup> cutoff: 28 September 2022

# EIC Accelerator (TRL 7-8)



- **Description:** largest EIC program, for “individual companies to develop and scale up breakthrough innovations with high risk and high impact—especially concerning “fit for 55” and “open strategic autonomy”
- **Scope / eligibility:** TRL 7-8
- **Selection procedure:**
  - Step 1: initial application to meet basic criteria: video pitch, slide deck, short survey (hear back in 4 weeks)
  - Step 2: If Step 1 is successful, submit full application to Accelerator Open or Accelerator Challenge for remote evaluation
  - Step 3: if Step 2 is successful, interview with EIC jury
  - Step 4: Successful or unsuccessful. *Note: applications invited for interview but not selected for funding receive access to EIC business acceleration services.*
- **Type of support:** grants and equity investment (blended finance)
  - Grants for innovation development costs up to €2.5 million,
  - Direct equity investments for scale-ups—up to €15 million

## How to apply?

- Through Horizon portal
- Cutoff dates: 15 June, 5 October 2022

# Innovation Fund (TRL 6-9)

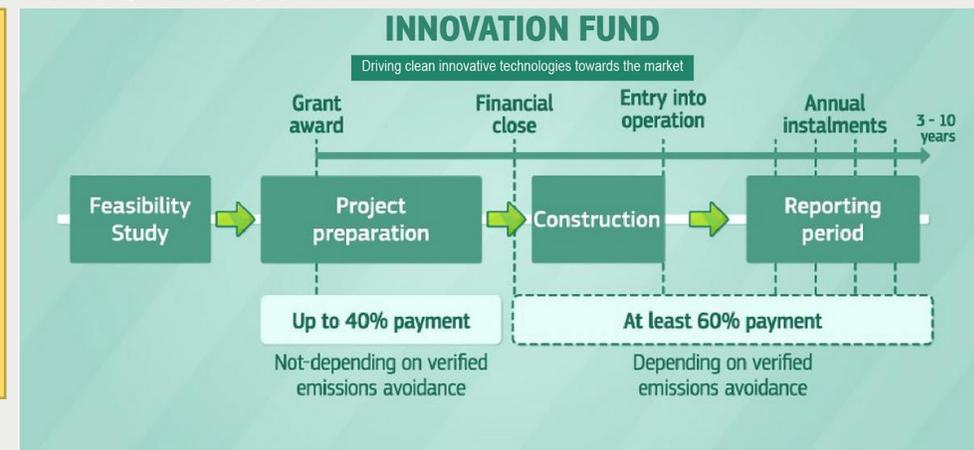
## INNOVATION FUND

Driving clean innovative technologies towards the market

- **Description:** The Innovation Fund is funded from the revenues of the ETS. It finances innovative low-carbon technologies in energy intensive industries. It includes two calls:
  - one for small-scale (CAPEX between €2.5 and €7.5 million). Acceptance rate of the last call <13%.
  - one for large-scale projects (CAPEX >7.5 million). Acceptance rate of the last call <2%.
- **Scope and eligibility:** Open to innovative projects reducing CO2 emissions. Projects must belong to one of the following four categories: (i) energy intensive industries, (ii) carbon capture and utilisation (CCU), carbon capture and storage (CCS), (iii) innovative RES, or (iv) energy storage.
- **Selection procedure:** open calls for proposals. Two phases:
  - Phase I: expression of interest with a first assignment on the project effectiveness, innovation, and maturity level. Projects that meet only the first two criteria may qualify for project development assistance.
  - Phase II: full application in which projects are assessed on all the criteria, including scalability and cost efficiency
    - evaluated on effectiveness, innovation,
    - viability/maturity, scalability, cost efficiency
  - If the project is rejected, it can be eligible for EIB project development assistance, with a view to resubmission in the next call.
- **Type of support:** grants to be disbursed during the 10 years and covering up to 60% of CAPEX / OPEX costs.

### How to apply?

- Funding calls are published regularly through the [Innovation Fund Tenders website](#).
- To get more information:
  - Webinars on the lessons learnt from the first calls ([aggregate link](#), [2020](#), [SSC](#))
  - Self-check questionnaire to manage expectations: [link](#)
  - FAQ ([here](#), section Topic related FAQ).
  - Get in touch with national contact points ([list here](#)), or the helpdesk ([here](#)).
- Next calls (3<sup>rd</sup> call):
  - Small-scale call: launch March 2022, deadline late August 2022 (result Q1 2023)
  - **Doubled Large-scale call:** Q3 2022, deadline late Q1 2023, result Q3 2023



# European Investment Bank (EIB)



- **Description:** The EIB operates InvestEU, an European fund aimed at channelling investment into strategic projects and infrastructure.
- **Selection procedure:** On a case-by-case basis, following regular banking practices. Projects must be aligned with the priorities of the EIB.
- **Scope and eligibility:** all projects
  - Private entities such as special-purpose vehicles (SPV) or project companies, large corporates, midcap companies, including small midcap companies, and SMEs
  - Public sector entities (territorial or not) and public-sector type entities
  - Mixed entities, such as public–private partnership (PPPs) and private companies with a public purpose
  - Non-for-profit organisations
- **Type of support:**
  - Loans for the private sector, from €25 million covering up to 50% of the total project cost.
  - Equity (venture debt and investments in SME and mid-cap funds)
  - Guarantees: 75% of guarantees are covered through EIB, 25% through other implementing partners, such as NPBIs.

## How to apply?

- Contact the [Advisory Hub](#) for more information on the support possibilities
- Access your EIB national contact point [here](#)

# Other EU Portals to give visibility to your projects

- **Register your project on the InvestEU Portal Link.** The portal aims at match making for investors and project promoters around EU-based projects, through a database of projects existing in the EU.
- **Find funding opportunities in your country on access2finance website:** Through an interactive map, the website provides a view of the national public and private investors.

# National funding for PV manufacturing

Implementing NGEU funding  
through RRF plans and  
Modernisation Fund

Active calls in France, Romania,  
Italy



# Introduction – EU budgets and national funding programmes

- Following the COVID-19 crisis, national budgets are reinforced with the EU Recovery and Resilience Facility (2020-2026). Funding is accessible through national programmes to be designed by member states. Use of the EU Recovery and Resilience Facility is conditional to respecting a minimum share of climate investments: 37% of investments using RRF should be climate-related. In addition, the Modernisation Fund financed from ETS revenues is made available to finance the energy transition for 10 low-income countries. It is administered jointly by EIB, EC and Member States. **Your first point of contact should be your national, regional and local authorities.**
- InvestEU is reinforcing national public banks' budgets. Use of InvestEU by national public banks is also conditional to a minimum of 32% of investments to be climate-related. **It is therefore highly advised to get in touch with your national public bank. [Find the list of banks using EU funding here.](#)**

# France

- As part of its Recovery Plan France 2030, France opened a series of call for projects aimed at boosting innovation and industrialisation in the PV industry. One of the calls (**AAP INDUS ENR**) aims at supporting investment projects in new renewable products manufacturing capacities.
- **Scope / Eligibility:** primarily breakthrough technologies, but the call is also open to less innovative technologies, supporting energy independence and reindustrialisation.

## How to apply?

- 1st round open: until September 15, 2022
- Call for proposals [website](#), [application guide pdf](#)
- [Dropbox link](#) with slides overview and webinar recording

# Romania

## Upcoming funding for manufacturing:

- €250 million of the Recovery Fund is earmarked for primarily battery components and some solar PV manufacturing, with an objective of reaching 200 MW of production capacity by 2025. The funding call has not yet been launched and should be launched as of April 2022.
- As part of the Modernisation Fund (MF), a tender for PV-manufacturing projects is expected in Q3 2022.

How to apply?

*Pending publication of further information, expected in Q3 2022*

# Italy

As part of its Recovery and Resilience Plan “Italia Domani”, Italy sets aside €400 million for direct PV technology manufacturing support, to boost to 2GW production by the end of 2025 (from 200MW today). A first **call for projects for “renewables and batteries”** has been launched under this investment plan, under the category of strategic value chains. Other sources of funding will launch calls in the future, with tenders required for projects to be awarded more than €150 000. Separately, a fund for research centres and universities has also been launched, and includes funding for PV manufacturing ([LINK](#)).

- **Scope / Eligibility:** 400 million for innovative PV technology
- **Type of Support:** interest subsidies, plant subsidies, direct contributions to expenditure

## How to Apply?

- Selection procedure: apply on Invitalia Platform, open from 11 April to 11 July 2022
- Find the direct link to call for application on [Invitalia platform here](#)
- Italian Government [website](#) for RRF, documents [page](#)

# Thanks for listening

