

**Can the energy bill be reduced
and Carbon Neutrality achieved
with a strong financial business
case?**

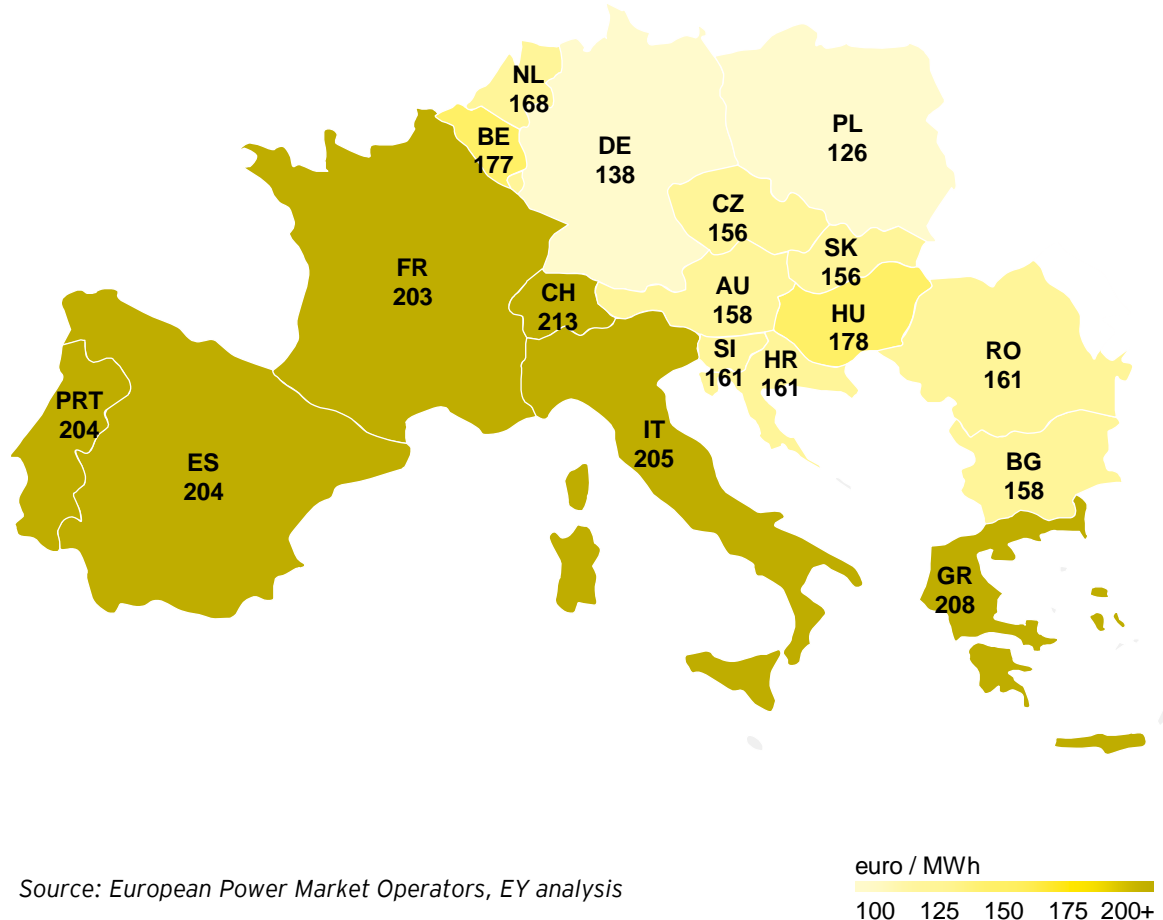
February 2022



**Building a better
working world**

Operations are being impacted all across Europe as a result of electricity price increase, mostly due to climate-related policies and generation capacity shortage

Day-ahead market average prices across Europe for 8 February 2022 (EUR / MWh)



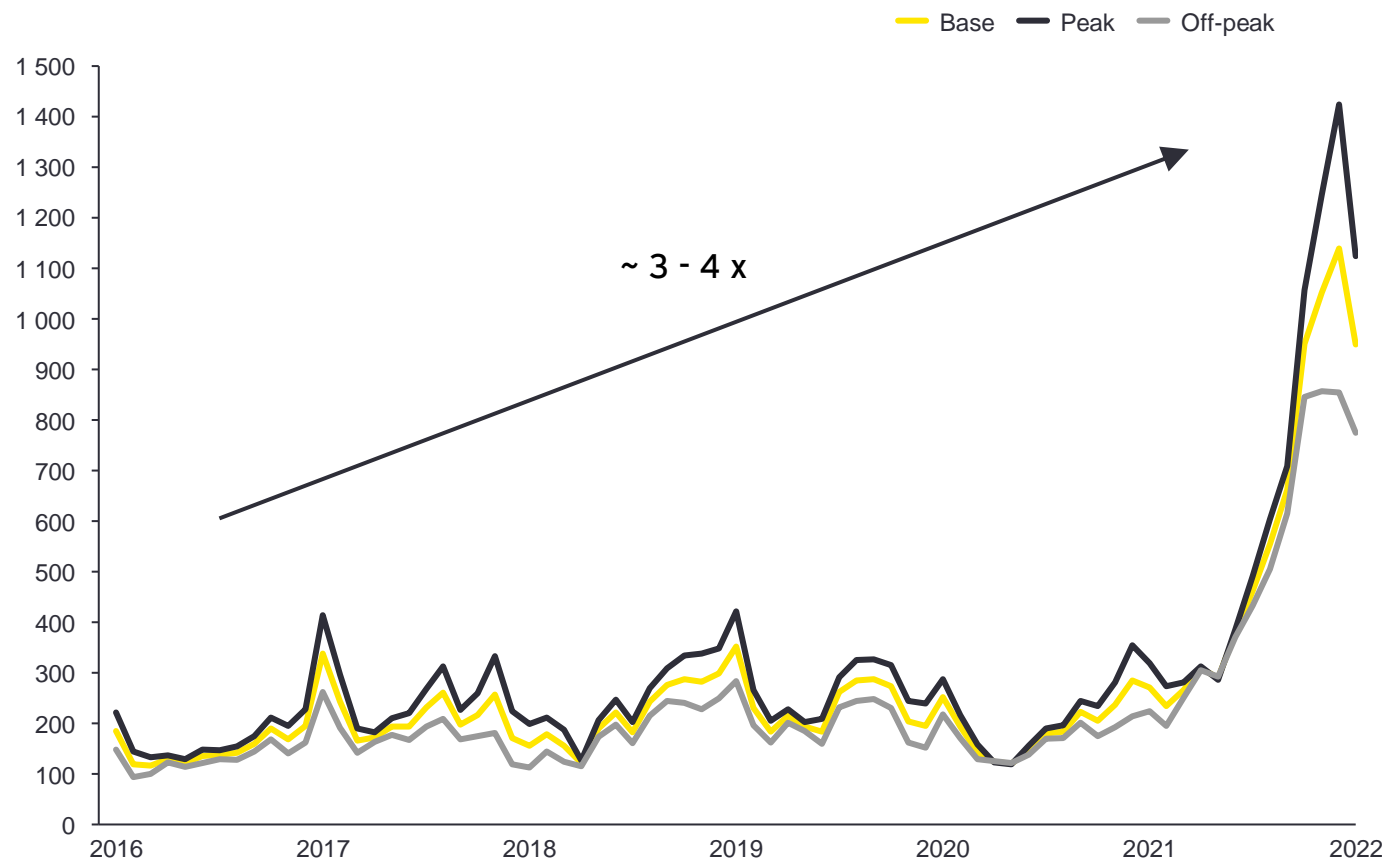
Source: European Power Market Operators, EY analysis

Comments

- ▶ **Wholesale power prices** have significantly increased over last few months.
- ▶ High prices have been driven by a **“perfect storm”** of factors:
 - ▶ High gas prices
 - ▶ High CO2 prices
 - ▶ Low wind output
 - ▶ Plant outages and closures
- ▶ **EU emission reduction target increase:** at least 55% for 2030, up from 40% previously.
- ▶ **CO2 price increased from approx. 5 to 96 EUR in the last 4 years** and we expect the EU Green Deal commitment to continue this trend on medium-long term.

Recent day-ahead market prices exceeded 1,000 RON / MWh, up more than 3 times compared to similar period during 2016 – 2020 timeframe

Romania day-ahead market average prices (2016-2021, RON / MWh)



Source: OPCOM reports, EY analysis

Comments

- ▶ **Electricity price increase:** on short-medium term at local level we expect higher electricity price compared to previous years average and a high price volatility due to a number of factors such as:
 - ▶ low energy system interconnectivity with other countries;
 - ▶ planned shutdown for refurbishment of one of the nuclear reactors;
 - ▶ Complexul Energetic Oltenia restructuring and decommissioning plan
- ▶ **Electricity imports increase:** Romania became a net electricity importer in 2019 and 2020 (a change from the traditional net exporter position)

Note: Recent transactions on forward market closed at approx. RON 900 for 2022, RON 850 for 2023 and 550 RON for 2024

Industry-wide solutions are available for reducing energy costs and EY holds necessary expertise for successful implementation

**Power Purchase
Agreements**
(Physical or Virtual)



Electricity Generation
(on-site or off-site)



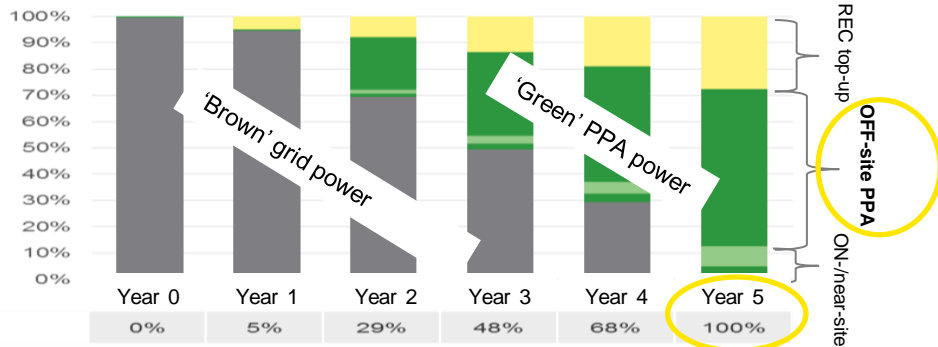
EY can provide market-leading assistance for PPAs in order to deliver long-term cost savings at the same time as meeting ambitious renewables targets...

Client challenge

How do I meet renewable energy targets and still reduce energy costs?

Opportunity

Renewable energy opportunities will exist onsite and offsite across multiple technologies and countries. Companies typically need a portfolio of renewable energy options to reach ambitious targets, achieve significant savings and mitigate various risks.



Anticipated Benefits

5-10% Energy cost savings

- 1 ► Increased Price Security ↑
- 2 ► Increased Reputational Benefits ↑
- 3 ► Reduced Carbon Emissions ↓

EY Response

Renewables Strategy

Opportunity identification & strategy development

- Benchmark current 'baseline' energy state against peers
- Challenge existing targets and potentially set new ones
- Evaluate various technologies
- Appraise available contractual options

Market test & Business Case development

- Analyse short-listed technologies
- Market check and contractual options
- Issue teaser to the market to assess developer appetite for corporate requirements
- Financial model of inputs to develop case for change against BAU

Renewables Implementation

Competitive tender / RfP process

- NDAs for short-list
- Prepare RfP tender document
- Approach the market with competitive tender
- Evaluate bids
- Further NPV modelling against BAU
- Offsite PPA: start discussions with licensed supplier

Contract negotiations & project implementation

- Work to draft contract with Legal Advisor
- Due diligence on commercial aspects of the contract
- Negotiations with the developer
- For offsite PPA - Negotiate sleeving arrangements with retail power supplier
- Finalise contract documentation

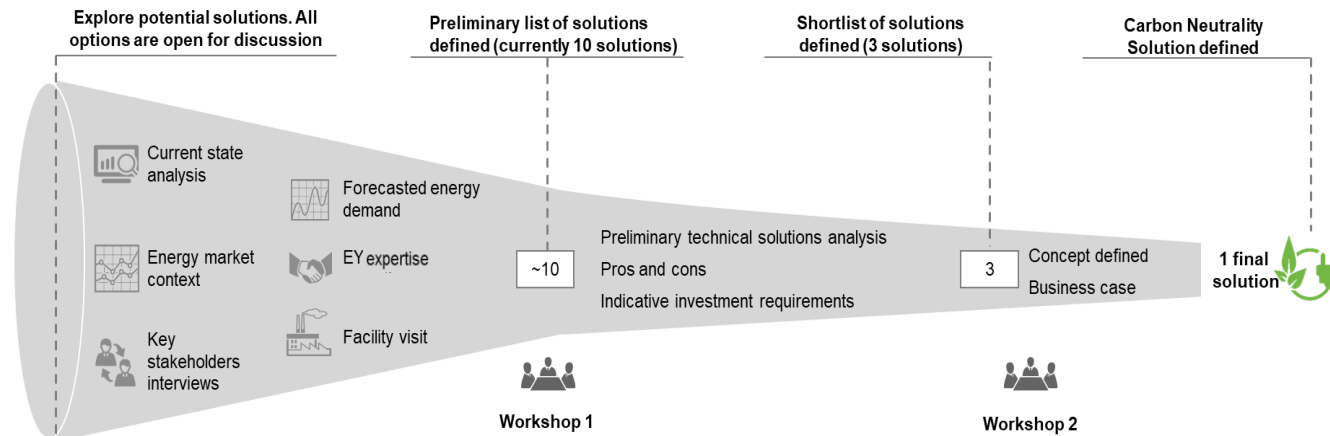
Previous Experience

Sectors we have worked with

	Telecommunications		Consumer Products		Finance
	Food & beverage		Pharmaceuticals		

...and EY can assist through a process of selecting the cost effective Energy solution

Solution selection process





Comments

- ▶ **Initial assessment will be conducted in order to:**
 - ▶ analyse current state and market context;
 - ▶ confirm forecasted energy demand;
 - ▶ explore potential solutions for cost reduction and/or reaching carbon neutrality .
- ▶ A **preliminary list of solutions** will be presented and discussed during the first workshop.
- ▶ The second stage of the project will include the **preliminary technical analysis** of the solutions, the associated **pros and cons** and the **indicative investment requirements**.
- ▶ A second workshop will be organized in order to present and discuss the **shortlist of solutions**.
- ▶ The **carbon neutrality solution** will be reached based on the shortlist's concept and business case definition.

Different options can be explored for financing an energy project

Main approaches

	✓ Pros	✗ Cons
 <p>Own financing</p>	High benefits	High CAPEX and effort
 <p>Co-financed through EU Funds</p>	Highest benefits thanks to non-reimbursable financing	Longer implementation time and higher bureaucracy
 <p>Financed / Co-financed by an Energy Service Company (ESCO)</p>	Low effort and risk sharing approach	Lower benefit

Comments

- ▶ **3 main approaches** were identified for implementing a carbon neutrality solution, each with associated benefits and constraints.
- ▶ **Maximum benefits** can be reached by implementing the solution with **own funds**, yet this also implies **high CAPEX and effort**.
- ▶ **Risk and effort can be minimized** in an **ESCO**-type approach, although **benefits will also be reduced**.
- ▶ **EU funding** can prove a viable alternative in order to reach **higher benefits**, but **longer implementation time and higher bureaucracy** need to be navigated.

EU Funds totaling over EUR 15 B will facilitate the transition to low-carbon economy by 2030 in Romania



Recovery and Resilience Facility

Status: launch planned during 2022 (energy)

Value: EUR 1.6 B energy component



Modernisation Fund

Status: launch planned during 2022

Value: EUR 14 B (dependent on CO2 price)



Just Transition Operational Programme

Status: launch planned during 2022

Value: EUR 1.95 B



Sustainable Development Operational Programme

Value: EUR 0.6 B energy component covering energy efficiency, GHG reduction and other



Innovation Fund

Status: recurrent annual calls

Value: EUR 10 B (estimated)



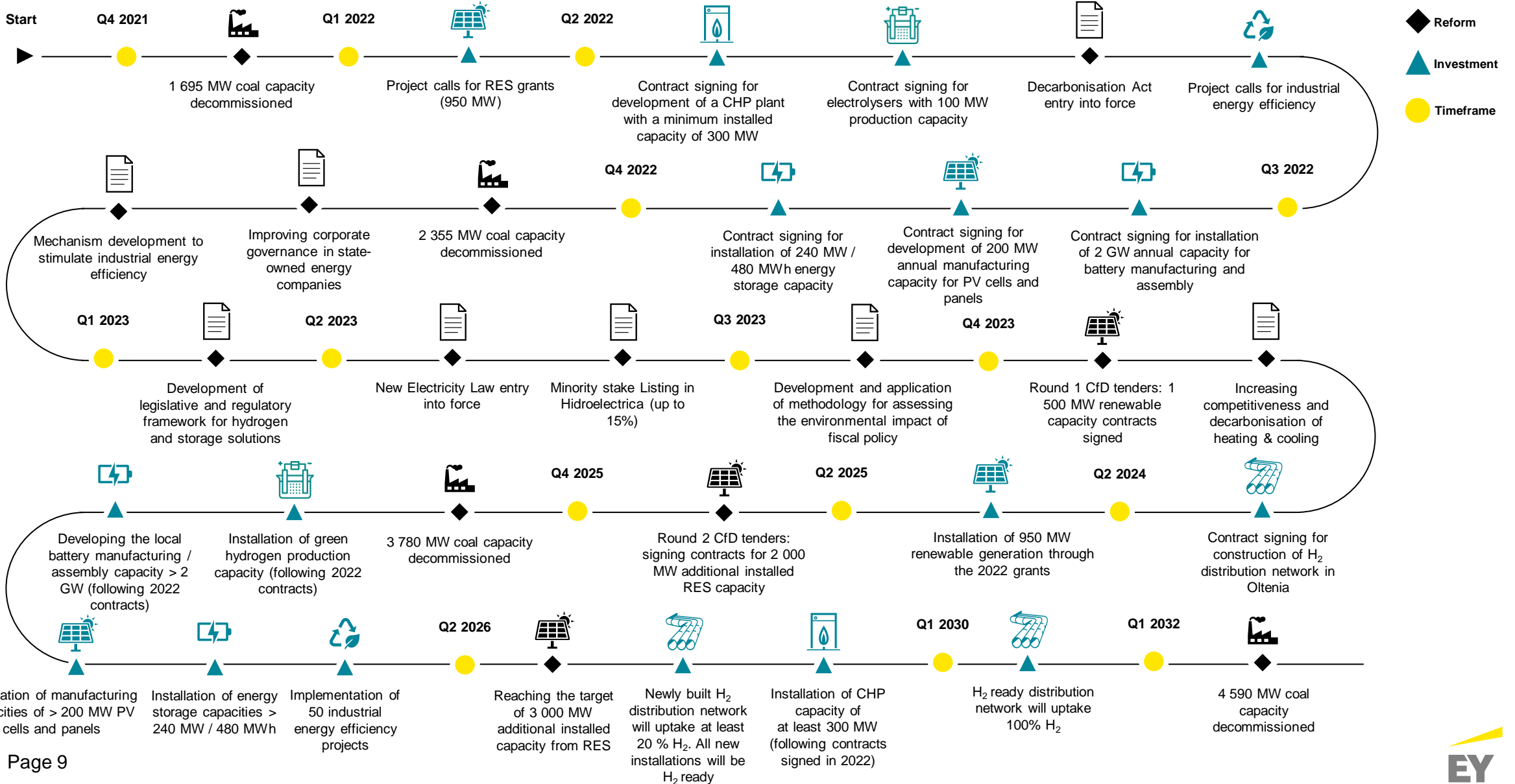
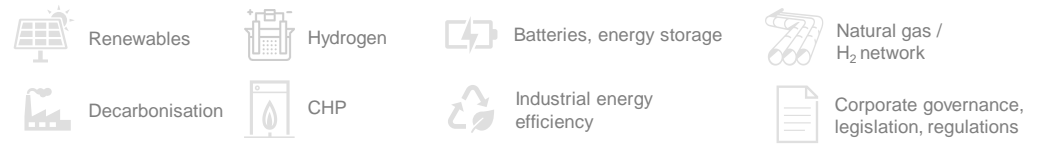
Connecting Europe Facility

Status: launched

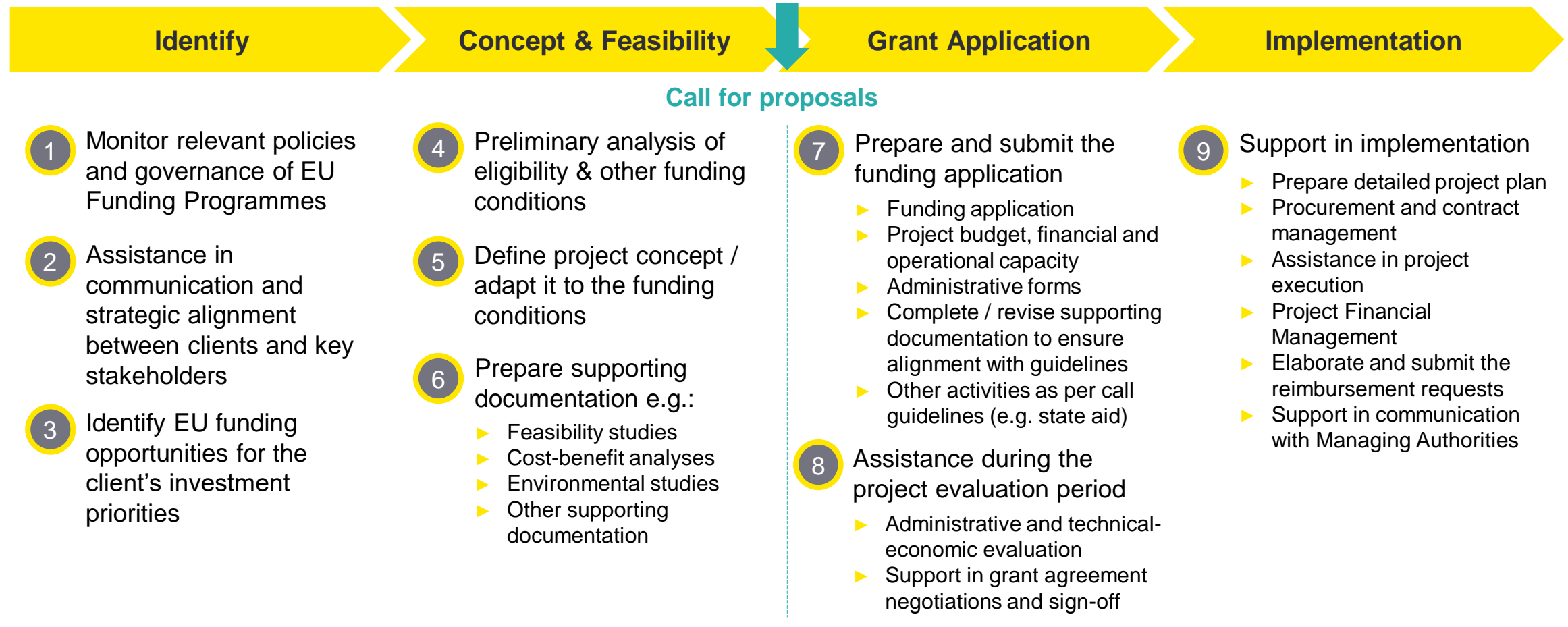
Value: EUR 5.8 B (energy component)

Romania Resilience and Recovery Plan

Indicative roadmap



We are providing our clients with end-to-end services for preparing, funding and implementing energy projects



Save time...

... by addressing all needs and challenges related to an EU-funded project with EY as single point of contact



Save effort...

... by having EY to contract and coordinate the work of all the necessary contractors, in all phases

The better the question. The better the answer. The better the world works.



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