Policy update & political context

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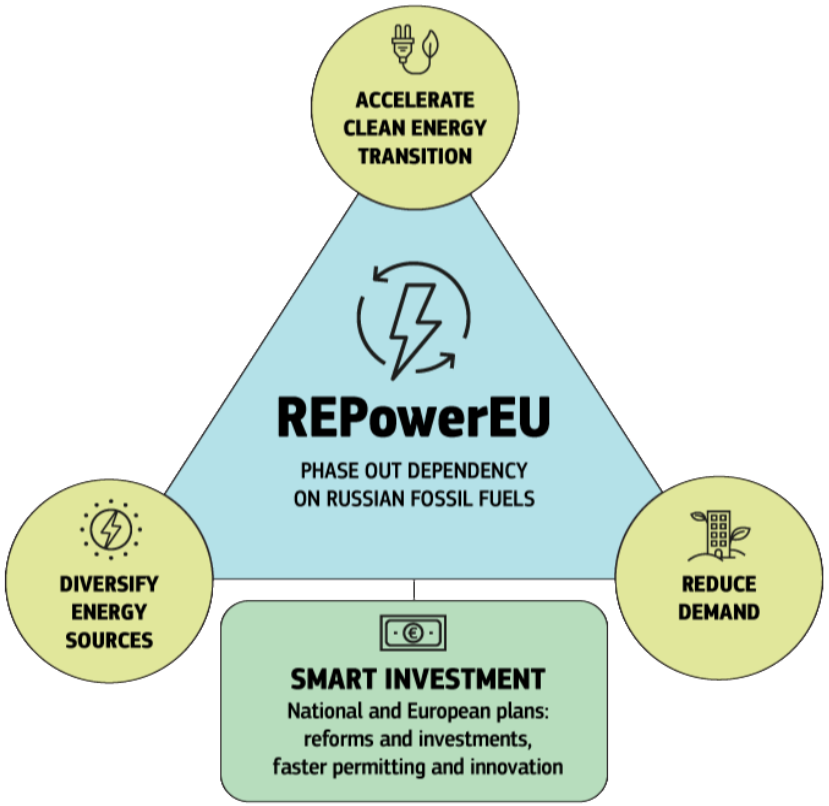
Chair IEA TCP Ocean Energy Systems

Brussel, 27 March 2023

Energy policy developments

- May: **REPowerEU** Plan
- June: **Gas Storage** Regulation
- August: Regulation on coordinated **demand reduction measures for gas**
  - Reduction by 15% between 1 August 2022 and 31 March 2023
  - EU Alert to trigger compulsory reduction if necessary



New energy policy developments (2/5)

- 6 October: Council Regulation (EU) 2022/1854 on an **emergency intervention** to address high energy prices
  - **10% overall electricity demand reduction**
  - Reducing electricity demand during **peak price hours by at least 5%**
  - Toolbox to **protect consumers and companies** from high energy prices
  - **Cap on the revenues** of companies producing electricity at low cost
  - **Solidarity contribution** on surplus profits in the fossil fuel sectors

New energy policy developments (3/5)

- 18 October: Proposal for a Council Regulation **enhancing solidarity** through:
  - Better **coordination of gas purchases** (demand aggregation + voluntary purchases)
  - Reliable **price benchmark for LNG** (with market correction mechanism to limit gas prices)
  - Exchanges of gas across borders through **new solidarity rules**

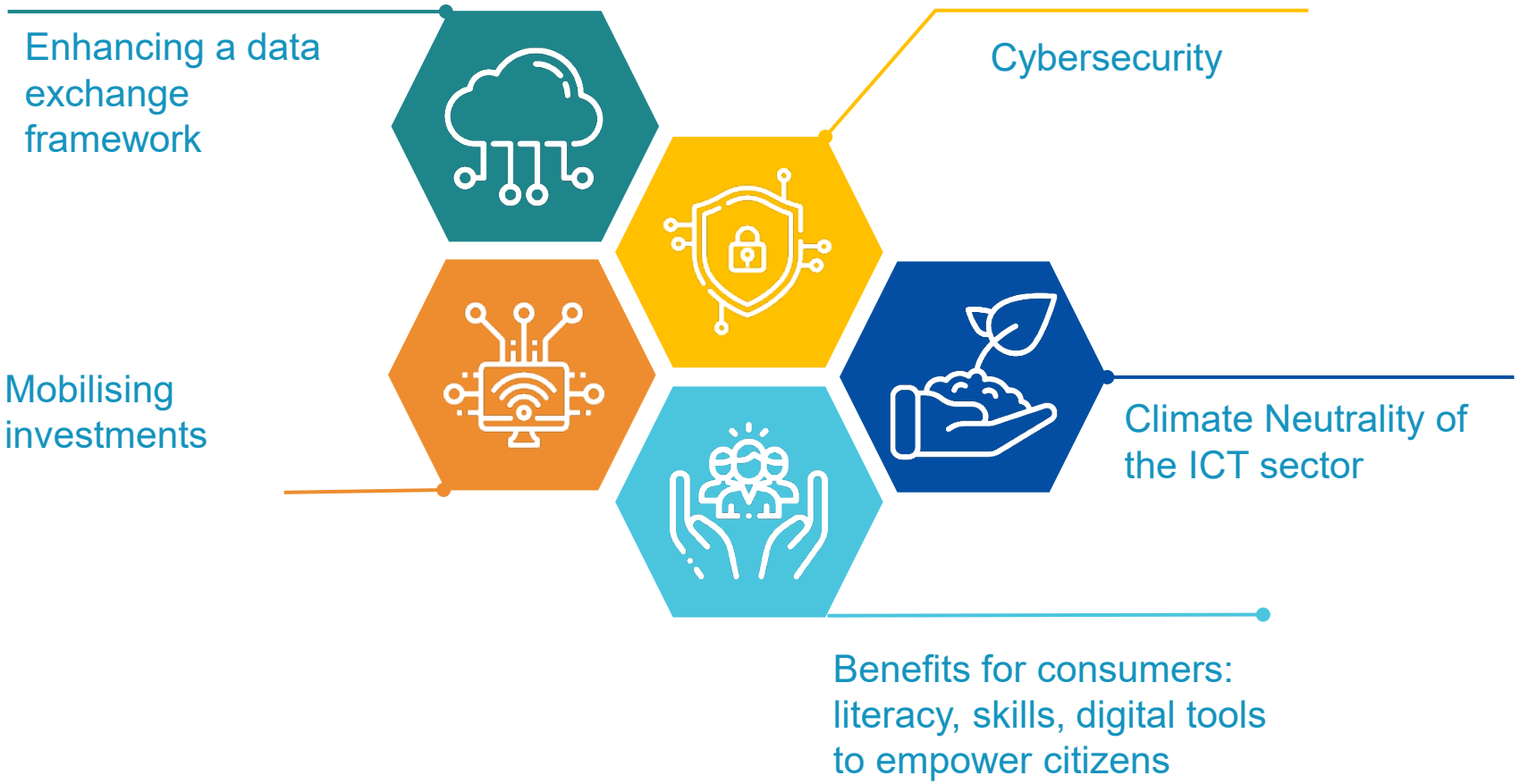
New energy policy developments (4/5)

Also adopted by the Commission on 18 October:

- Proposal for a Council Recommendation to strengthen the **resilience of critical infrastructure**
- Seventh report on the **state of the Energy Union**
- Action Plan for the **Digitalisation of the Energy System**

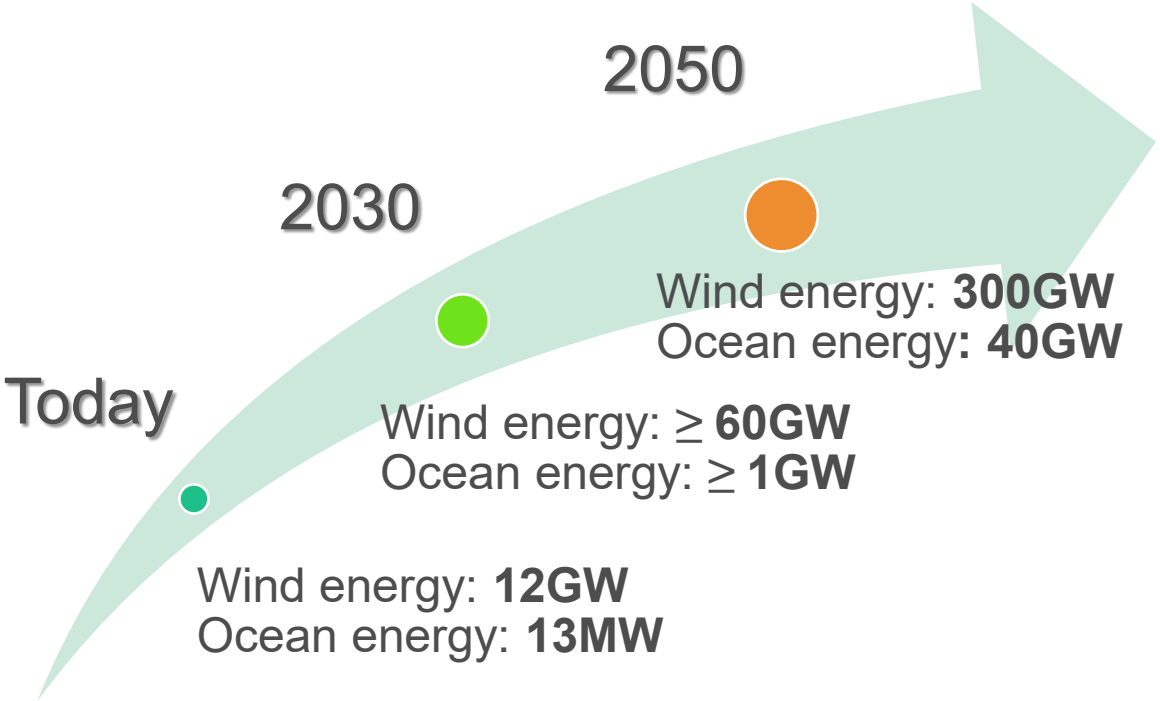
New energy policy developments (5/5)

Action Plan for the **Digitalisation of the Energy System**



European Commission

Offshore Renewable Energy Strategy
Overall objectives



- Set ambitious targets for the growth of the offshore renewable energy sector
- Encourage public and private investment in new infrastructure and research
- Provide a clear and stable legal framework

Why a new ORES communication?

- Fit for 55, the revised TEN-E and REPowerEU: Offshore renewables are key in ensuring decarbonisation and security of supply.
- Actions proposed in ORES have been implemented or are well under way
- Renewed political momentum to the implementation of the ORES following the Esbjerg and Marienborg summits and more ambitious goals in MS.

European Commission | English | Sear

Energy

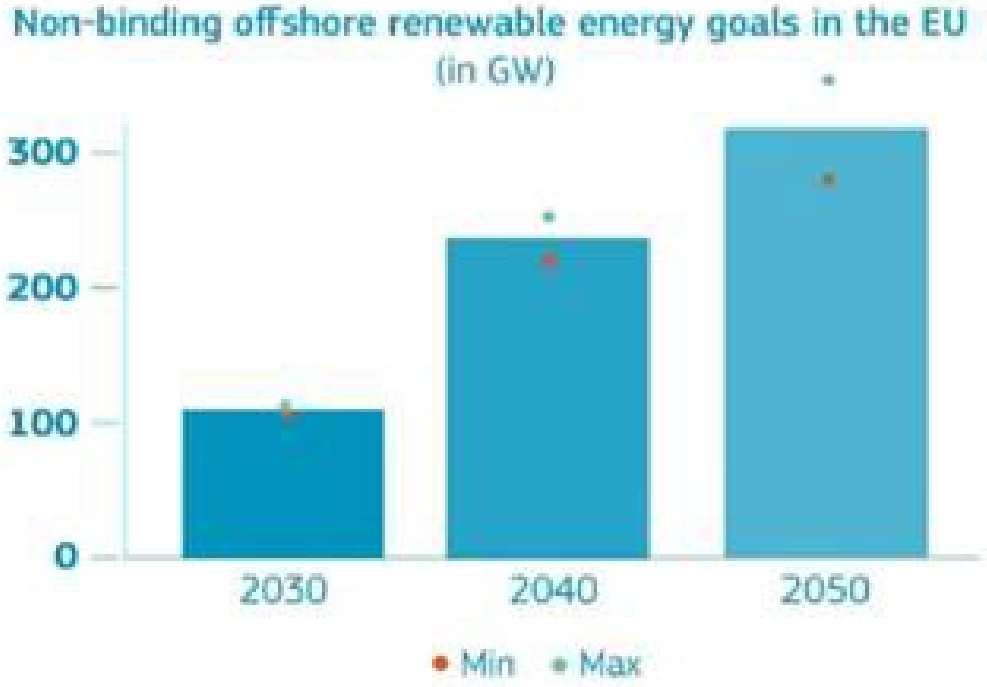
Home | Topics | Data and analysis | Studies | Publications | Consultations | Energy explained | Events | News

Home > News > Member States agree new ambition for expanding offshore renewable energy

NEWS ANNOUNCEMENT | 19 January 2023 | Directorate-General for Energy

Member States agree new ambition for expanding offshore renewable energy

Esbjerg, 18 May 2022



Marienborg, 30 August 2022

Dublin, 12 September 2022

European Commission

Objectives

- Update the targets for offshore renewable energy
- Focus on implementation to close the gap between political ambition and actual progress
- Maintain global ambition: identify actions to support global leadership of EU offshore renewable - build on NZIA.

European Commission

Net Zero Industry Act

Proposal for a Regulation on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem

March 2023

Net-Zero Technology Trends

The net-zero technology global market is worth about **€600 billion per year by 2030**

3x key mass-manufactured net-zero technologies expected by 2030

The EU net-zero ecosystem **doubled in value from 2020 to 2021**, reaching €100 billion

Deployment of renewables will **nearly quadruple by 2050**

Deployment of heat pumps will increase **6-fold by 2050**

Global production of electric vehicles will increase **15-fold by 2050**

More than 90% of solar photovoltaic (PV) wafers and certain other PV technology components are imported from China

More than ¼ of electric cars and batteries are imported from China

China accounts for **90%** of global investments in net zero technology manufacturing facilities.

European Commission

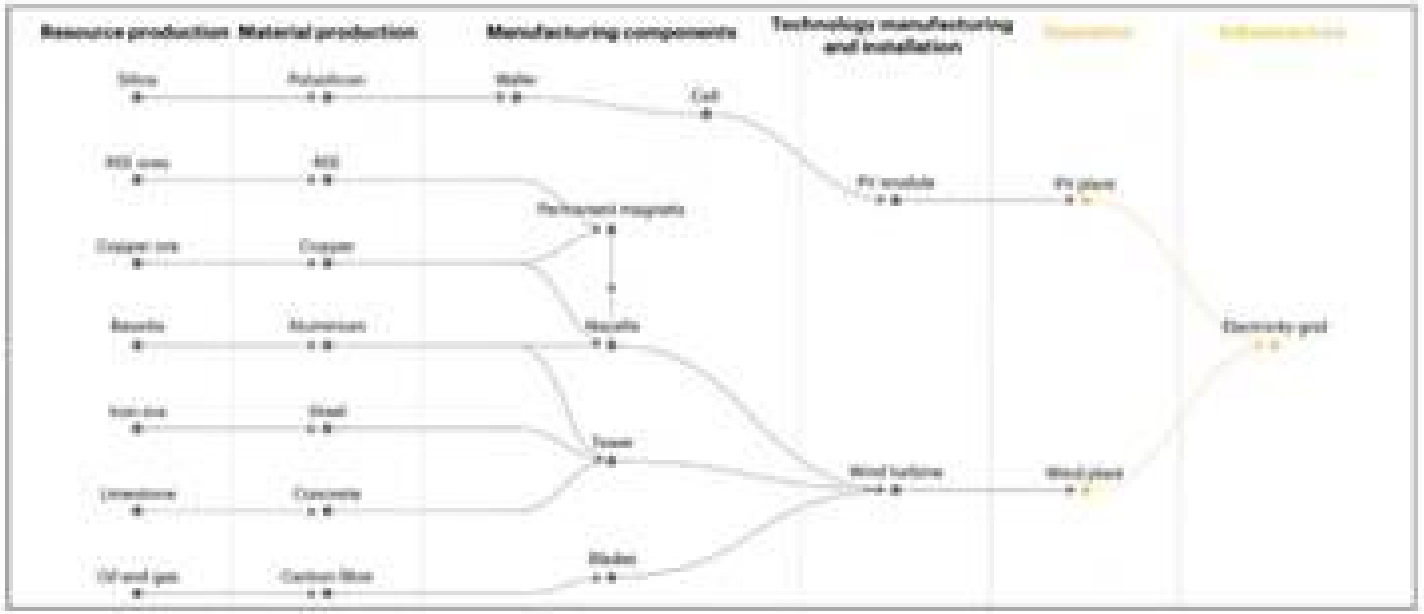
Objectives and scope (Chapter I)

Objectives:

- Aim to support the scale up of net-zero technology manufacturing in order to contribute to decarbonised and resilient energy system.
- Quantified benchmark: manufacturing capacity of strategic net-zero technologies = at least 40% of the corresponding deployment needs in 2030 (indicative benchmarks listed in Recitals).

Scope:

- Net-zero technologies (list in Art 3 + at least TRL 8).
- Innovative net-zero technologies (Art 26 and 27).
- Strategic net-zero technologies (list in Annex; 3 selection criteria: 1) technology readiness level; 2) contribution to decarborization and competitiveness; and 3) security of supply risks.
- Vertical scope: applies to final products, specific components and specific machinery primarily used for the production of those products.



Net-Zero Industry Act: "the what"

Permitting

- Streamlined permitting deadlines and procedures
- One-stop shops
- Information sharing

Investment

- Crowding-in private investments in net-zero strategic projects by Commission and MS
- Net-Zero Industry Europe Platform to advise on financing of projects

Markets

- Sustainability & resilience criteria in auctions
- Sustainability & resilience criteria in public procurem ent
- Sustainability & resilience criteria in public support measures

Skills

- Skills for quality jobs through Net-Zero Industry Academies
- Credentials for skills transparency, transferability & cross-border mobility

Innovation

- Regulatory Sandboxes to promote innovation and to test innovative net-zero technologies in a controlled environment for a limited amount of time

Governance

- Net-Zero Europe Platform as a reference body for the Commission to coordinate actions jointly with Member States including international partnerships

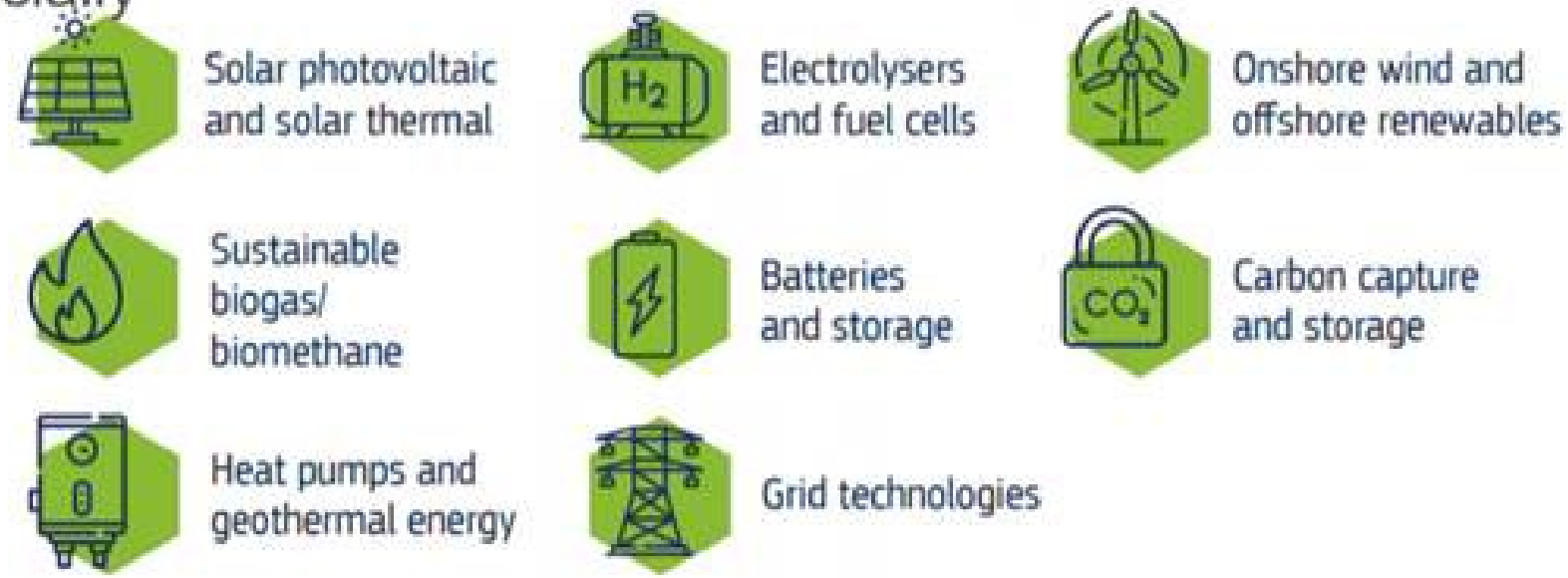
CO_2 storage

- Sets objective and obligations aimed at removing one of the main barriers to CCU

European Commission

Net Zero Technologies

- The Act supports in particular Strategic net-zero technologies that are commercially



- Other net zero technologies are also supported by the measures in the act, including sustainable alternative fuels technologies, advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle, small modular reactors, and related best-inclass fuels.

	Benefits
Net-Zero Technologies	• Simplification: One-stop shop, online access to info, faster permitting (12-18 months) • Innovation: Regulatory Sandboxes • Competences and skills
Net-Zero Strategic Technologies	• Facilitated access to markets through benefitting from sustainability and resilience criteria in auctions (15-30% weight of award criteria), public procurement and other public schemes • Benchmark for manufacturing capacity of strategic net-zero technologies to reach at least 40% of EU's annual deployment needs by 2030 • Possibility to become a Strategic Net-Zero Technology Project
Strategic Net-Zero Technology projects	• Priority status and obligations for Member States to process the permitting process faster via shorter time-limits. • Shorter permitting deadlines (9-12 months) • Overriding public interest • MS and COM to support through crowd-in private investments in net-zero strategic projects to accelerate their implementation • Benefit from finance coordination by the Net-Zero Europe Platform

Permitting (Chapter II)

Legal, planning and investment certainty

- Clear scope: entire permit-granting procedure
- Harmonisation & simplification of permitting rules across all MS via Regulation.

National Competent Authority ("One-stop shop")

- OSS in charge of entire process for given project, and which provides 'comprehensive decision'.
- Subsidiarity: one or more OSS, provided that one remains sole point of contact for project.
- Projects can submit any documents electronically.
- OSS provide info on-line on permitting process, investment, funding & business support services.
- OSS ensure easy access to simple dispute settlement procedures.
- MS ensure that OSS have sufficient staff, financial, technical and technological resources (TSI).
- Net Zero Platform best practice group with OSS.

Time-limits and procedural clarity

- Shall not exceed 18 months for gigafactories, 12 months for smaller projects.
- For expanding production lines, DDLs halved.
- In exceptional cases, time-limits extended.
- Within 1 month of receiving project application, OSS shall validate start of the process and draw up with the project a detailed schedule.

Priority Status for Strategic Projects

- 12 months for strategic gigafactories, 9 months for strategic smaller projects.
- Priority treatment, including for litigation, appeals and judicial remedies.
- May be in the overriding public interest, provided relevant mitigating measures are met.
- Administrative silence for individual steps.

Streamlined Environmental Impact Assessments

- Projects can request scoping study on EIA from OSS, to be provided within 30 days.
- EIAs bundled and carried out at the same time OSS responsible for single assessment.
- OSS to respond to EIA within 3 months.
- Consultation of public 45 days. 90 d[illegible]en ris[illegible]

Ocean energy

- Meeting between Commissioner Sinkevicius (Environment, Ocean and fisheries) and the European Investment Bank Vice-President (January 2023)
- Offshore renewables, included in the Net Zero Industrial Act (March 2023)
- European conference of ocean energy in The Hague-NL (Oct 2023)
- Multi-technologies projects: wave / floating solar and offshore wind (NL, BE, IE, PT)
- Lack of visibility and public support to be addressed

Outcomes of the Annual Report

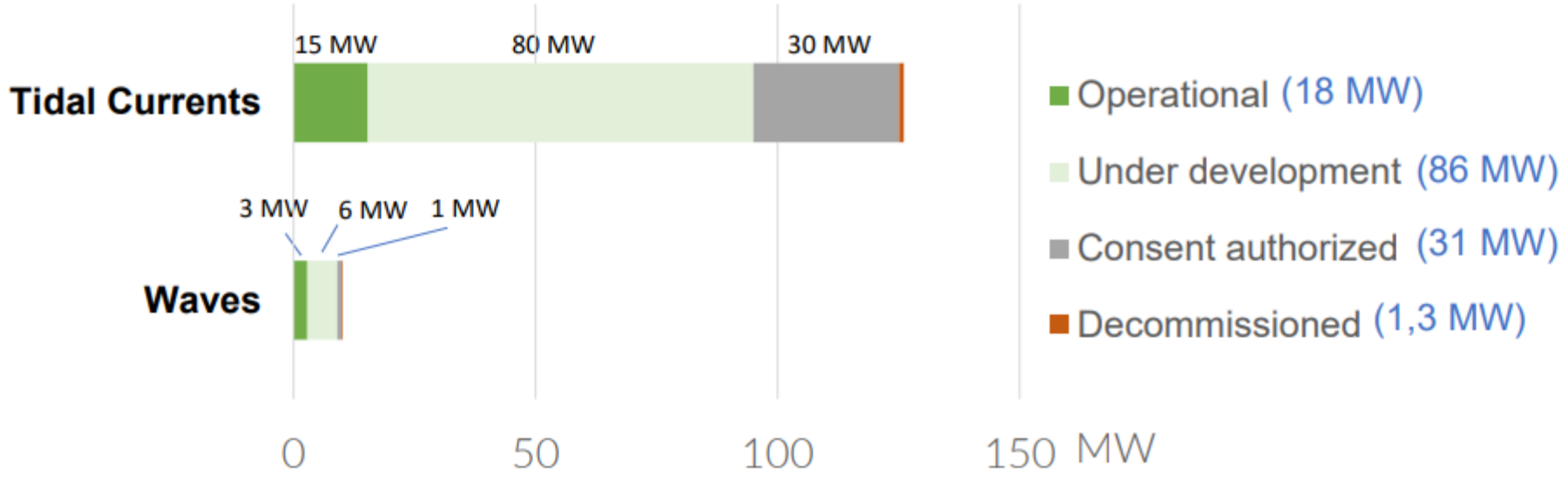
Summary on key policies in 2022:

AUSTRALIA	Consistent regulatory regime for offshore renewable energy projects
BELGIUM	Initiatives to promote Blue Economy
CANADA	Introduction of refundable investment tax credit for clean energy technologies
CHINA	Continuous Governmental support to ocean energy demo projects
EU	Horizon 2020 call for demonstration of sustainable tidal energy farms
FRANCE	Innovative «experimentation contract» for renewable energies
IRELAND	Update of Offshore Renewable Energy Development Plan (OREDP)
INDIA	Deep Ocean Mission
KOREA	2030 Ocean Energy Development Plan
MONACO	National Green Fund
PORTUGAL	Technological Free Zone (ZLT) at sea for marine energy projects
SINGAPORE	Renewable Energy Integration Demonstrator
SWEDEN	National ocean energy programme (2018 – 2024)
SPAIN	Roadmap for ORE with wave energy goal to reach 40-60 MW in 2030
UK	5th round of the UK's flagship CfD program: auction for wave and tidal stream
USA	Inflation Reduction Act of 2022: expected impact on clean energy projects

Outcomes of the Annual Report

OCEAN ENERGY SYSTEMS

2022 | Installed Capacity



River currents: 116 kW operational + 25 kW under development (Canada, USA)
OTEC: 120 kW operational (Japan, Korea)+ 65 kW under development (India)
Salinity gradients: 4-50 KW (France, Netherlands)

Operational

13 Tidal current projects
14 wave energy projects
4 river currents
2 OTEC
1 Salinity gradient

Under Development

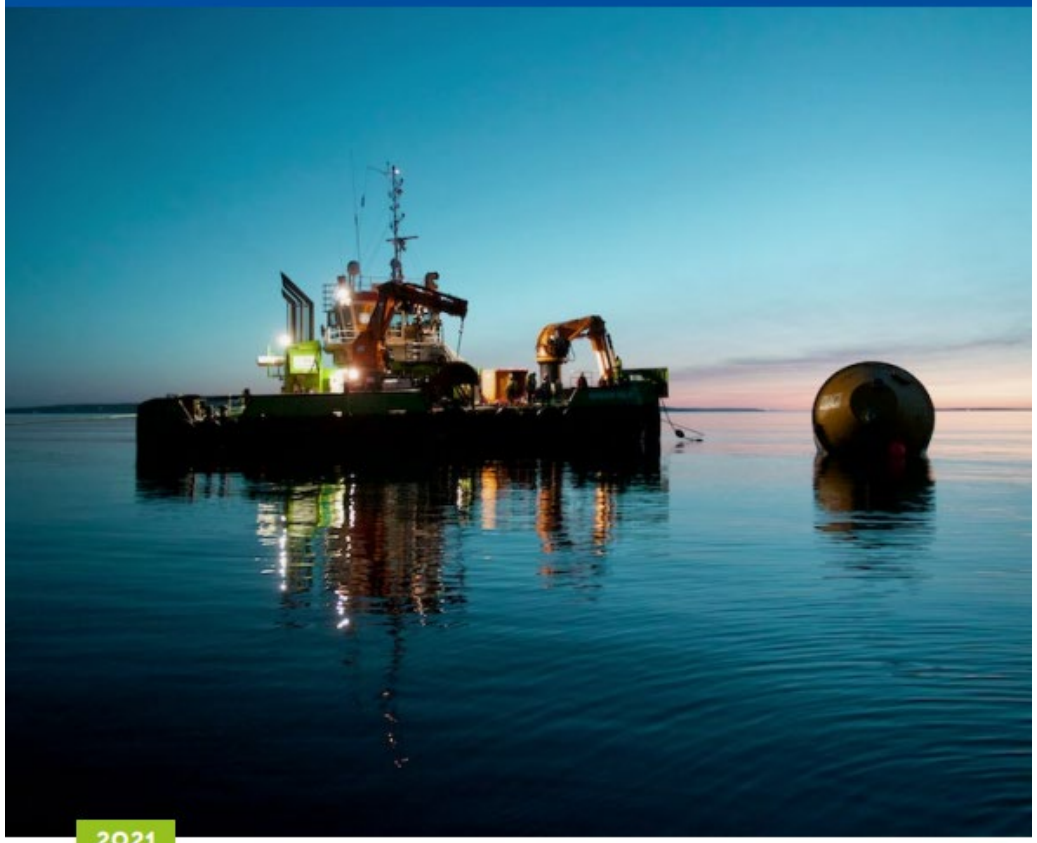
21 Tidal current projects
20 wave energy projects
1 river currents
1 OTEC
1 Salinity gradient

Wave Energy:
2 projects > 500 kW
8 projects [100, 500]
16 projects < 100 kW

Tidal currents:
18 projects > 500 kW
7 projects [100, 500]
5 projects < 100 kW

- How to make use of this data to create confidence to investors?
- Which signals to give to investors that ocean energy is on track?
- Any other indicators (long-running projects, operational hours, etc)?

Technology Collaboration Programme
by iea



2021

AN INTERNATIONAL EVALUATION AND GUIDANCE

FRAMEWORK FOR OCEAN ENERGY TECHNOLOGY

OES OCEAN ENERGY SYSTEMS

Figure 4 Evaluation Areas included in the Evaluation and Guidance Framework (10)

European Commission

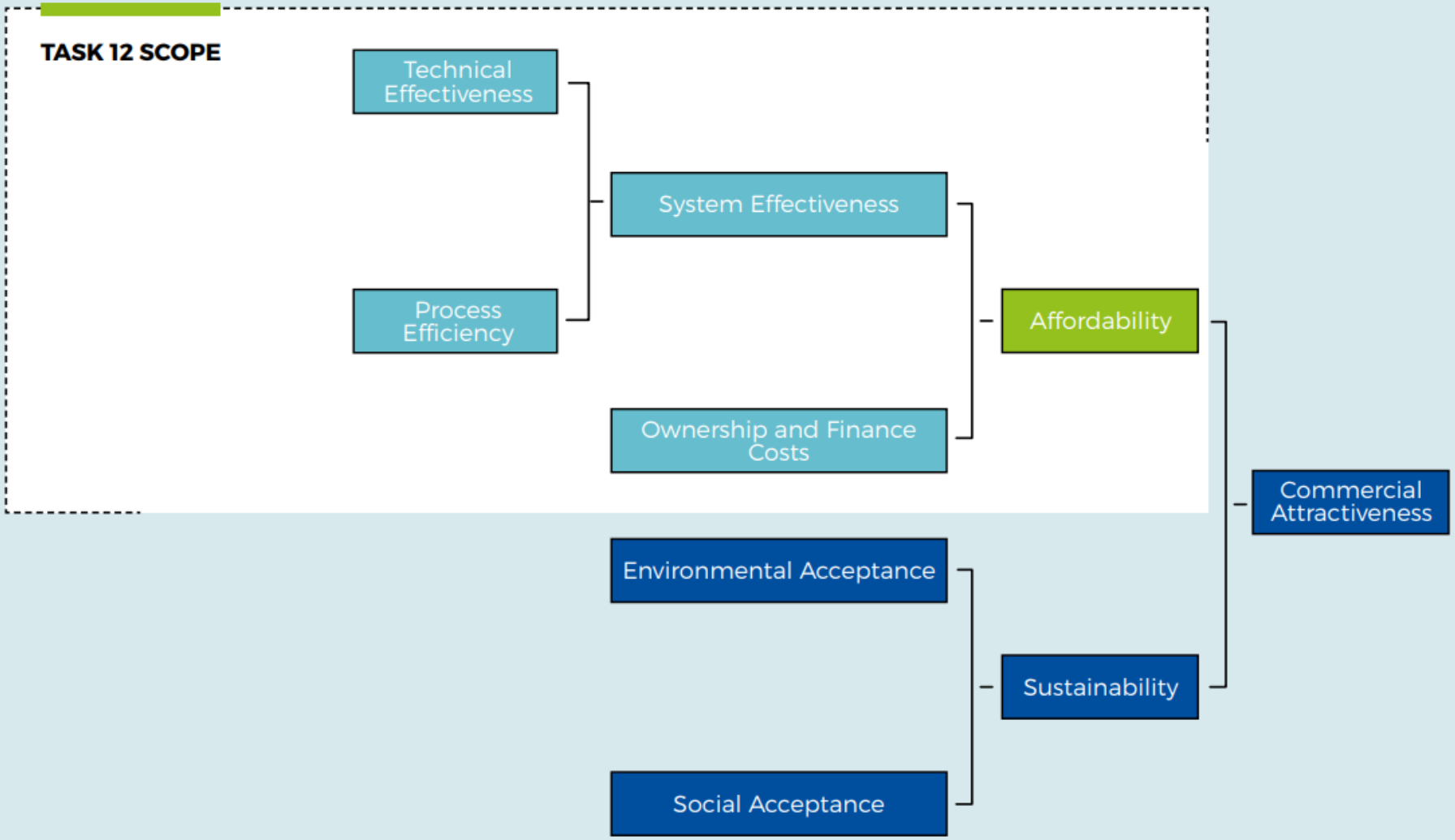


Figure 6 Groups of Evaluation Areas flowing into overall Commercial Attractiveness

European Commission | Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)

English

Register | Login

SEARCH FUNDING & TENDERS | HOW TO PARTICIPATE | PROJECTS & RESULTS | WORK AS AN EXPERT | SUPPORT | Get star

Match whole words only

GRANTS | TENDERS

Submission status

Forthcoming (3) | Open for submission | Closed (15)

Programming period

Select a Programme period...

Filter by Programme / Programme group

Select a Programme...

Filter by call

Select a Call...

Demonstration of sustainable wave energy farms

Call for proposal | Grant

HORIZON-CL5-2024-D3-01-08

Programme	Horizon Europe (HORIZON)	**Status**	Forthcoming
Type of action	HORIZON Innovation Actions	**Deadline model**	single-stage
Opening date	12 September 2023	**Deadline date**	16 January 2024 17:00:00 Brussels time

Development of innovative power take-off and control systems for wave energy devices

Call for proposal | Grant

HORIZON-CL5-2023-D3-02-10

Programme	Horizon Europe (HORIZON)	**Status**	Forthcoming
Type of action	HORIZON Research and Innovation Actions	**Deadline model**	single-stage
Opening date	04 May 2023	**Deadline date**	05 September 2023 17:00:00 Brussels time

Critical technologies for the future ocean energy farms

Call for proposal | Grant

HORIZON-CL5-2024-D3-02-04

Programme	Horizon Europe (HORIZON)	**Status**	Forthcoming
Type of action	HORIZON Research and Innovation Actions	**Deadline model**	single-stage
Opening date	07 May 2024	**Deadline date**	05 September 2024 17:00:00 Brussels time

Thank you

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