



# Achieving renewable energy targets while protecting and restoring biodiversity

Vedran Nikolić, European Commission, DG Environment, Nature Conservation Unit

3<sup>rd</sup> Natura 2000 biogeographical seminar  
for the Mediterranean and Black Sea marine regions

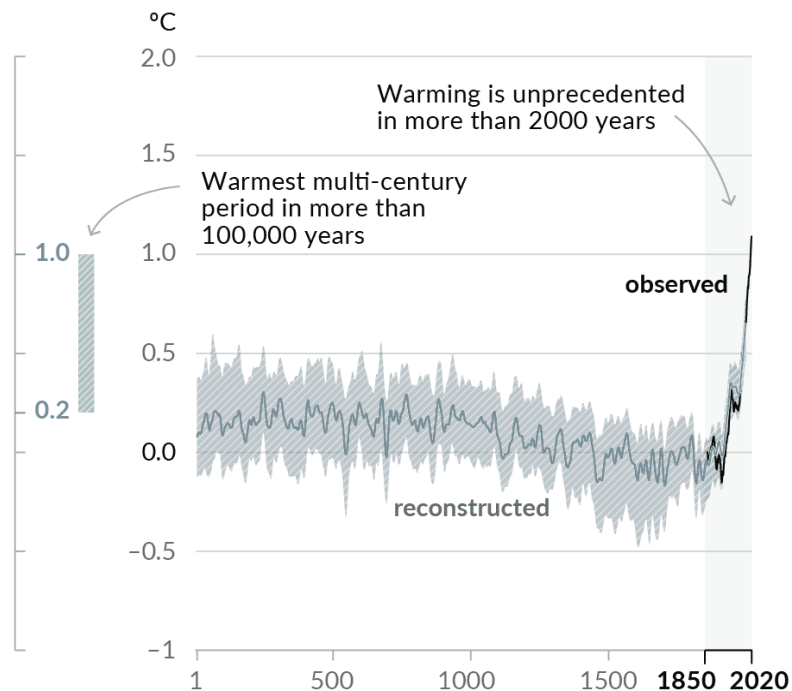
Marseille, France, 12-14 March 2024

# Climate crisis

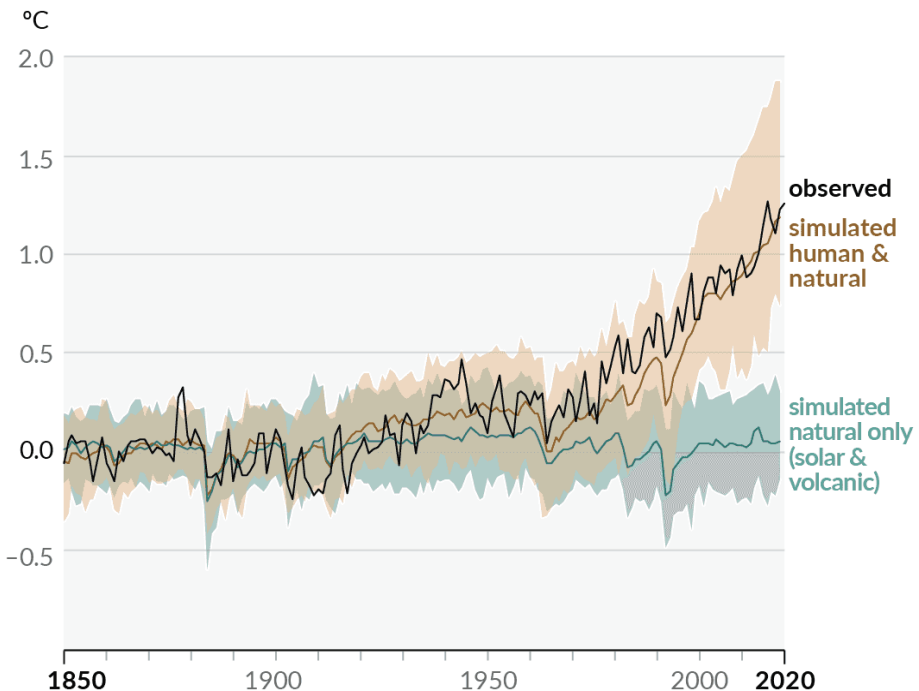
Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years

## Changes in global surface temperature relative to 1850–1900

(a) Change in global surface temperature (decadal average) as **reconstructed** (1–2000) and **observed** (1850–2020)

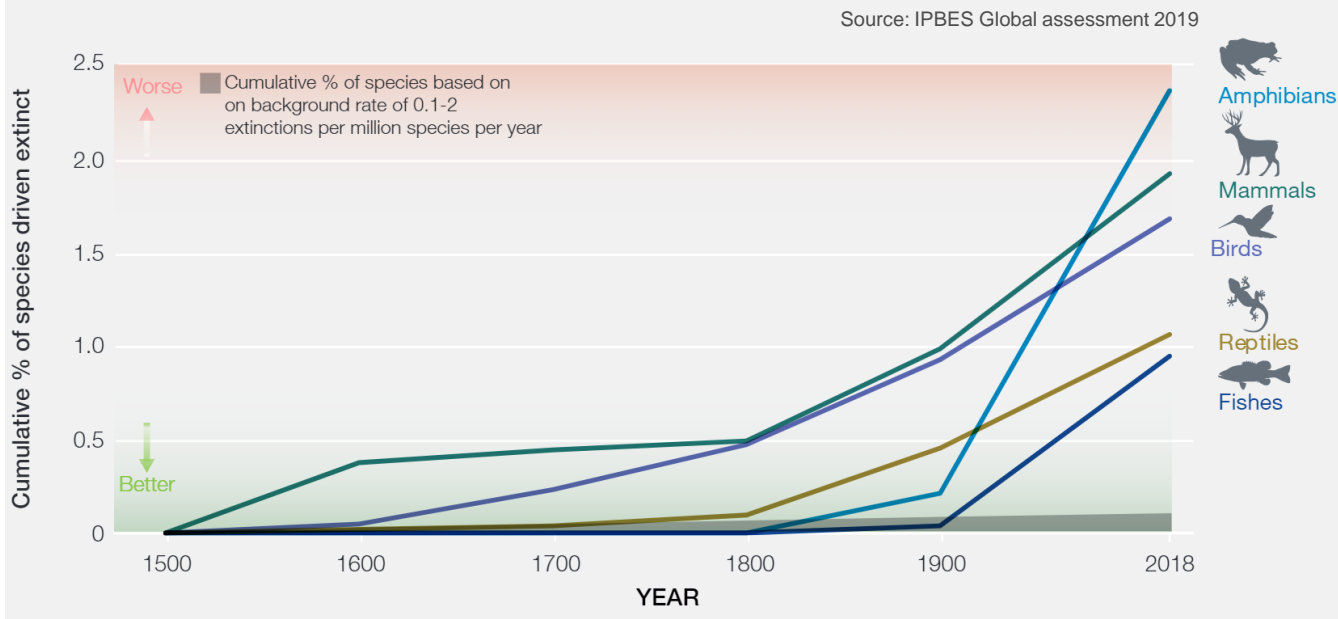


(b) Change in global surface temperature (annual average) as **observed** and simulated using **human & natural** and **only natural** factors (both 1850–2020)



# Biodiversity crisis

## Extinctions since 1500

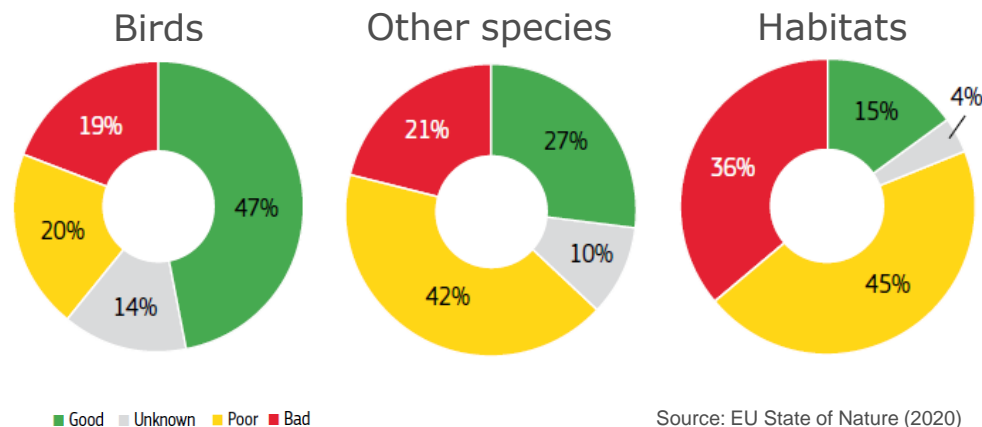


## European Union

- 80% of protected habitat types are in bad or poor status
- up to 70% of soils are in an unhealthy condition

In Western, Central and Eastern Europe:

- Wetlands have shrunk by 50% since 1970
- 71% of fish and 60% of amphibians have been declining over the last decade



Source: EU State of Nature (2020)

# Time is running out...

Intergovernmental Panel on Climate Change, 2022

***“Restoring ecosystems will be fundamental in helping to combat climate change and also reduce risks to food security”***

and we have a.....

***“...brief, rapidly closing window to secure a liveable future”***

# EU policy context



- the Birds and Habitats Directives, the Marine Strategy Framework Directive
- EU Biodiversity strategy for 2030
- Global biodiversity framework
- Nature restoration law *proposal*
- Marine action plan
- Climate policy and climate law
- Energy policy

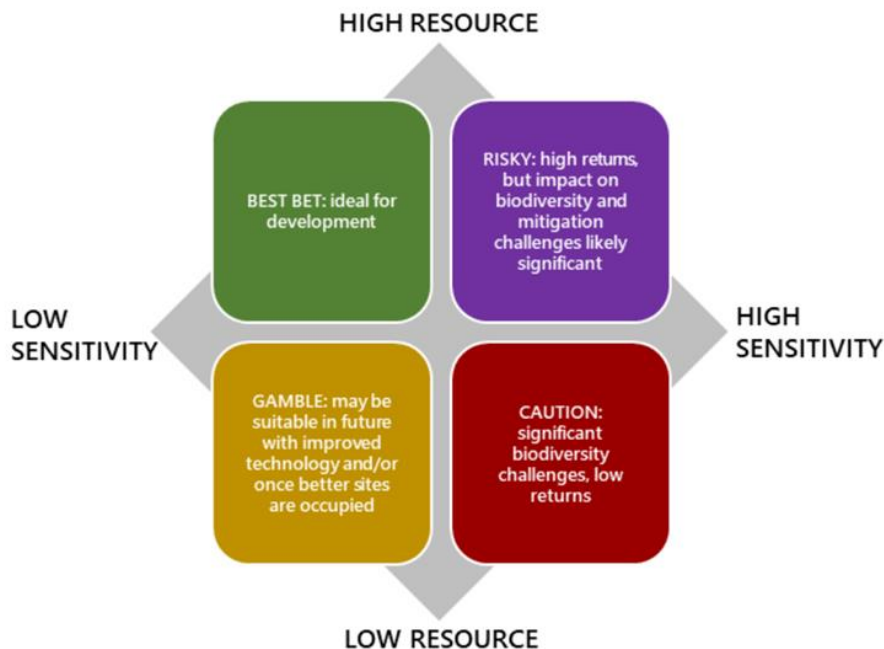
# The role of existing environmental legislation

- The EU policy and legislation (SEA, EIA, HD, WFD, MSFD, MSPD) already provide **tools to avoid conflicts between renewables and biodiversity**.
- The EU nature legislation allows for effective deployment of renewable energy infrastructure and its **coexistence with nature protection**.
- The Habitats Directive (Article 6.3) allows implementation of projects **if they do not harm the integrity** of the Natura 2000 sites.
- Flexibility (Article 6.4): projects affecting the integrity of the sites can be carried out, if it is proven that there are **no alternatives, appropriate compensatory measures** have been put in place, and the plan or project is of '**overriding public interest**' (presumed in renewables emergency regulation).

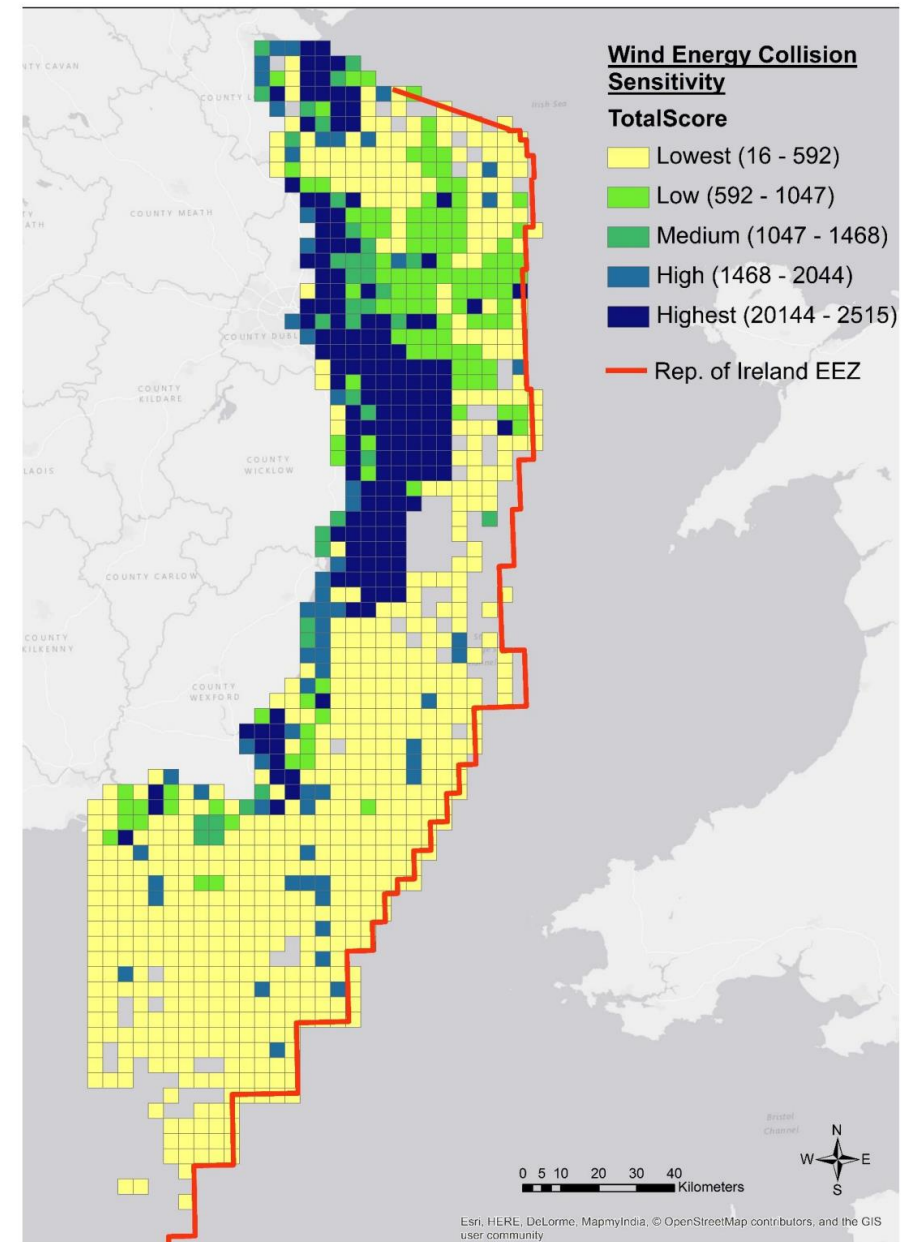


# The importance of strategic planning

- Conflicts are best avoided through **good strategic and integrated planning.**
- **Maritime spatial plans** must integrate nature protection/restoration, energy, fisheries and all other **uses of the sea.**



- Strategic planning of renewables **through sensitivity mapping.**



**Figure 4.** Trial composite sensitivity map of the Irish Sea (within the Republic of Ireland EEZ), following mapping and assessment of six seabird species in relation to the collision risk posed by wind energy developments.

Source: Burke, B. (2018) Trialling a Seabird Sensitivity Mapping Tool for Marine Renewable Energy Developments in Ireland. BirdWatch Ireland, Kilcoole, Co. Wicklow.

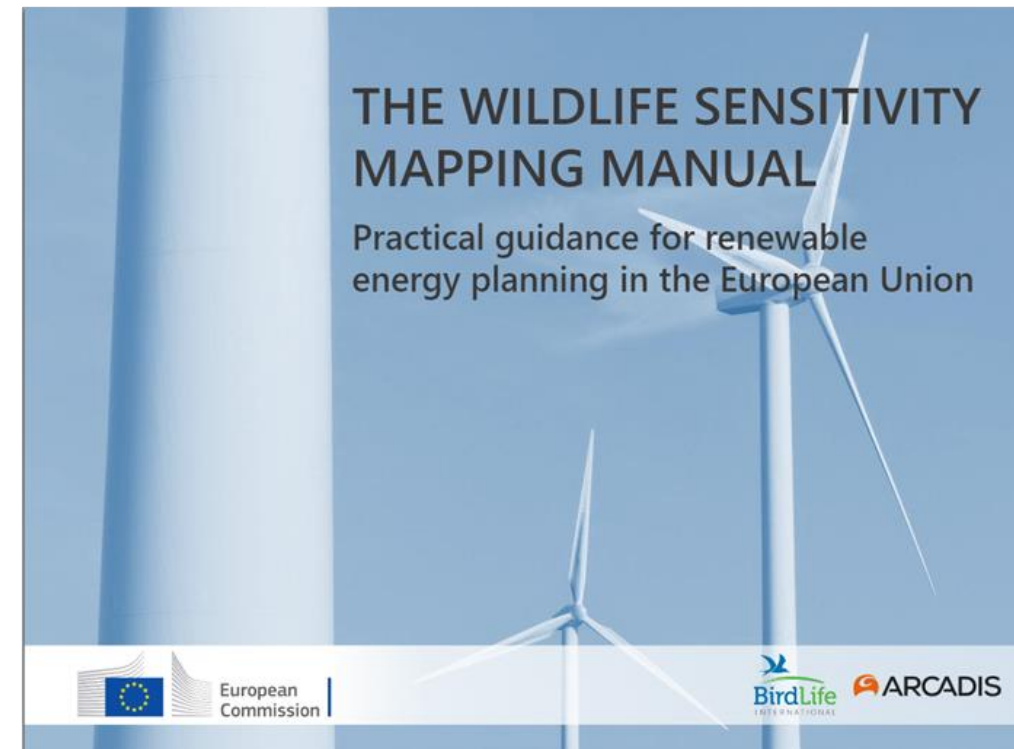
# Guidance and support

- **Guidance document on wind energy developments and EU nature legislation** clarifies existing obligations and flexibilities built in the EU law.
- **The wildlife sensitivity mapping manual** with case studies.
- **The recommendation on speeding-up permit-granting procedures** for renewable energy projects (and the accompanying guidance) adopted as part of REPowerEU.



Guidance document on  
wind energy developments and  
EU nature legislation

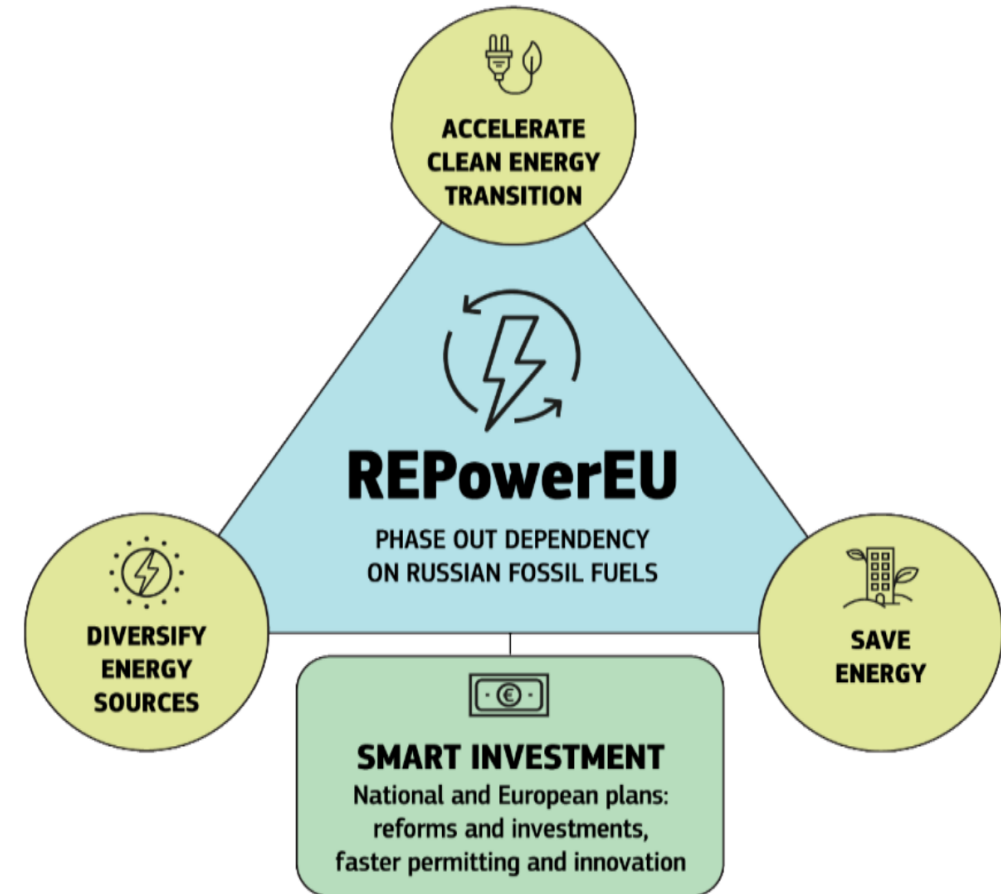
Guidance on Energy Transmission  
Infrastructure and EU nature legislation





# REPowerEU plan

- Reinforces and **accelerates the implementation of the European Green Deal** and tackling the climate crisis
- Three pillars:
  - diversifying energy sources
  - saving energy
  - accelerating renewable energy
- EU solar strategy, target for solar photovoltaics, European solar rooftop initiative
- Heat pumps
- Hydrogen...



# Revised Renewable Energy Directive

- **Renewable Energy Directive:** the EU sets its path towards a renewable energy future - **minimum binding target of 42.5% share** by 2030, and an aspiration to reach 45%.
- More **strategic approach to spatial planning**, including **Renewable Acceleration Areas (RAAs)** by 21 February 2026 (also option for Dedicated Infrastructure Areas). These are areas particularly suitable for certain renewable energy technologies the deployment of which is **not expected to have significant environmental impact**. Projects in RAAs can benefit from **simplified permitting procedures**.
- **RAAs exclude** Natura 2000, national protected areas, major bird and marine mammal migratory routes, other areas identified on the basis of sensitivity maps.

# Temporary emergency regulation

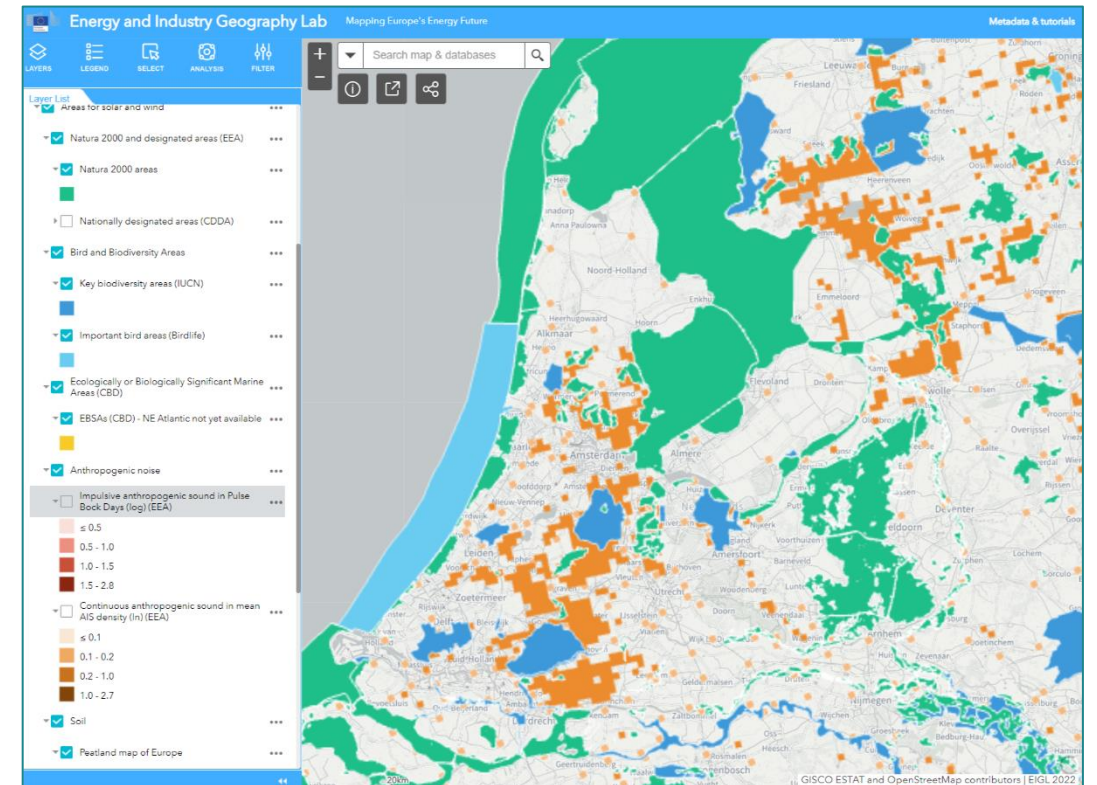
- Council Regulation (EU) 2022/2577 on RES: **Directly applicable to all MSs from 30 Dec 2022 to 30 June 2024**: Sets **new, temporary and targeted measures** to accelerate the deployment of certain RES
- Most provisions have a limited scope in terms of technologies and projects (e.g. solar installation on artificial structures and heat pumps)
- **Articles 3 (presumption of OPI)**, 5 (repowering) and **6 (permit-granting)** apply to all renewable energy sources
- Applies to **all permitting procedures** with a starting date within the duration of its application, regardless of their end date, as well as to ongoing processes which have not resulted in a final decision before 30 Dec 2022
- **Council Regulation (EU) 2024/223 amending Regulation (EU) 2022/2577**: Applicable from 1 July 2024 to 30 June 2025, **extending provisions** of the previous Emergency Regulation
- **New Article 3a** (optional for MSs) inserted on the **absence of alternative or satisfactory solutions** for the purposes of Articles 6(4) and 16(1) HD, Article 4(7) WFD and Article 9(1) BD enables the assessment of same technology projects only.

# European wind power action plan

- Published on **24 October 2024**
- Commission and Member States to work together in order to accelerate permitting (**online Q/A tool** before end 2023).
- **‘Accele-RES’** - frontloading transposition and implementation of the revised RED. Temporary emergency regime.
- **By April 2024**, the Commission will:
  - **Update** the Recommendation on speeding up permit-granting procedures for renewable energy projects and the Guidance on good practices to speed up permit-granting procedures for renewable energy projects and on facilitating power purchase agreements
  - **Issue Guidance** to the Member States on the designation of the renewables acceleration areas.
  - **Issue Recommendation and Guidance** on the design of renewable energy auctions including on the use of non-price criteria.

# Identification of RE acceleration areas for wind and solar

- EIGL tool has been **expanded** and is **embedded in the permitting recommendation** of REPowerEU
- EIGL is intended as an **instrument to support planning choices** by national and regional authorities who may not otherwise have immediate access to relevant datasets



[https://joint-research-centre.ec.europa.eu/energy-and-industry-geography-lab\\_en](https://joint-research-centre.ec.europa.eu/energy-and-industry-geography-lab_en)



# The Mediterranean context



Source: WWF-France (2019). Safeguarding marine protected areas in the growing Mediterranean blue economy. Recommendations for the offshore wind energy sector. PHAROS4MPAs project. 68 pages

Potential locations  
SOURCE: MedTrends (2015)  
Windfarm project  
SOURCE: EMODNET (2017), revised by WWF

#### WINDFARM PROJECTS

-  Planned OWF
-  Authorised OWF

#### POTENTIAL SUITABLE AREAS FOR OWF DEVELOPMENT



-  Suitable area for fixed OWF (water depth < 50 m and wind speeds greater than 5m/sec at 80 m height above sea level)
-  Suitable area for floating OWF (water depth 50 to 200 m and wind speeds greater than 5m/sec at 80 m height above sea level)

FIGURE 3. Potential areas suitable for OWF development, and planned and authorized OWF projects in the Mediterranean Sea



# Win-win solutions?



## OFFSHORE WIND / POSSIBLE SYNERGIES



**Artificial Reefs**  
provide new habitats for marine species



**3D Underwater Farming**  
of seaweeds and shellfish requires zero inputs and minimise acidification while sequestering CO<sub>2</sub>



**(Re)introducing Reef Building Species**  
for example, oysters or Ross worms (*Sabellaria spinulosa*)



**Noise Reduction**  
from installation of wind turbine foundations, to protect marine mammals



**Scour Protection**  
using materials such as rock and sand to protect cables and structures to prevent local seabed deepening



**Bird Protection**  
Elevated nacelle height can reduce bird collisions by providing migratory paths between water surface and swept wind area

# Thank you



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