



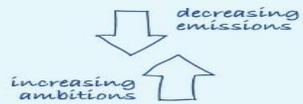
European Commission

## Paris Agreement: the EU's road to climate neutrality

In December 2015, for the first time **all countries worldwide** agreed on a collective effort to:

keep global warming well below 2°C

tackle climate change effects



The agreement requires parties to submit national plans to reduce emissions and to review these commitments **every 5 years**



### What the EU pledged

The EU has agreed to cut emissions by **at least 55% by 2030**, up from its 40% commitment in 2014.



The EU's end goal is to reach **climate neutrality by 2050**. This will entail a transition which should:

- require action from all sectors of the economy
- be socially balanced and fair
- preserve the EU's competitiveness



# EU's updated NDC & Technology

**December 2019:** the European Council (heads of state or government of the EU Member States, the European Council President and the President of the European Commission) endorsed the objective of achieving a climate-neutral EU by 2050, in line with the Paris Agreement.

**5 March 2020:** EU Council adopted a long-term low greenhouse gas emission development strategy of the EU and its Member States, reflecting this climate neutrality objective and submitted this to the UNFCCC Secretariat

**11 December 2020:** EU's Council endorsed a new, significantly more ambitious EU climate target for 2030 - at least 55 % net reduction in greenhouse gas emissions by 2030 compared to 1990 will be enshrined in the Climate Law

# How to achieve the targets of NDC?

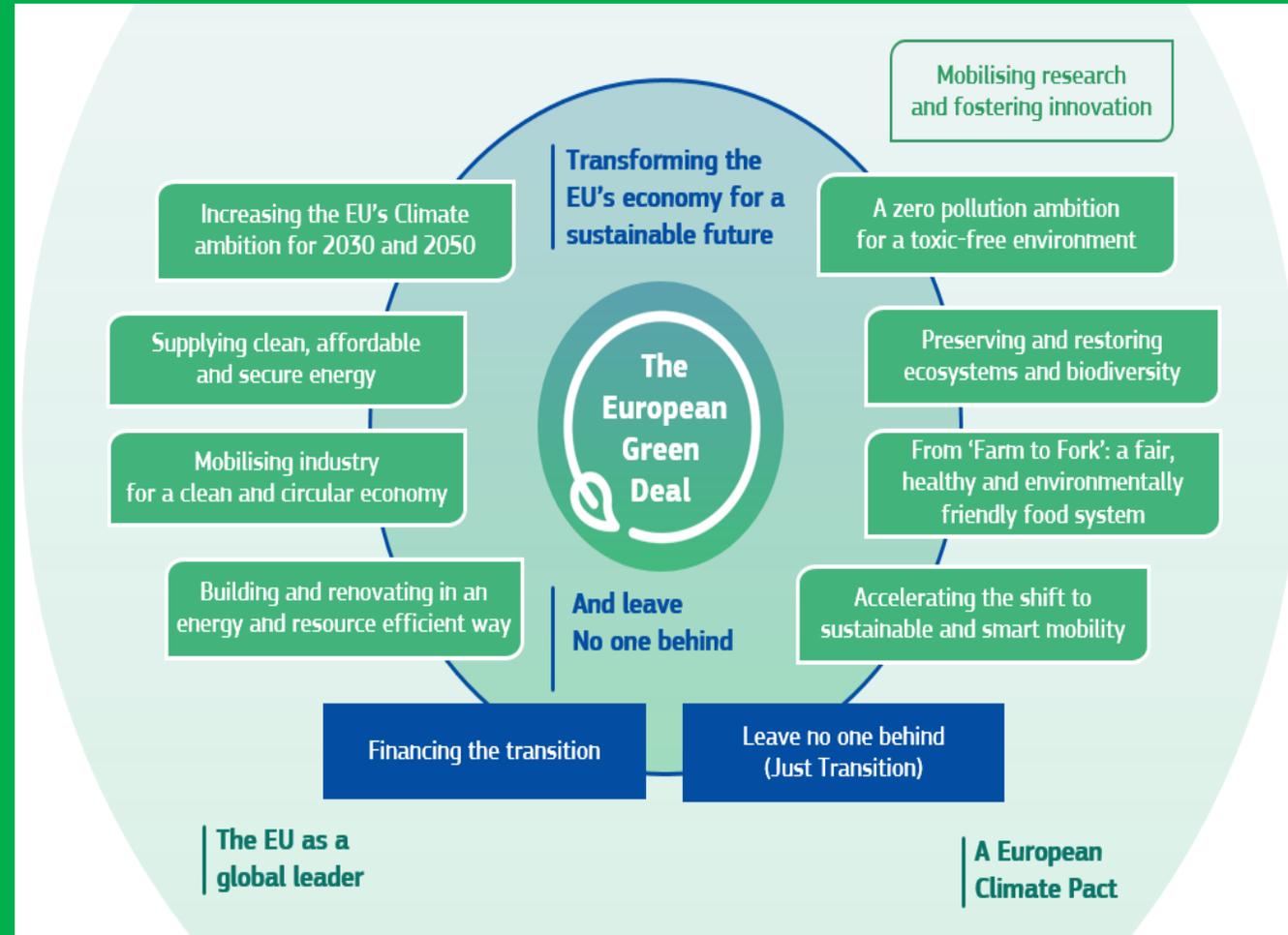
## Legally binding, Economy-wide Transformation:

### 21 April 2021- EU Climate Law:

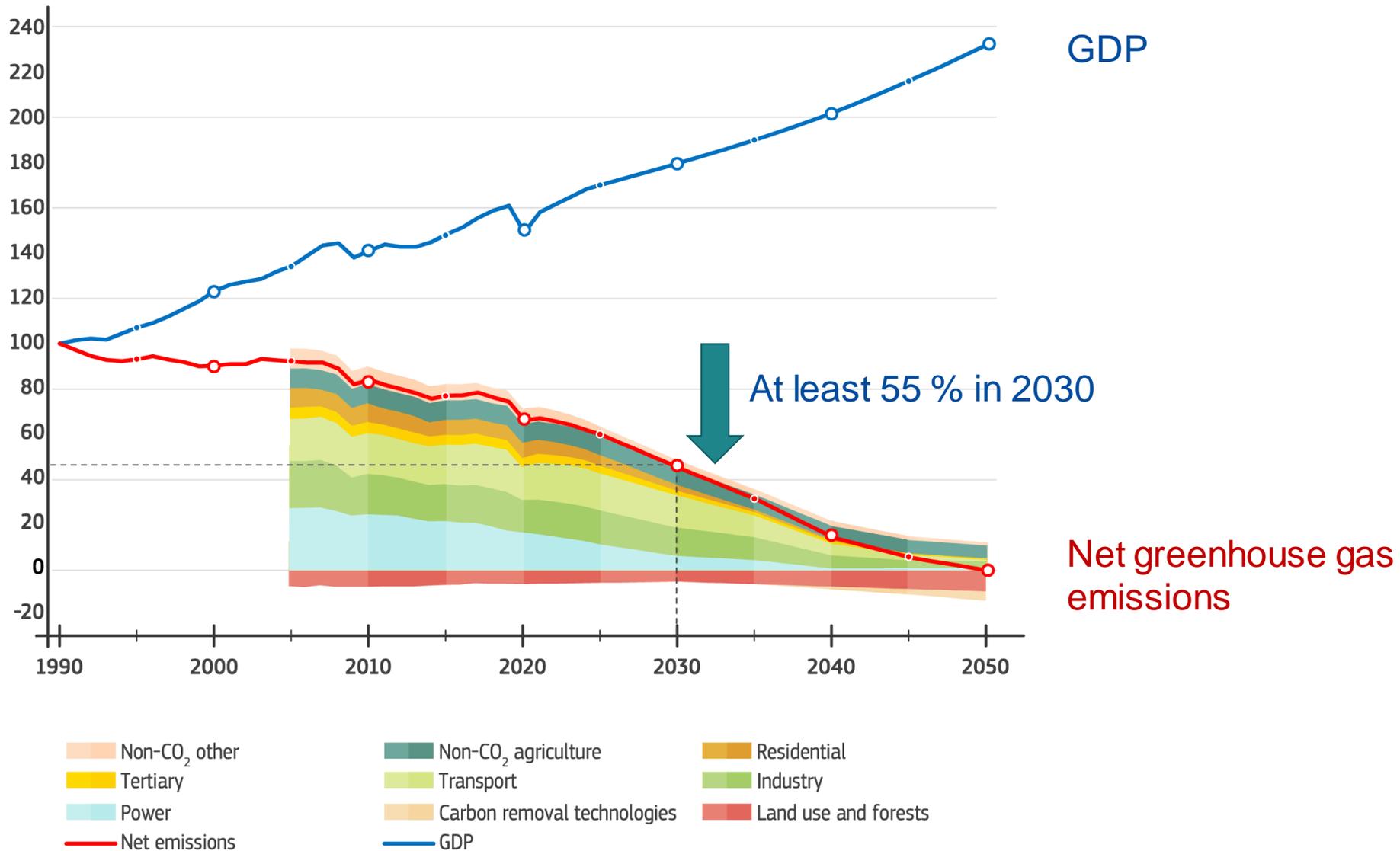
The Council's and the European Parliament's negotiators reached a provisional political agreement setting into law the objective of a climate-neutral EU by 2050, and a collective, net greenhouse gas emissions reduction target (emissions after deduction of removals) of at least 55% by 2030 compared to 1990 levels.

*'We are very happy with the provisional deal reached today. The European climate law is **"the law of laws"** that sets the frame for the EU's climate-related legislation for the 30 years to come. The EU is strongly committed to becoming climate neutral by 2050 and today we can be proud to have set in stone an ambitious climate goal that can get everyone's support. With this agreement we send a strong signal to the world - right ahead of the Leader's Climate Summit on 22 April - **and pave the way for the Commission to propose its "fit-for-55" climate package in June.***

*João Pedro Matos Fernandes, Minister of Environment and Climate Action*



# The EU's path towards climate neutrality



# European Climate Law: main elements

- Objective of Union-wide **climate neutrality by 2050**
- New **2030 target** of at least 55% net greenhouse gas emissions reduction
- Recognition of the need to enhance the EU's **carbon sink**
- Commitment to aim for **negative emissions** after 2050
- Articles ensuring **discipline** and **accountability**
- Mechanism for setting a **2040 target**, taking into account an indicative **greenhouse gas budget** for 2030-2050 to be published by the European Commission
- Assessing climate neutrality in **the impact assessment** of Commission proposals
- A strengthened role for **adaptation** to climate change;
- Process for voluntary sectoral **decarbonisation roadmaps**

# Implementing the new 2030 Climate Target

The EU will review and table new draft legislation by June 2021:

- Reinforced and expanded **EU Emissions Trading System**
- Updated **Effort-Sharing Regulation**
- Strengthened **Land Use, Land Use Change and Forestry Regulation**
- Revised **Energy Efficiency & Renewable Energy Directives** + Renovation Wave
- Tightening of **CO2 emissions performance standards for cars and vans**
- **Carbon Border Adjustment Mechanism** and Revision of Energy Taxation Directive

# Sectoral transition (1): energy and buildings

- Decarbonisation of the energy system is a priority (75 % of EU greenhouse gas emissions).
- **Reducing emissions by 60 % by 2030 compared to 2015 in buildings and the energy sector**, thanks to the rapid penetration of renewables, the use of the energy efficiency principle, electrification and energy system integration.
- **The use of fossil fuels will decrease substantially. The use of coal, for example, decreases by more than 70 % compared to 2015.**
- By 2030, the share of renewable electricity production will double to 65 % or more.
- Industry and buildings can be decarbonised later, and heating and cooling will reach a 40 % share of renewables by 2030.
- The renovation rate for buildings would have to double to 2 % (2030).

# Sectoral transition (2): transport and industry

- Reduction options: improvements in vehicle efficiency, changes in fuel mix, modal shift.
- The projections include increasing renewable energy for transport to 24 % by 2030 (based on RED II measurements), around 50 % improvement in CO<sub>2</sub> emissions per kilometre for passenger cars, compared to the 2021 targets.
- Clean hydrogen is crucial to decarbonise heavy transport and, through its derivatives, the aviation and maritime sectors. **2021- European Year of Rail: [https://europa.eu/year-of-rail/index\\_en](https://europa.eu/year-of-rail/index_en)**
- The projected increases in the use of bioenergy by 2030 are limited. The best way to produce bioenergy is through better use of biomass waste and residues, sustainable cultivation of energy crops, replacing the production of first generation biofuels based on food crops.
- Industry could reduce emissions by 25 % by 2030 compared to 2015 through a combination of best practices, use of waste heat and increased electrification.
- Preparing for the transition towards climate neutrality after 2030 will require the deployment of zero- and low-carbon technologies.

# Sectoral transition (3): no-CO<sub>2</sub> and land

- Emissions of methane, nitrous oxide and fluorinated gases from energy, waste and agriculture could be cost-effectively reduced by 35 % by 2030 compared to 2015.
- Rigorous implementation policies are essential for the waste sector, the methane strategy to address fugitive emissions in the energy system, the potential in the agricultural sector (e.g. efficiency in fertiliser use, precision farming, health of ruminant herds, anaerobic digestion)
- Sinking (= carbon sink) is decreasing. If land use practices are not changed, the increase in harvests could see a further decline in the sink to 225 million tonnes of CO<sub>2</sub>eq by 2030. Increasing the risks of natural hazards due to climate change itself.
- Reversing the current trend requires significant action in the short term due to long waiting times, especially in forestry. The Impact Assessment estimates a potential to levels above 300 million tonnes of CO<sub>2</sub>eq.

# Investment

- ✓ EU Multi-annual Financial Framework (2021-2027): €1.8 trillion - the largest package ever financed through the EU budget.

[https://ec.europa.eu/info/sites/info/files/about\\_the\\_european\\_commission/eu\\_budget/mff\\_factsheet\\_agreement\\_en\\_web\\_20.11.pdf](https://ec.europa.eu/info/sites/info/files/about_the_european_commission/eu_budget/mff_factsheet_agreement_en_web_20.11.pdf)

- ✓ 30% of the EU funds, under both NextGeneration EU and MFF (including the International Cooperation Budget), will be spent to fight climate change, the highest share ever of the largest European budget ever. The package also pays specific attention to biodiversity protection and gender-related issues.

- ✓ Greening the Investments – 21/04/2021

Press release | 21 April 2021 | Brussels

**Sustainable Finance and EU Taxonomy: Commission takes further steps to channel money towards sustainable activities**

[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_1804](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1804)

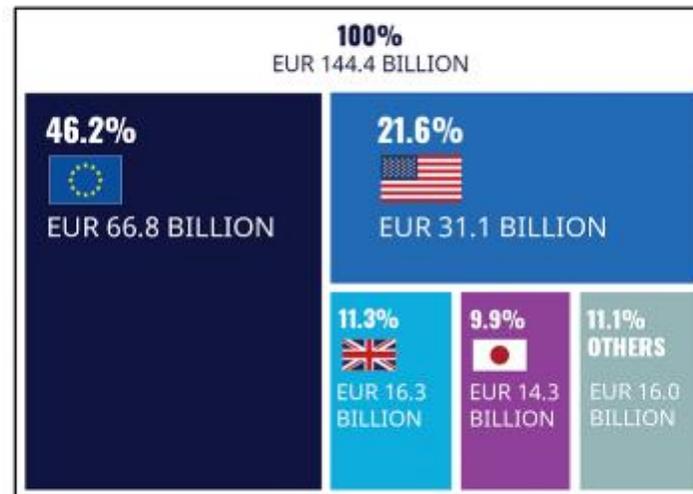
# EU's International Cooperation

13/4/2021 – OECD Official ODA:

Team Europe increased Official Development Assistance to €66.8 billion as the world's leading donor in 2020

[https://ec.europa.eu/international-partnerships/news/team-europe-increased-official-development-assistance-eu668-billion-worlds-leading-donor-2020\\_en](https://ec.europa.eu/international-partnerships/news/team-europe-increased-official-development-assistance-eu668-billion-worlds-leading-donor-2020_en)

## OFFICIAL DEVELOPMENT ASSISTANCE



Preliminary figures for 2020 ODA

# EU's new Neighbourhood, Development and International Cooperation Instrument (NDICI)

Large allocation: EUR 79.5 bln

Plenty of Opportunities for Alliances & Partnerships



## Our Priorities



### Priorities

A stronger global actor – The EU has set priorities for its external cooperation to face global challenges, promote its values and contribute to peace and prosperity in the world.

More details

### Funding

The EU is the largest development cooperation donor in the world. We provide funding in many different fields and through different methods depending on the needs and objectives of our partner countries.

More details

[https://ec.europa.eu/international-partnerships/our-work\\_en](https://ec.europa.eu/international-partnerships/our-work_en)



[https://ec.europa.eu/international-partnerships/funding\\_en](https://ec.europa.eu/international-partnerships/funding_en)

For NDICI's priority developing countries → Contact the EUD delegation in your country

Partners: all levels of Government (national, sub-regional, local & CSOs)

## Tackling the Digital Divide

[https://ec.europa.eu/international-partnerships/projects/africaconnect\\_en](https://ec.europa.eu/international-partnerships/projects/africaconnect_en)



**Digital Energy Challenge is open: Deadline for proposals Proposals: 30 June 2021**

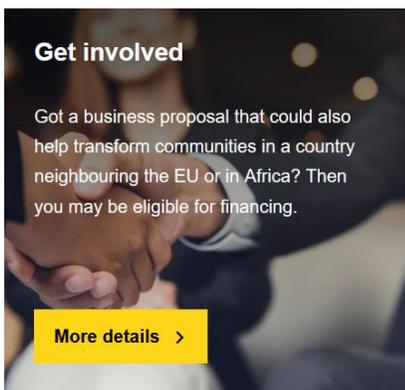
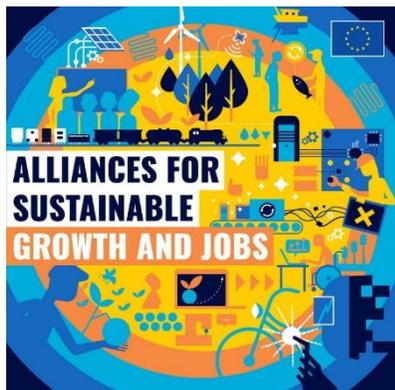
<https://www.afd.fr/en/form/digital-energychallenge-for-start-ups-project-submission>

or <https://www.afd.fr/en/form/digital-energy-challenge-forutilities-submission>

## Possibilities for participating in Horizon Europe – EU's Research & Innovation Framework (2021-2027) managed directly by the EU

[https://ec.europa.eu/info/horizon-europe\\_en](https://ec.europa.eu/info/horizon-europe_en)

[https://ec.europa.eu/info/research-and-innovation/contact/research-enquiry-service\\_en](https://ec.europa.eu/info/research-and-innovation/contact/research-enquiry-service_en)



[https://ec.europa.eu/international-partnerships/sustainable-growth-and-jobs\\_en](https://ec.europa.eu/international-partnerships/sustainable-growth-and-jobs_en)

[https://ec.europa.eu/eu-external-investment-plan/home\\_en](https://ec.europa.eu/eu-external-investment-plan/home_en)

## Financial guarantees or blended finance comprising grants and loans

[https://ec.europa.eu/eu-external-investment-plan/sites/devco-eip/files/documents/efsd\\_guarantees-feb\\_2021-en.pdf](https://ec.europa.eu/eu-external-investment-plan/sites/devco-eip/files/documents/efsd_guarantees-feb_2021-en.pdf)

Participation in the **European Enterprise Network** – A call for third countries expression of interest will open by June 2021

Entities eligible to apply: Organisations with track record in providing support services to SMEs, ideally in an international context (usually chambers of commerce, research/innovation agencies, academia, governmental bodies...

<https://een.ec.europa.eu/about>

## EU's support for Climate Information technologies in ACP countries:

- ✓ The EU Earth Observation Programme Copernicus
- ✓ GMES & Africa (<http://gmes.africa-union.org/>)
- ✓ ClimSA (just launched): <https://www.climsa.org/>
- ✓ A cluster of Horizon 2020 projects with International partners (eg Africultures, Twiga, SINCERE): <https://cordis.europa.eu/>
- ✓ **SINCERE**: Strengthening INternational Cooperation on climatE change Research
- ✓ <http://www.jpi-climate.eu/sincere>)



# COPERNICUS architecture

**FULL, FREE AND OPEN**

	<b>SENTINEL-1:</b> 4-40m resolution, 3 day revisit at equator	2 Sats in orbit
	<b>SENTINEL-2:</b> 10-60m resolution, 5 days revisit time	2 Sats in Orbit
	<b>SENTINEL-3:</b> 300-1200m resolution, <2 days revisit	2 Sats in Orbit
	<b>SENTINEL-4:</b> 8km resolution, 60 min revisit time	1st Launch in 2020
	<b>SENTINEL-5p:</b> 7-68km resolution, 1 day revisit	1 Sat in Orbit
	<b>SENTINEL-5:</b> 7.5-50km resolution, 1 day revisit	1st Launch in 2021
	<b>SENTINEL-6:</b> 10 day revisit time	1st Launch in 2020

**Sentinels**



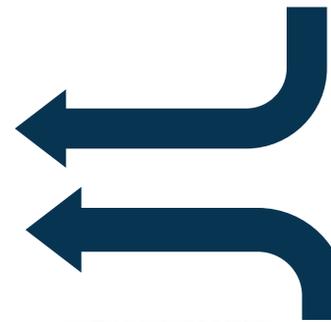
## 6 services use Earth Observation data to deliver



## added-value products



## Contributing missions



In Situ





Copernicus

# COPERNICUS SERVICES

*Monitoring the State of the Earth System Environment ...*



Land Monitoring



Marine Environment Monitoring



Climate Change



Atmosphere Monitoring



Emergency Management



Security

*... Six cross-cutting Thematic Services*



Land  
Monitoring

# Benefit areas and products examples

Ecosystems

Biodiversity

Agriculture

Forestry

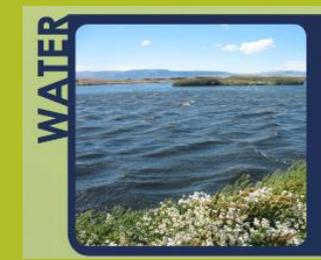
Energy

Natural Resources

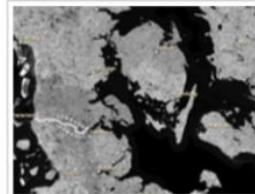
Water

Urban planning

## Global



## Pan-European



[Image Mosaics](#)



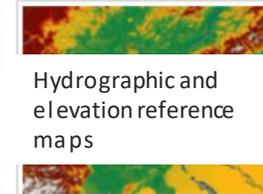
EU Land Cover

[CORINE Land Cover](#)



Specific land cover info

[High Resolution Layers](#)



Hydrographic and elevation reference maps

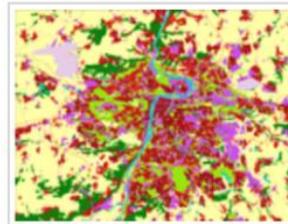
[Reference Data](#)



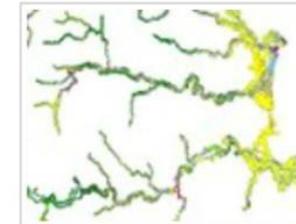
% of built-up area

[Related Pan-European products](#)

## Local



[Urban Atlas](#)



[Riparian Zones](#)



[Natura 2000 \(N2K\)](#)



User Uptake

# COPERNICUS DATA ACCESS: KEY LINKS

## Access to Satellite data

**FULL, FREE AND OPEN \***



**Scientific and Other Access**

<https://scihub.copernicus.eu/>



*Copernicus Space Component Data Access Portal\**  
CSC-DA

<https://spacedata.copernicus.eu/>

**FULL, FREE AND OPEN \***



- Copernicus Online Data Access (CODA)
- EUMETCast:  
[www.eumetcast.com](http://www.eumetcast.com)  
*Needs to get a station and pay a yearly fee*

## Access to Copernicus Services Data

- Land-related data: <http://land.copernicus.eu>
- Atmosphere-related data: <http://atmosphere.copernicus.eu>
- Marine-related data: <http://marine.copernicus.eu>
- Emergency-related data: <http://emergency.copernicus.eu>
- Climate change-related data: <http://climate.copernicus.eu> (Beta version)

**FULL, FREE AND OPEN**

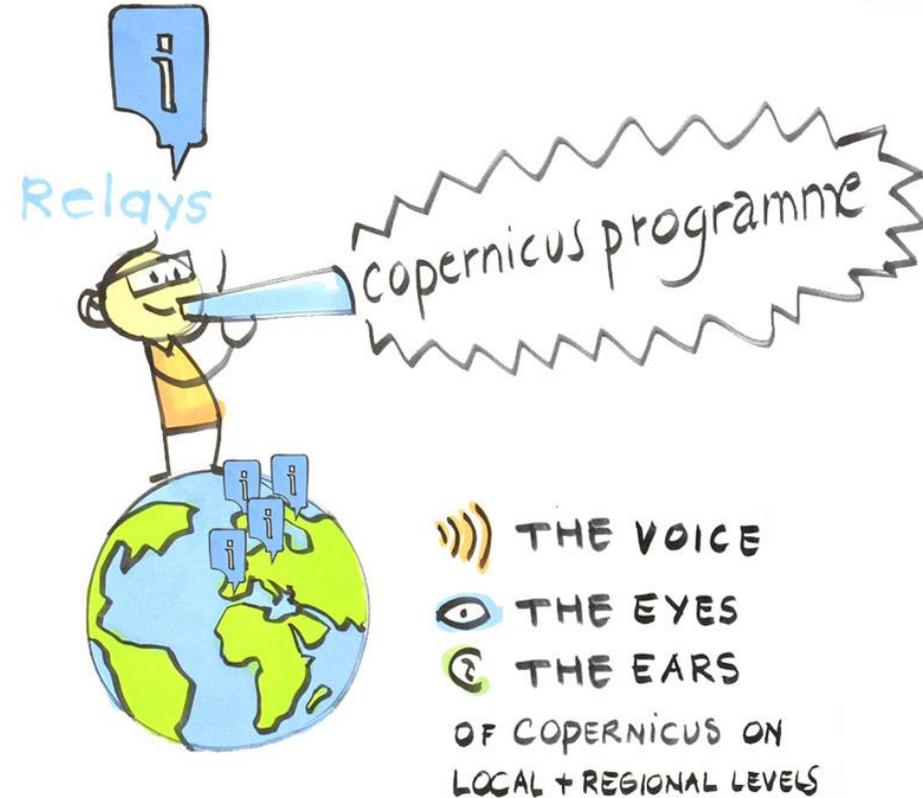
\* Not for Security Services And Data purchased from third parties

(\*) Includes instructions on how to access Contributing Missions data

JOIN THE COPERNICUS RELAYS NETWORK !

# Copernicus Relays

- Reaching end-users in different countries and regions worldwide
- Content localization
- Local and global cooperation
- Support to local users
- Organizing promotional events and training



THE MEMBERS OF THIS NETWORK ARE BRIDGES BETWEEN COPERNICUS AND THE END-USERS OF THE PROGRAMME INCLUDING BUSINESSES, START-UPS AND THE EU CITIZENS

g u i d o s

<https://www.copernicus.eu/en/opportunities/public-authorities/copernicus-relays>

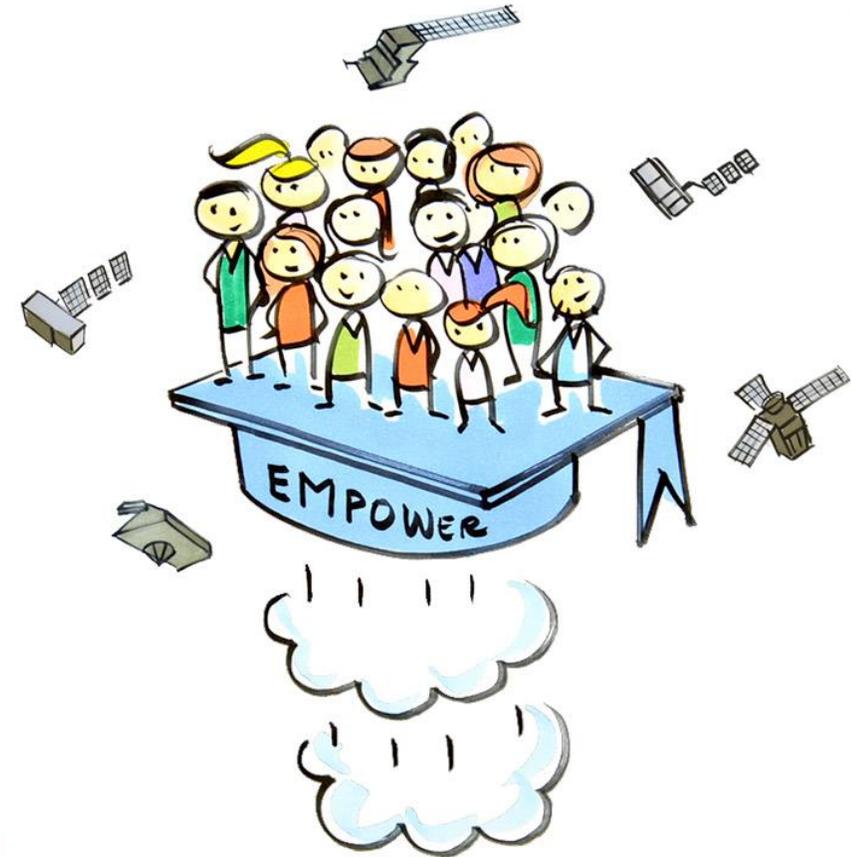


Expression for interest to join via the EU Delegations

# Copernicus Academy

- Reaching academic institutions worldwide
- Enabling global Earth Observation research network
- Promoting space in education
- Accelerate research to market link
- Building skills

JOIN THE COPERNICUS ACADEMY



THE MEMBERS OF THIS NETWORK ENSURE THAT SKILLS ARE DEVELOPED TO ENABLE COPERNICUS TO UNLEASH ITS FULL POTENTIAL

<https://www.copernicus.eu/en/opportunities/education/copernicus-academy>



Expression for interest to join via the EU Delegations



# Together: European Climate Pact

- This incredible journey towards Climate neutrality isn't a top-down journey.
- The European citizens are consulted in every important piece of policy and regulation through an e-platform and a EU climate Pact to raise awareness and mobilise citizens and society at large in the fight against climate change

## European Climate Pact

The European Climate Pact is an EU-wide initiative inviting people, communities and organisations to participate in climate action and build a greener Europe.

The Pact is an EU-wide initiative that invites people, communities and organisations to:

- **Connect** and **share** knowledge
- **Learn** about climate change
- Develop, implement and scale up **solutions**

As an open and inclusive initiative, the Pact will evolve and grow thanks to the creativity, needs and ideas of those becoming part of it.

## Focus areas

In the starting phase, the Pact will prioritise actions focused on four areas that offer immediate benefits not only for the climate and the environment, but also for the health and wellbeing of citizens:

- Green areas
- Green transport
- Green buildings
- Green skills

The Pact will expand over time to other areas, such as sustainable consumption and production, the quality of soils, healthy food and sustainable diets, oceans, rural and coastal areas and others.

The Pact has an open mandate and its scope will evolve based on the ideas and contributions of the people and organisations that become part of it.

[https://ec.europa.eu/clima/policies/eu-climate-action/pact\\_en](https://ec.europa.eu/clima/policies/eu-climate-action/pact_en);

<https://europa.eu/climate-pact/select-language?destination=/node/1>]

*European citizens' initiatives portal: [https://europa.eu/citizens-initiative/home\\_en](https://europa.eu/citizens-initiative/home_en)*



**M**

[@EuropeanCommission](https://www.instagram.com/EuropeanCommission)



[europeancommission](https://www.instagram.com/europeancommission)



[EUTube](https://www.youtube.com/EUTube)



[European Commission](https://www.linkedin.com/European Commission)



[EU Spotify](https://www.spotify.com/EU Spotify)



[ec.europa.eu/](https://ec.europa.eu/)



[europa.eu/](https://europa.eu/)



[@EU Commission](https://twitter.com/@EU Commission)



[@EuropeanCommission](https://www.facebook.com/@EuropeanCommission)