

#### In Brief



COPERNICUS WILL GENERATE €67 TO €131 BILLION IN BENEFITS TO THE EUROPEAN SOCIETY BETWEEN 2017 AND 2035. THIS IS 10 TO 20 TIMES THE COST OF THE PROGRAMME.



MOST AMBITIOUS AND SUCCESSFUL EARTH OBSERVATION PROGRAMME IN THE WORLD AND THE THIRD LARGEST SPACE DATA PROVIDER GLOBALLY.



WITH A FULL, FREE AND OPEN DATA
POLICY, COPERNICUS IS A GLOBAL
GAME-CHANGER IN EARTH OBSERVATION, A
DOMAIN WHICH WAS TRADITIONALLY
RESERVED
FOR GOVERNMENTS, LARGE COMPANIES
AND SCIENTISTS.



BEYOND 2020 COPERNICUS WILL GENERATE ABOUT €1 BILLION OF REVENUE FOR THE SPACE INDUSTRY AND CREATE 4,000 JOBS EVERY YEAR.



SINCE 2014, THE ECOSYSTEM ENABLED BY COPERNICUS DATA AND INFORMATION DISPLAYS AN ANNUAL GROWTH OF 17%. THIS IS MORE THAN 8 TIMES THE EU ECONOMIC GROWTH RATE, WHICH IS 2% ON AVERAGE.



THE NUMBER OF COPERNICUS USERS HAS DOUBLED EVERY YEAR SINCE 2014. IN MAY 2018, THERE WERE 150,000 USERS OF COPERNICUS.



#### SUPPORTING A STRONGER EUROPE

Copernicus is the European Union's Earth observation programme. With the constellation of Sentinel satellites and 6 thematic services, Copernicus observes our planet to protect our environment and ensure our security.



Copernicus data supports various industries, creates new skilled jobs and helps to grow the European economy.



There are considerable cost savings from having a single EU programme, coordinating national initiatives.



Copernicus is a long-term investment in the well-being of our planet. With a regular and continuous observation of the Earth we are better prepared to face environmental challenges and understand, mitigate and respond to climate change.



A vibrant Copernicus start-up scene is unfolding with hundreds of new ventures created using Copernicus data and information.



Thanks to Copernicus,
Europe is less dependent on
third-country data sources
and can act
as an autonomous
international player.



Copernicus is crucial for Europe's security – it provides satellite information for border and maritime surveillance, European external actions such as peacekeeping, and helps to build a safer future for all European citizens.





# BENEFITS OF COPERNICUS





# AIR POLLUTION

Air pollution is a growing concern in Europe and the world. Euronews uses Copernicus data for their daily air quality forecast. A number of mobile applications have been developed providing local information about air quality, pollen and UV-radiation in various European cities. Copernicus also helps policymakers – with Copernicus they are better equipped to meet the EU air pollution targets under the 2013 National Emission Ceilings Directive.

### AGRICULTURAL PRODUCTIVITY

Copernicus is paving the way for the future of the CAP and Farming 2.0. Copernicus data is used for precision farming, which relies on timely information to optimise and minimise the use of fertilisers and water. Copernicus will also be used to streamline CAP monitoring by lowering the number of required on-the-spot checks. Copernicus empowers farmers, encourages sustainable farming practices and helps to ensure food security for the future of Europe.

#### **TOURISM**

Beachgoers in Europe rely on Copernicus data-based apps to receive information about weather and water conditions, the UV index and even jellyfish warnings.

#### RESOURCES MANAGEMENT

Water bodies such as lakes, lagoons and reservoirs provide us with a range of ecosystem services, including fresh drinking water, recreation, transport and fishing. Copernicus data helps to monitor parameters essential for these activities and ensures that the biodiversity of local ecosystems is preserved. Copernicus also helps to monitor water quality inland and in coastal areas while enabling water savings through better irrigation management in agriculture.

#### COPERNICUS



#### SUPPORTING THE RENEWABLE ENERGY INDUSTRY

Copernicus supports the renewable energy industry by providing specialised information that improves site selection and design for wind and solar farms.

By empowering renewable businesses today, we avoid CO2-emissions and help to build the sustainable Europe of tomorrow.

#### IMPROVED MANAGEMENT OF OUR FORESTS

With Copernicus data, forest monitoring is faster, easier and more cost-effective. It enables private and public forest owners to comply with the EU directives and incentivises them to adopt more sustainable management practices, which lead to improved yields and other long-term benefits.

### EMERGENCY MANAGEMENT

The Copernicus Emergency Management Service (EMS) has been activated over 340 times to provide emergency maps for risk reduction and post-disaster activities following floods, forest fires, earthquakes, disease outbreaks, hurricanes and cyclones. Through the EMS, Copernicus helps to save lives in Europe and globally.

# URBAN AREA MONITORING

Copernicus provides critical information about the safety of infrastructures such as buildings, roads, bridges and power generation assets. Copernicus also measures the land surface temperature which helps to easily map urban hot spots, which create Urban Heat Islands. Equipped with this kind of information, policy makers can create a safer environment for their citizens.

# IMPROVED BORDER SURVEILLANCE

The European Coast and Border Guard Agency (Frontex) uses Copernicus for improved situational awareness at the EU's external borders, for search and rescue operations at sea, and for fighting cross-border crime and illegal activities such as arms and drug smuggling.