

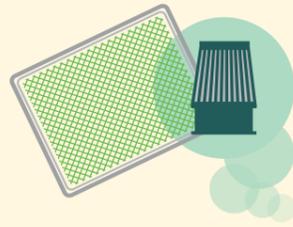
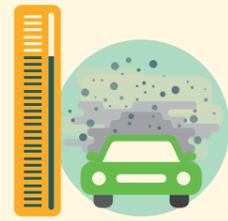
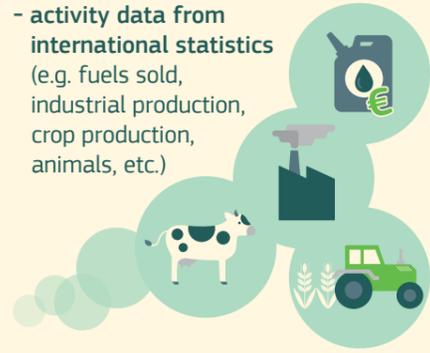
HOW DOES IT WORK?

Emissions are calculated using:

- activity data from international statistics (e.g. fuels sold, industrial production, crop production, animals, etc.)

- emission factors (e.g. how much of a certain pollutant is emitted for a certain amount of fuel burnt)

- technologies penetration and abatement measures (e.g. filters on vehicles or on a stack of a power plant, etc.)



WHAT DOES IT TELL US?

Examples of key findings:

Global fossil CO₂ emissions are still rising (+ 19 % with respect to 2005), although **not in Europe** (- 29 % with respect to 2005). Efforts to reduce emissions are now put forward in a transparent way under the **Paris agreement**, but verification of their effectiveness will need consistent atmospheric measurements and global tool linking emissions to measurements.

	Globe 2020 vs 1990 (fossil CO ₂)	EU27 2020 vs 1990 (fossil CO ₂)	EU27 2018 vs 1990 (GHG)
Power industry	+ 72 %	- 43 %	- 24 %
Other industrial combustion	+ 58 %	- 46 %	- 39 %
Buildings	+ 1 %	- 32 %	- 26 %
Transport	+ 59 %	+ 8 %	+ 23 %
Other sectors	+ 97 %	- 23 %	- 24 %

HOW MANY DOWNLOADS?



ARE YOU CURIOUS TO KNOW MORE?

The Emissions Database for Global Atmospheric Research (EDGAR): <https://edgar.jrc.ec.europa.eu>

GHG emissions of all world countries, 2021 report: https://edgar.jrc.ec.europa.eu/report_2021

COLLABORATIONS



EDGAR The Emissions Database for Global Atmospheric Research

Mapping human emissions on Earth

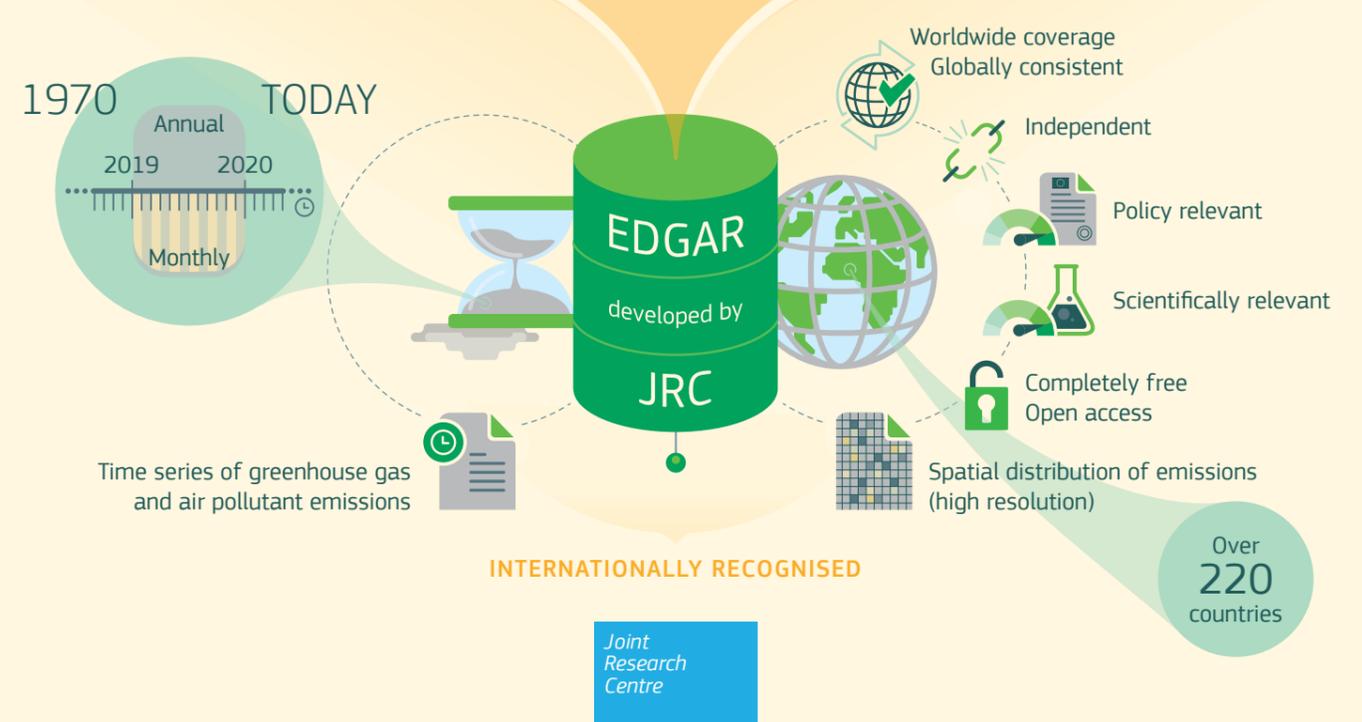
WHAT IS IT?

EDGAR is a multipurpose, independent, global database of human emissions of greenhouse gases and air pollution on Earth.



ACCOUNTABILITY

EXCELLENCE



WHAT CAN IT BE USED FOR?

EDGAR is used as independent verification system in support of:

- control strategies for emission mitigation



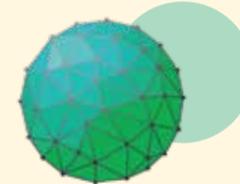
- emission trend analysis and projections



- international treaty reporting requirements (e.g. Paris agreement)



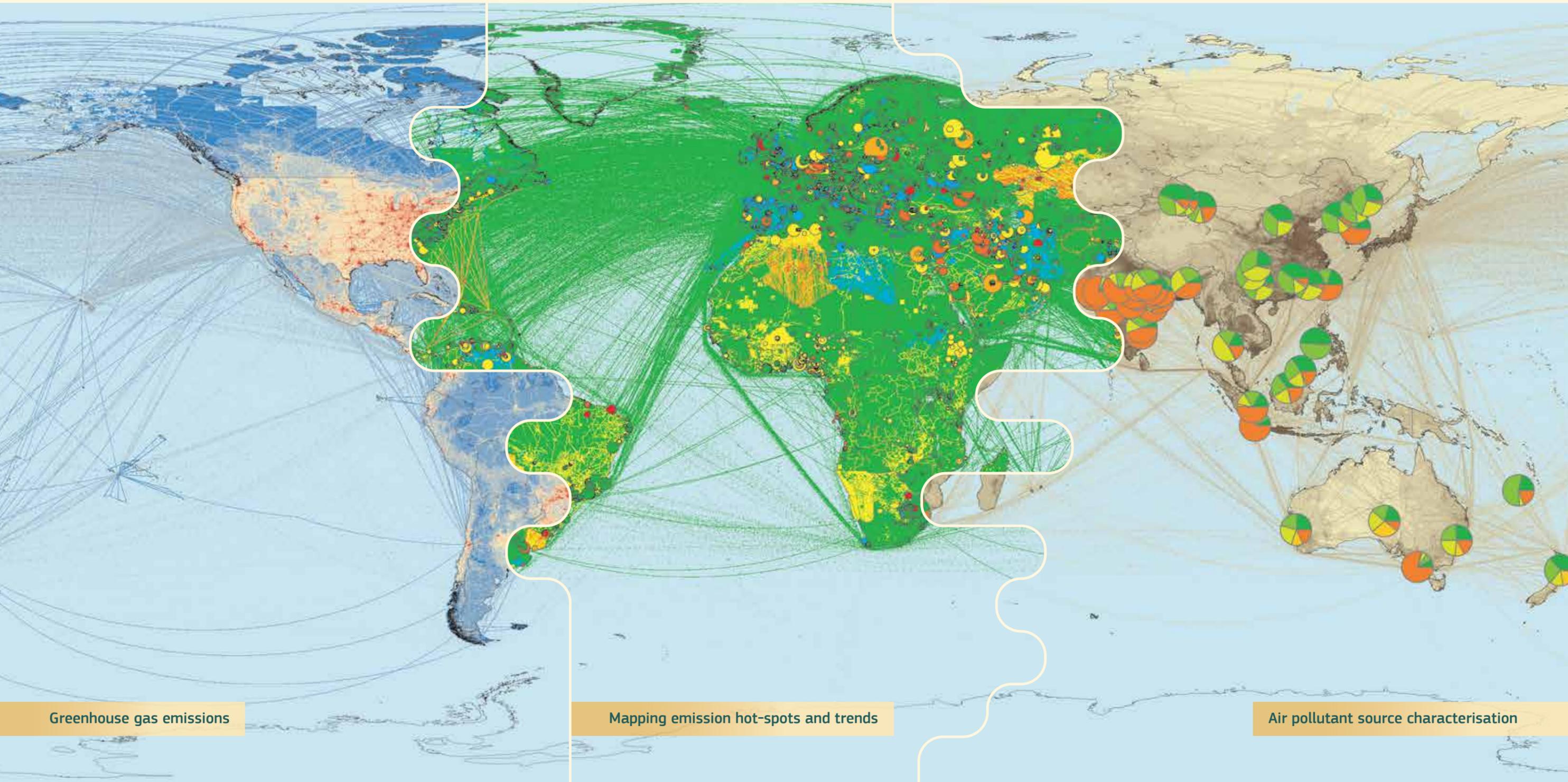
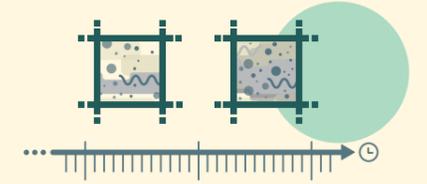
- global and regional modelling of atmospheric pollution and climate change



- evaluate current and historical policy impacts at the European and global scales



- track emissions changes in emissions sources, fuels, technologies and abatement measures



Greenhouse gas emissions

Mapping emission hot-spots and trends

Air pollutant source characterisation