

INNOVATING WITH NATURE



Nature-based solutions are designed to bring more nature and natural features and processes to cities, landscapes and seascapes. These innovative solutions also support economic growth, create jobs and enhance our well-being.

CHALLENGES



CLIMATE CHANGE AND ENERGY



landslides

UNSUSTAINABLE & UNHEALTHY CITIES

1980-2010

75,000 DEATHS in the EU due to heatwaves

= 67% of all deaths from natural disasters

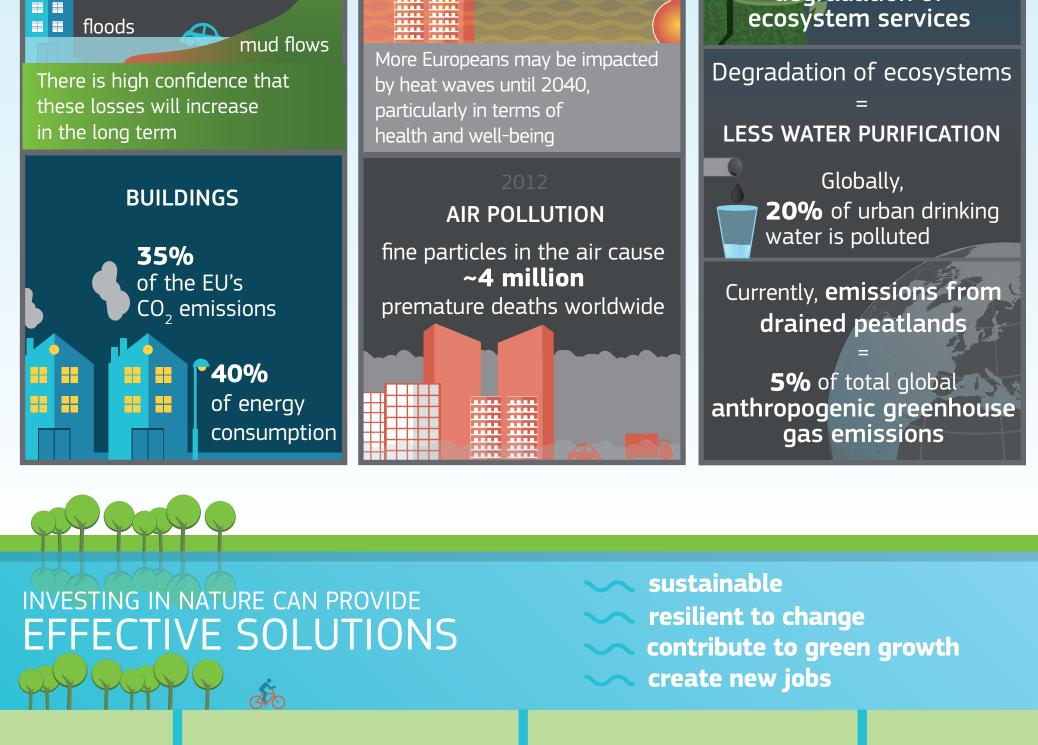


DEGRADATION OF ECOSYSTEMS

2011-202 up to



EU OPPORTUNITY COST of not halting biodiversity loss and degradation of





INCREASE RESILIENCE

Green roofs can cool buildings in the summer and prevent heat loss in the winter

-**10%**) energy use

European market for green roofs

+ €380m sales

E

+ 11m m² yearly

DECREASE URBAN HEAT STRESS

Trees, green space and vegetation can **attenuate urban heat stress** and **reduce** temperatures by

up to 13°C compared to

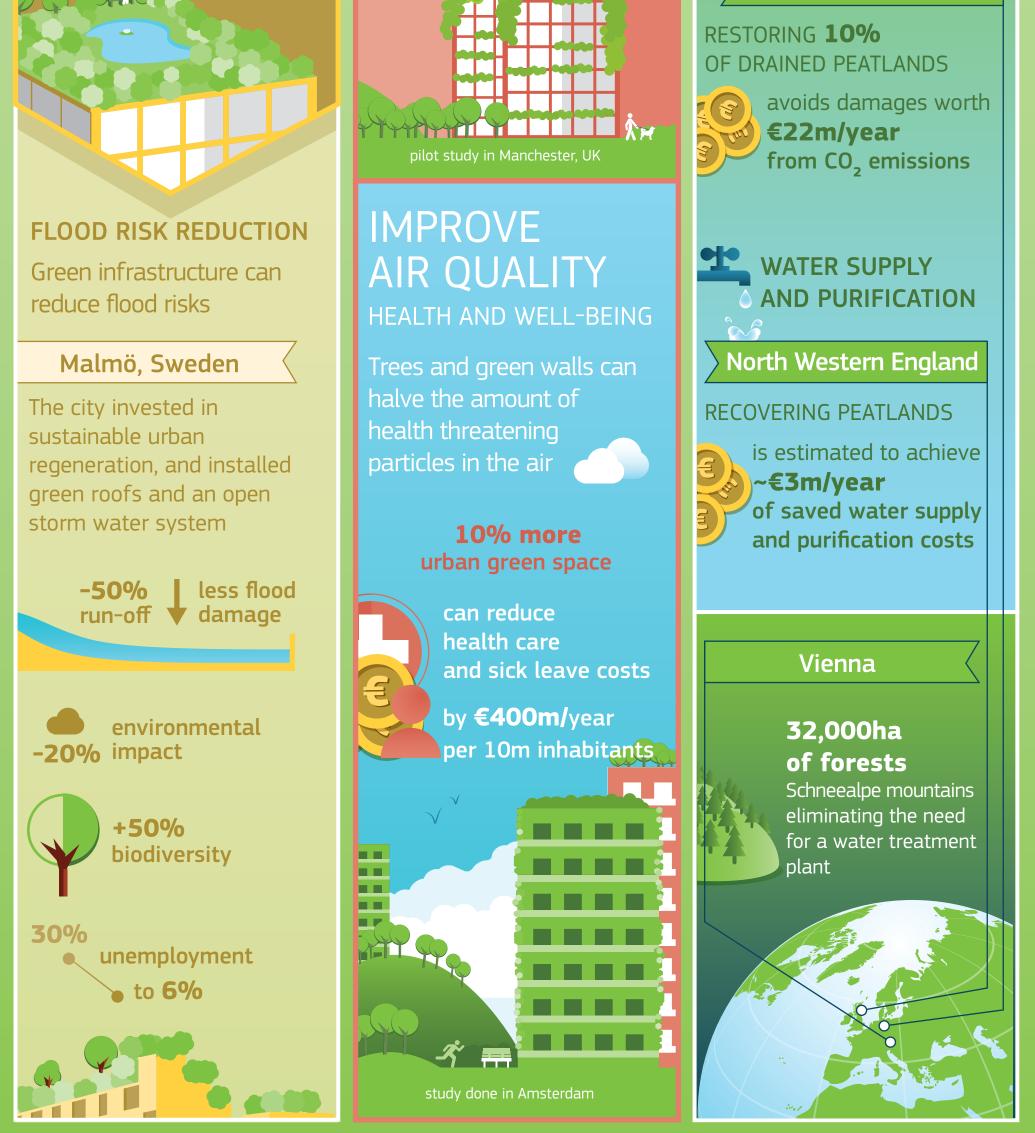
full sunlight

ENSURE WELL FUNCTIONING ECOSYSTEMS

Restoration and preservation of ecosystems can provide very high returns on investment and help to avoid costs of expensive infrastructure

EFFECTIVE CO₂ STORAGE

Northern Germany



Planning, developing, implementing and monitoring these nature-based solutions needs a high as well as low-skilled workforce. Investing in nature-based solutions creates more sustainable jobs: Environment and energy efficient jobs in the EU increased by 20% during the recession (2007-2011).

EU RESEARCH AND INNOVATION IN NATURE-BASED SOLUTIONS THROUGH HORIZON 2020





€120m

in 2016-17 for '**Innovating with Nature'** research and innovation activities in cities and rural areas

open access to evidence anddata to support and stimulatepublic and private investment



LARGE-SCALE DEMONSTRATION PROJECTS

living labs connect researchers, public authorities, businesses, industry, local communities



CO-DESIGN, MUTUAL LEARNING

local, regional and national decision-makers, researchers, private investors, businesses and industry and citizens will be encouraged to collaborate, design and implement innovative solutions



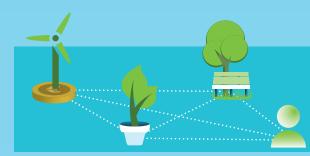
EXAMPLES



TURAS SUSTAINABLE CITIES

- green walls and roofs
- urban brownfields
- social agriculture
- biomimicry innovation inspired by nature
- novel design

http://goo.gl/SCGsqv



GREEN SURGE MAJOR URBAN CHALLENGES

 identifies, develops and tests ways to link green spaces, biodiversity, people and the green economy

http://goo.gl/c2ZsI5



OPERAS ECOSYSTEM SCIENCE FOR POLICY & PRACTICE

 applies nature-based solutions in the real world:
e.g. urban hybrid dunes for storm and coastal protection, recreation and biodiversity conservation

http://goo.gl/8EqrLD



Find out more about nature-based solutions: https://goo.gl/Hf23xb