

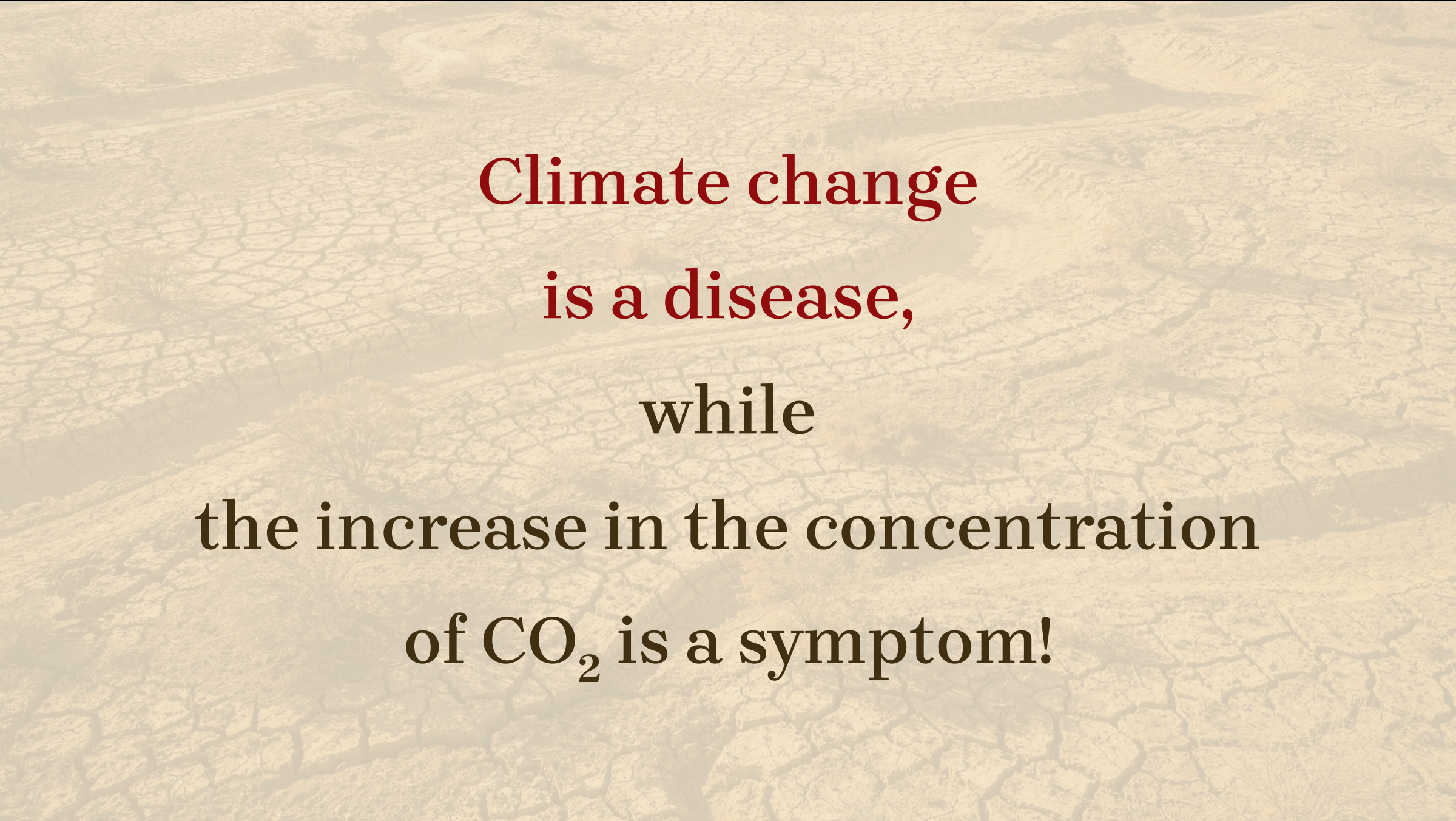
Co-funded by the
Erasmus+ Programme
of the European Union



The Vital Role of CO₂

Good morning everyone, I am Nicola Palmieri from the association Il Pianeta Naturale, partner of the European WAVE project approved under the Erasmus+ KA 210 program. Today we will explore the process of photosynthesis and the fundamental role of CO₂ in life on Earth.





Climate change
is a disease,
while
the increase in the concentration
of CO₂ is a symptom!

The problem is not CO₂ itself

The problem is not CO₂ itself, but the breaking of the natural balance caused by a series of devastating factors: massive deforestation in the Amazon, Congo, Indonesia, but also in Europe, Asia, and America;



Fragmentation of ecosystems

the fragmentation of ecosystems;
the continuous consumption of land and urbanization;
the continuous and permanent destruction of
vegetation;



Cities that are ever larger, hotter, and less hospitable

the construction of cities that are ever larger, hotter, and less hospitable; the absence of three trillion plants that once populated the planet; and finally the indiscriminate consumption of energy.



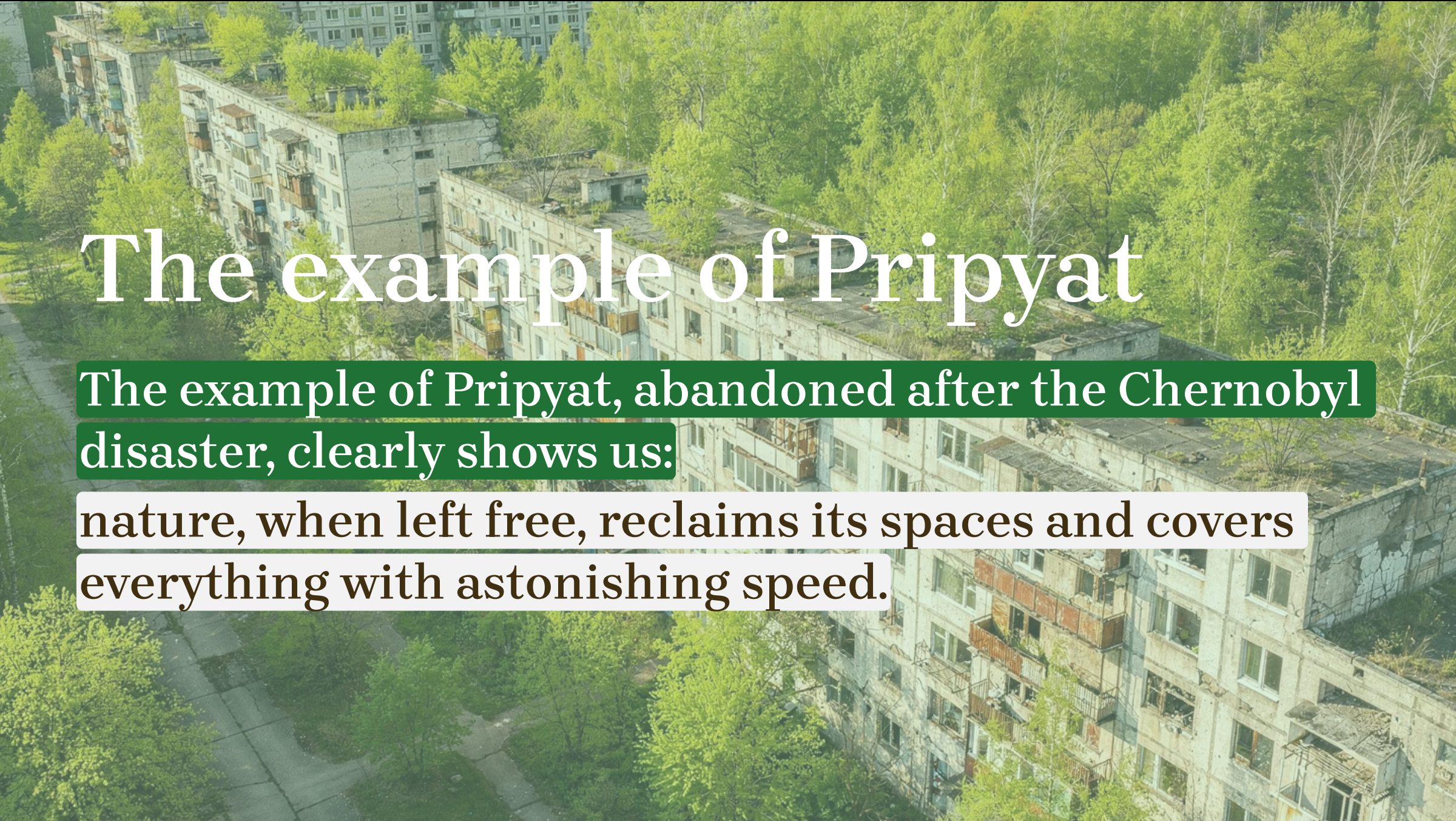


The real solution is natural

Artificially capturing CO₂ is useless! The real solution is much simpler and more natural: stop destroying forests, fill the planet with trees, and at no cost or effort

-

simply let the ones that sprout spontaneously grow.



The example of Pripyat

The example of Pripyat, abandoned after the Chernobyl disaster, clearly shows us:

nature, when left free, reclaims its spaces and covers everything with astonishing speed.

Plants are "converters of solar energy"

There is then a fundamental aspect that is often overlooked: plants function as authentic "converters of solar energy".



Dark surfaces = Heat

When sunlight hits a dark surface - such as asphalt or arid soils - all the energy is immediately transformed into heat, contributing to the dangerous "heat island" effect that characterizes urban areas.



Plants = Chemical Energy

In plants, however, something different happens: part of the solar energy is captured by photosynthesis and converted into chemical energy - glucose, cellulose, living structures (leaves, branches, flowers, stems, roots).

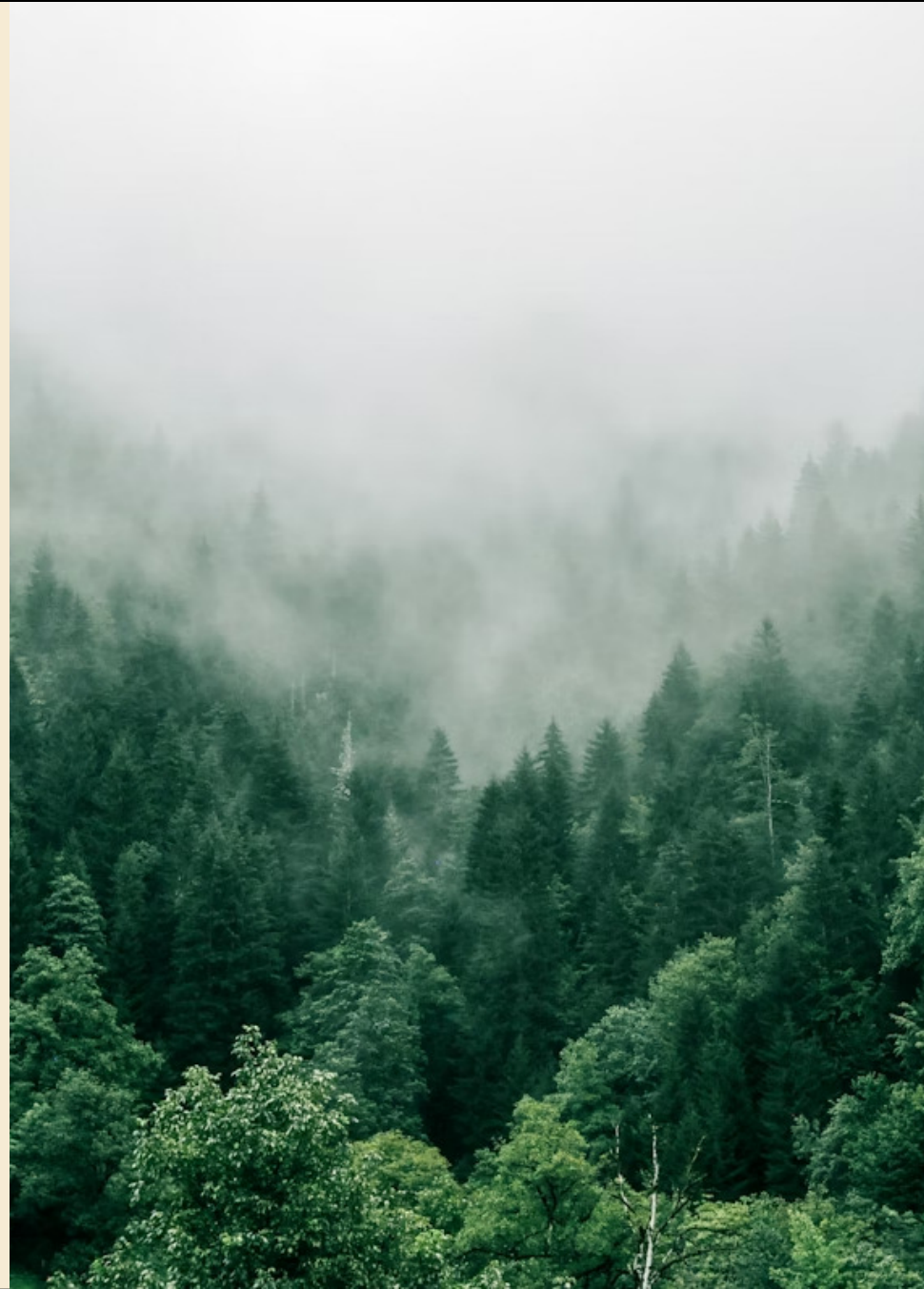
Not all energy becomes heat

Although plants also dissipate a portion of energy as heat, the crucial difference is that not all energy becomes heat: a portion is "sequestered" in the form of chemical bonds in plant biomass.

This natural process helps mitigate both local and global warming.

CO₂ transformed into life

Plants, in the end,
transform CO₂ into life,
converting part of solar
energy into living matter, stable
biomass — rather than pure heat.



A vibrant, sun-drenched tropical jungle scene. Sunlight filters through the dense canopy of various tropical plants, including large monstera leaves and palm fronds, creating a warm, golden glow and visible light rays. The scene is filled with lush greenery and a sense of a thriving ecosystem.

The resource that can save our species is plants

Plants are the only natural resource that can help save our species
species.