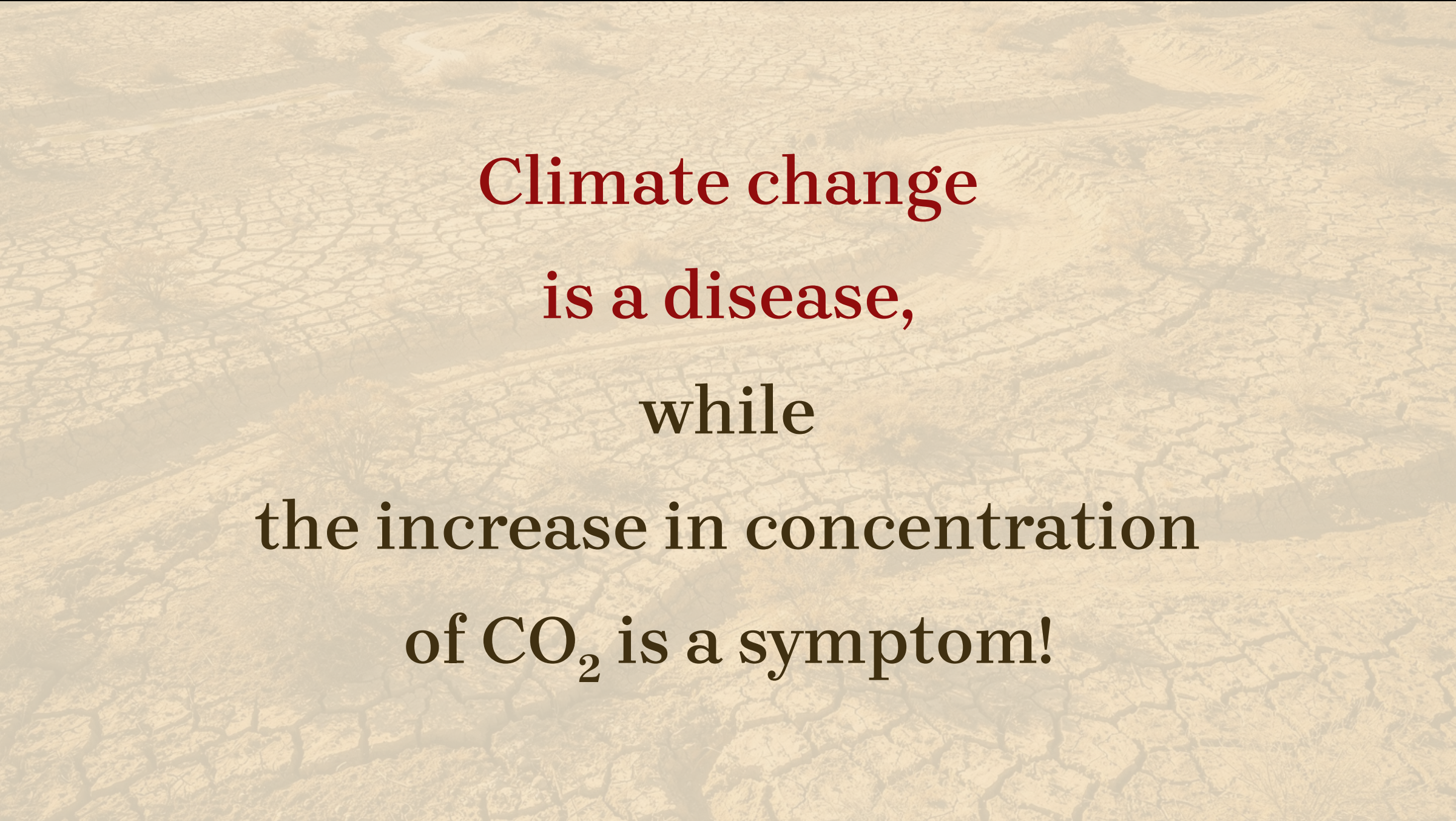


The Vital Role of CO₂

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



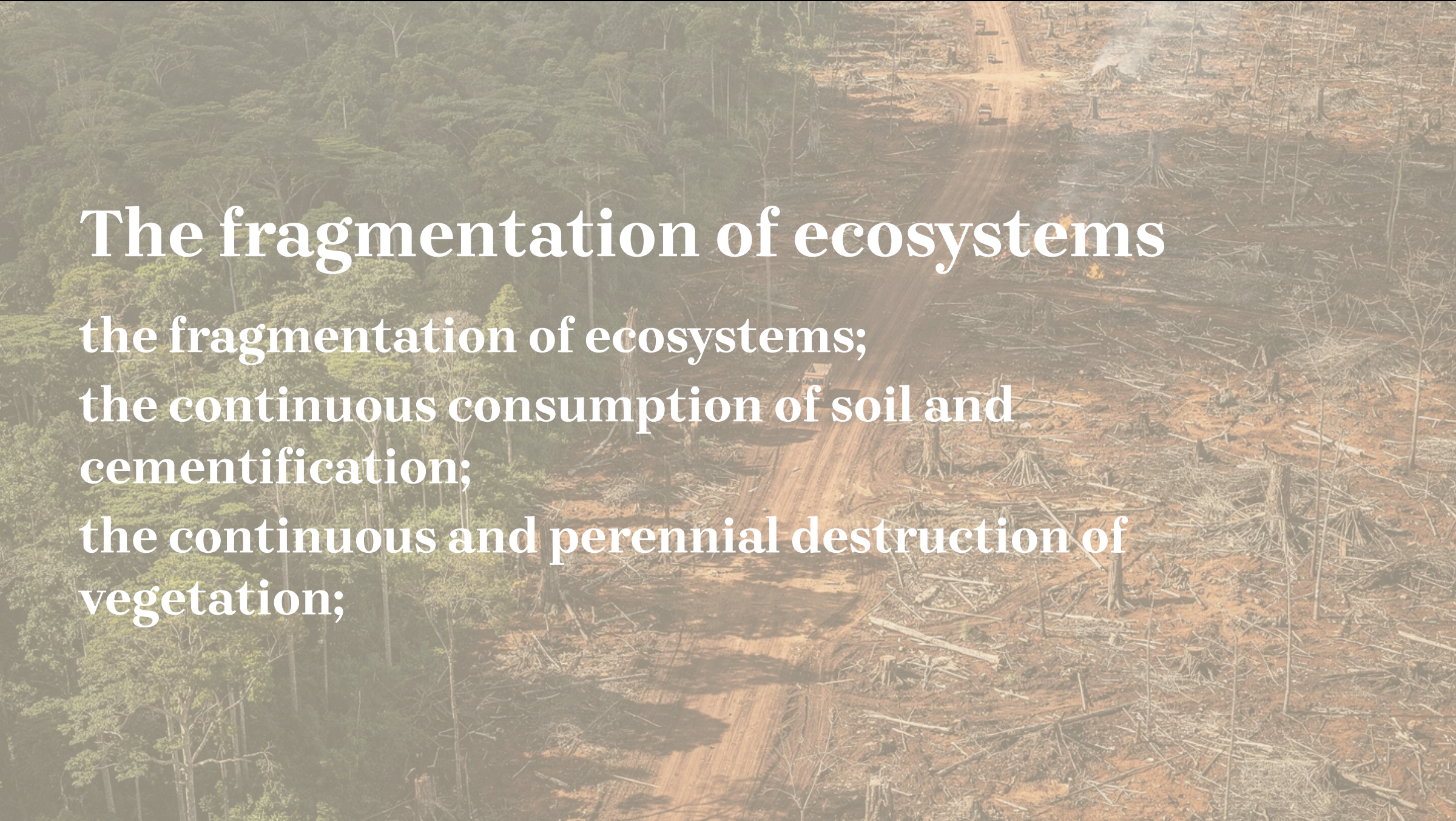


Climate change
is a disease,
while
the increase in concentration
of CO₂ is a symptom!

The problem is not CO₂ itself

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



An aerial photograph showing a large area of deforestation. A wide, straight dirt road cuts through a dense green forest on the left and leads into a cleared, brownish landscape on the right. The cleared area is covered with tree stumps, branches, and debris. In the distance, a small structure with smoke rising from it is visible. The text is overlaid on the left side of the image.

The fragmentation of ecosystems

the fragmentation of ecosystems;
the continuous consumption of soil and
cementification;
the continuous and perennial destruction of
vegetation;

Cities increasingly vast, hot, and inhospitable

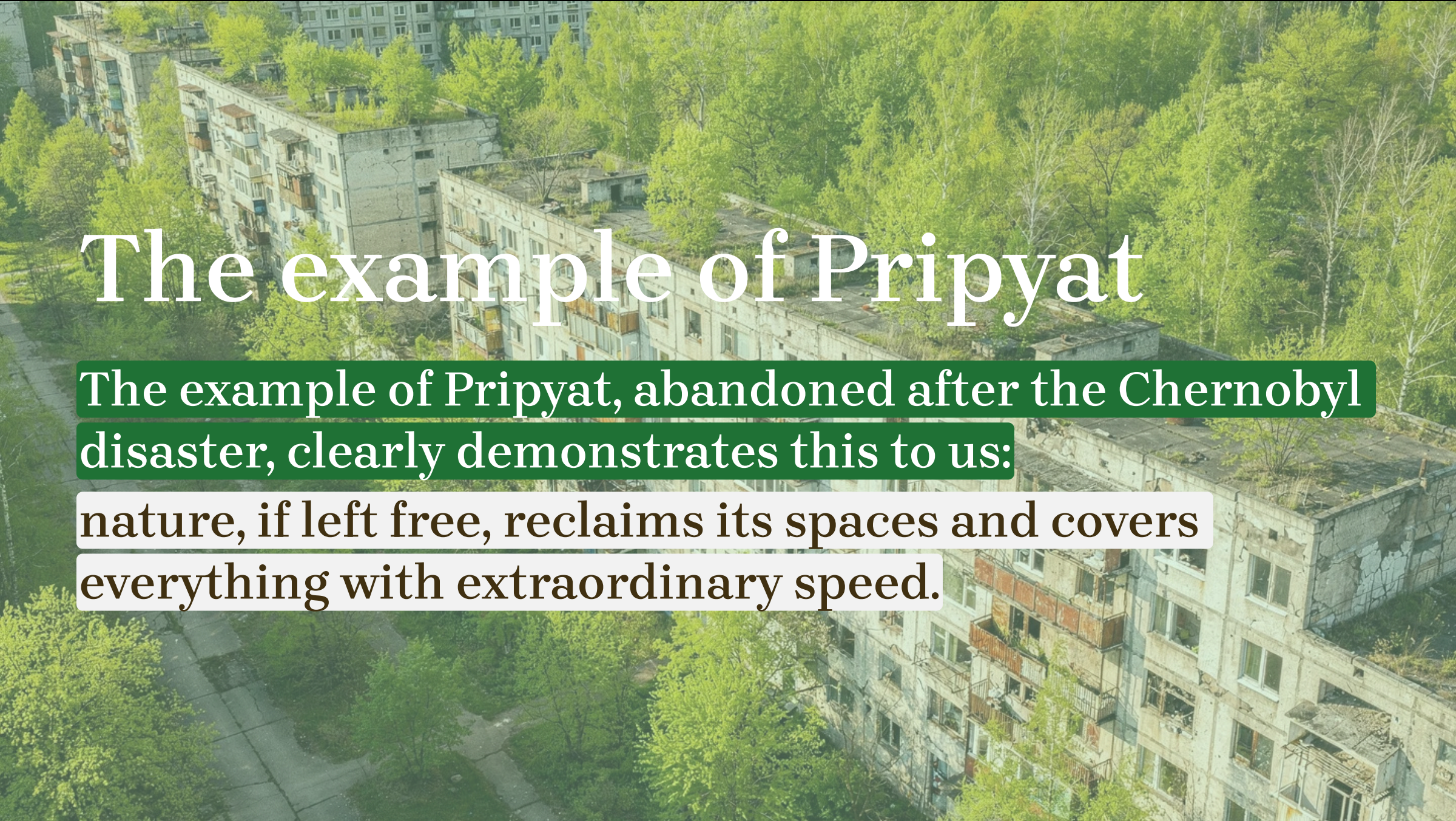
the construction of increasingly
vast, hot, and inhospitable cities;
the absence of three trillion plants
that once populated the planet;
and finally, the indiscriminate
consumption of energy.





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 - without any cost or effort - simply let those that grow spontaneously continue to grow.



The example of Pripyat

The example of Pripyat, abandoned after the Chernobyl disaster, clearly demonstrates this to us:

nature, if left free, reclaims its spaces and covers everything with extraordinary speed.

Plants are "converters of solar energy"

There's also a fundamental aspect that is often overlooked: plants act as authentic "solar energy converters".



Dark surfaces = Heat

When sunlight hits a dark surface - like asphalt or arid land - 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: a 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

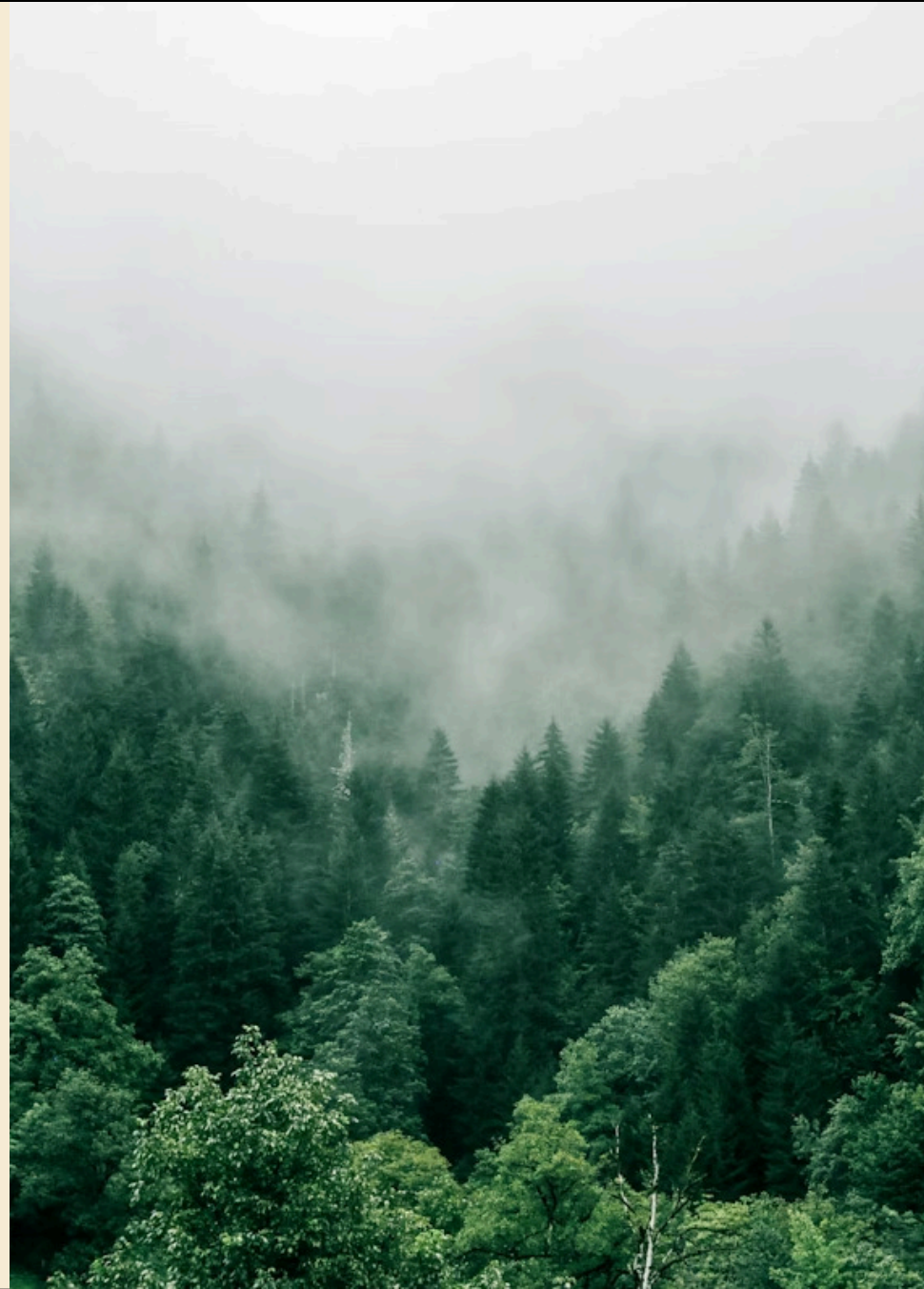
Although plants also dissipate a portion of energy as heat, the crucial difference is that not all energy becomes heat:

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, ultimately,
transform CO₂ into life,
converting part of the solar
energy into living matter, stable
biomass - rather than pure heat.





The resource that can save our species is plants

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