## THE NEW FACE OF THE EARTH



## METAMORPHOSES

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Our planet is in a state of flux as entire ecosystems transform in response to climate chaos. From the mountains to the sea, habitats are changing. Animals and plants must adapt or perish. Human made emissions have upset the balance, but there are people on the front lines working in their own special ways to counter the threat.

limate change affects more than just animals – including we humans. It is disrupting the natural cycles of our dynamic Earth. Droughts and heatwaves are desiccating once green lands while in alpine regions it is the opposite. As snow and ice become rare, green takes over. And in the oceans, once temperate waters transform into tropical marine ecosystems.

In two parts we witness the transformations of key natural environments from the perspective of human characters intimately connected to these places. A wombat conservationist in Australia; an elephant breeder in Kenya; an Ama diver in the seas of Japan, and a shepherd and his daughter in the Alps. Each of these characters invite us to witness how the natural land and seascapes of their world have altered over the course of their lives. As they evoke strong personal memories of what it once was like, they share their fears and hopes for the future of our planet.

## The Carbon Hunters – the science behind metamorphoses

Everywhere on the planet, natural environments are undergoing profound transformations. Snowy alpine mountains are turning green, tropical forests are drying up and flat tundra is becoming boreal forest. These changes are the result of global warming due to an excess of greenhouse gases, such as carbon dioxide, produced by human activities.

But could these same endangered natural environments also be of benefit? The Carbon Hunters introduces scientists in search of environments with the capacity to absorb greenhouse gases – and to lock them away, sometimes for millennia.

To identify the best natural carbon traps, they use cutting-edge technologies like artificial intelligence and bioacoustics to scan, survey and even listen to the planet in real time. The massive amount of data is collected through a global network of laboratories where it is analysed by supercomputers and cross-referenced.

Once identified, the protection and development of these environments will be a priority. They may even be restored to pre-climate change status. To what extent can forests, oceans, grasslands, open seas and peatlands act as carbon pumps? How do oceans and terrestrial ecosystems absorb almost half the  $CO_2$  produced by human activities? Are these natural environments more efficient than human technologies? These are the questions scientists hope to answer.

The Carbon Hunters takes us on a dynamic journey of discovery where we may find that nature is our best ally in the fight against climate change.

A Boréales / Federation Studio / Lionfish / Terra Mater Studios co-production for France Télévisions



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