



Only Planet

**Climate Guide for
the 21st Century**

**Seven nature-positive pathways
to a hopeful future for our planet**

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Tim van Hattum

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Climate guide for the 21st century

**Seven nature-positive pathways
to a hopeful future for our planet**



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For Jasmijn and Mees

*The future belongs to those who believe
in the beauty of their dreams*

ELEANOR ROOSEVELT

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Foreword

When you really want something,
the whole universe conspires in helping you to achieve it

FROM: THE ALCHEMIST BY PAULO COELHO

The seed for this book

On a beautiful spring day in 2018, my daughter Jasmijn's teacher asked me if I could come and talk about climate change. Climate was – strangely enough – still not part of the standard curriculum, so I didn't let that opportunity pass me by. Not long after, I found myself with my best climate slides in front of a class of ten-year-olds.

I told them everything about the causes and consequences of climate change. I showed them that it is no longer something from a distant future, but that we are already seeing it happen around us. Of course, I showed them powerful images of wildfires in Australia, heatwaves in India, and flooded streets in The Netherlands. I emphasized that this is just the beginning, and that we will experience many more disasters of this kind in the coming decades. The alarming image showing that The Netherlands would be half underwater in the future due to extreme sea level rise made the strongest impression. When I looked around the classroom, I saw some children looking at me with wide, fearful eyes. One boy almost started to cry.

At that moment, I felt the paralyzing effect that all those doomsday images, spread by scientists and the media, can have on us. Fortunately, I could soften the impact a bit by explaining that many people around the world are already working on solutions to this global problem. The faces regained some color. In that classroom, the seed was planted for this hopeful book about the future of our planet and that of future generations.

During a long train journey from Amsterdam to Madrid, I typed the first lines of this book. In that city, the 25th international Climate Conference, COP25, took place at the end of 2019. There, government leaders reported behind closed doors on their progress on the climate agreements made in the Paris Agreement. Far outside the conference halls, I walked, together with thousands of young people, in the Fridays For Future march. The protest march was led by Greta Thunberg. All those young people were calling for system change instead of climate change. Their determination gave me more hope than the promises of the political leaders. The conference ultimately made little progress.

On the return journey from Madrid, I read the bestseller *The Uninhabitable Earth* by David Wallace-Wells. An impactful book, in which ‘not a word Spanish’ is said about the seriousness of the climate crisis. Wallace-Wells vividly describes the climate catastrophes that await us, but says nothing about how we might prevent them. With every page, my hope sank deeper into my shoes, and my sense of urgency grew for a solution-focused and inspiring book to show young and old what paths we can take to build a hopeful future. The seed had started to sprout.

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From The Netherlands 2120 to Europe 2120

It is of great importance that instead of spreading alarming messages, we put our energy into looking for solutions and taking action on a global scale. Fortunately, climate action is already underway in many places around the world. One of those places is Wageningen, a small town in The Netherlands.

In the so called Food Valley, I bike every day to the most sustainable campus in the world, the campus of Wageningen University & Research. There, I work as Head of the Green Climate Solutions Programme, together with many other experts, on developing solutions for the climate crisis. At the university, together with many other organizations, we are working hard on the major questions facing our planet: How do we feed 10 billion people? How do we bring carbon emissions back to zero? How do we adapt to a world that is at least 1.5 °C warmer? How do we restore biodiversity loss and work together with nature again? The Wageningen mission ‘to explore the potential of nature to improve the quality of life’ is in the DNA of everyone who walks around that campus.

A few weeks after the climate conference in Madrid, I published a future vision for The Netherlands in 2120 together with a group of Wageningen colleagues. In that vision, we outlined what The Netherlands could look like in 100 years if we collaborate with nature and prioritize nature-based solutions on the way to a climate-positive and climate-resilient Netherlands. For a

change, we didn't present the result in a thick report, but as a map that shows us the way to the future. The map shows a country with plenty of space for water, much more forest, nature as a buffer for climate extremes, high-quality plant-based food production on land, renewable energy, and protein production at sea, and attractive, green, and climate-positive cities. We wanted to show with this story that – if we really want to – we can create a desirable future.

Our mission was more than successful. Shortly after we published our story, it was picked up widely by the Dutch media. All major newspapers wrote about it, and I had the opportunity to explain our vision on the TV program *Buitenhof*. Our map went 'viral.'

The green ink of our story had barely dried when the world came to a standstill due to the coronavirus. The growing attention for the climate issue faded, but the enthusiasm for our future vision spread almost as quickly as the virus. We gave hundreds of digital and physical keynotes at national and international conferences, including a TED talk during TEDx Wageningen University. The responses to our story were overwhelming. This vision turned out to be the right answer to an 'unasked' question alongside all the doomsday images. Many people exclaimed: 'This is the country I want to live in.'

Roman Krznaric, author of the bestseller *The Good Ancestor*, was also enthusiastic when I spoke with him about our future vision at one of these conferences. He found our story a wonderful example of long-term thinking in our short-term world. His advice was to put the new map of The Netherlands in every classroom to inspire our future generation. And so, a few weeks later, I went with our map under my arm to my ten-year-old son Mees's class to give a lesson about climate change there as well. Unlike my earlier attempt three years prior in Jasmijn's class, the focus was now on solutions and the inspiring future vision of The Netherlands in 2120. Instead of fear, I now saw interested and engaged children who found this story very appealing.

The inspiring future vision for The Netherlands in 2120 has now reached a wide audience. The map is exhibited in 4 museums, is explained in school books, and various regions in The Netherlands and abroad have started developing a future vision for their region or city. A large consortium of knowledge institutions, nature organizations, businesses, and governments has joined forces to set up a knowledge and innovation program aimed at turning this vision into reality. In 2023, our team received the WUR Impact Award as the most impactful project of Wageningen University & Research, and I had the honor of giving the Mansholt lecture in Brussels. With a team of 50 international students and experts, we developed a first bold sketch for a nature-positive future for Europe in 2120. The lecture – followed by a beautiful reflection

from Diederik Samsom (former Head of Cabinet of the European Commission) – also led to much enthusiasm and discussion in Brussels about the importance of a imagining nature-positive futures.

The most important lesson I've learned in recent years is that many people desire a hopeful vision of the future. Every day, we're bombarded by a tsunami of bad news. We live in a pandemic of anxiety. Because of all those alarming messages and the complexity of the solutions, we lose sight of the direction we want to take. And yet, those sustainable pathways can offer so much beauty. Still, we must remember that across continents, in many countries, regions, cities, neighborhoods, schools, and university campuses, countless hopeful ideas and green projects are already emerging and spreading across the planet at an ever-growing pace. No matter how disappointing all those international climate conferences may be, the surge of green initiatives is encouraging.

If there's anything we've learned from all the excitement around The Netherlands 2120, it's that the time has come for a solution-oriented story about the future—not just for The Netherlands, but for our entire planet. The only planet we have.

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The Only Planet Climate Guide for the 21st Century

On September 12, 1962, American President John F. Kennedy spoke the legendary words: 'We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard.' With his Moon Shot speech, he wanted to gain public support for the Apollo program. He emphasized that developing the new knowledge needed to send a human to the moon would lead to technological advancements that would benefit society as a whole. In July 1969, Apollo 11 launched into space, and Neil Armstrong became the first human to set foot on the moon. Kennedy not only made history with the Apollo program but also showed the world that what once seemed impossible could become possible. In fact, the mission to the moon brought about many new technologies we still use today. The camera in our mobile phones, wireless headphones, water purification systems, and freeze-dried food all originated from that journey to the moon. More important than all those technical gadgets was the fact that space travel revealed the fragility of our planet. While the goal was to explore the moon, we ended up discovering the Earth. Every astronaut is struck by what's known as the overview effect—the feeling from space that Earth is extremely vulnerable. Luckily, we don't need to go into space to see how beautiful and fragile our planet is. In 1972, the crew of Apollo 17 took the first clear photo of Earth from space, fully lit by the sun. The so-called Blue Marble became one of the most widely shared

photos of all time and allowed every global citizen to experience the overview effect in a small way.

Anyone who's done some travelling knows there are incredible things to see on earth: white sand beaches, ancient temples from lost civilizations, glaciers and snow-covered mountain peaks, and historic cities. Personally, I find the underwater world the most breathtaking. Especially the coral reefs in tropical waters—they're a feast for the eyes. A magical world full of brightly colored fish, corals, and anemones.

I'm starting this book with my guilty pleasure: I love to travel. For years, I visited some of the most stunning places on Earth, often with a Lonely Planet travel guide in my backpack. In 2001, I quit my first job to go backpacking through Asia for a full year together with my girlfriend Floor. With just a backpack, good company, and beautiful surroundings, you can be happier than ever. It was an unforgettable experience. Travelling opens your mind and helps you understand other cultures, different worldviews, and ecosystems. There's nothing better than being amazed by the wonders our planet has to offer.

But travelling also confronts you with how vulnerable our planet has become. In many places, you now come face to face with the effects of climate change. Melting glaciers, firefighting planes battling wildfires, or dry rivers are increasingly part of our vacation photos. No matter how wonderful travel is, the way we travel also contributes to the climate crisis. My backpacker generation is now dealing with flight shame. We have to do everything we can to make sure our children—and theirs—still have something beautiful left to admire. That was my motivation for writing this book: *The Only Planet Climate Guide for the 21st Century*.

Our planet is calling for a new 'man on the moon' mission, but this time right here on Earth. Imagine a world with more nature, healthy food, green cities with clean air, less poverty, and more equality. In short, a better and happier life for everyone. We can build that world—if we choose to. That is our shared mission. This *Only Planet* climate guide, full of solutions, takes you on a journey along 7 routes to the green future ahead of us. We stand on the edge of the most adventurous journey humanity has ever undertaken. If we globally apply the knowledge and resources we already have and use them to speed up climate action, we can shape that beautiful future together. I wish you an inspiring journey.

'It's time for action'

'Tim van Hattum outlines a beautiful future in balance with our planet. We are smart enough to achieve it. Now we just need to be wise enough to make it happen.'

André Kuipers, Astronaut of our beautiful, fragile spaceship Earth

We are at the beginning of the most adventurous journey mankind will ever undertake – a journey towards a greener future for our planet, the only planet we have.

Climate change and the loss of biodiversity are the greatest challenges of our time. Over the past few years, we have been flooded with doom scenarios and alarming images of floods, extreme droughts, and forest fires. These messages worry us – but we do not have time for despair. It is time to act.

The good news is that most solutions for addressing climate change are already available. The key lies in restoring balance between our society and nature. If we cooperate more effectively with nature and apply smart technologies on a large scale, our future can once again be hopeful.

This book takes you – along seven routes – on a journey through inspiring examples from around the world, demonstrating that this transition has already begun. With this climate guide, packed with solutions for the 21st century, you will be inspired to help build a hopeful future.

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