

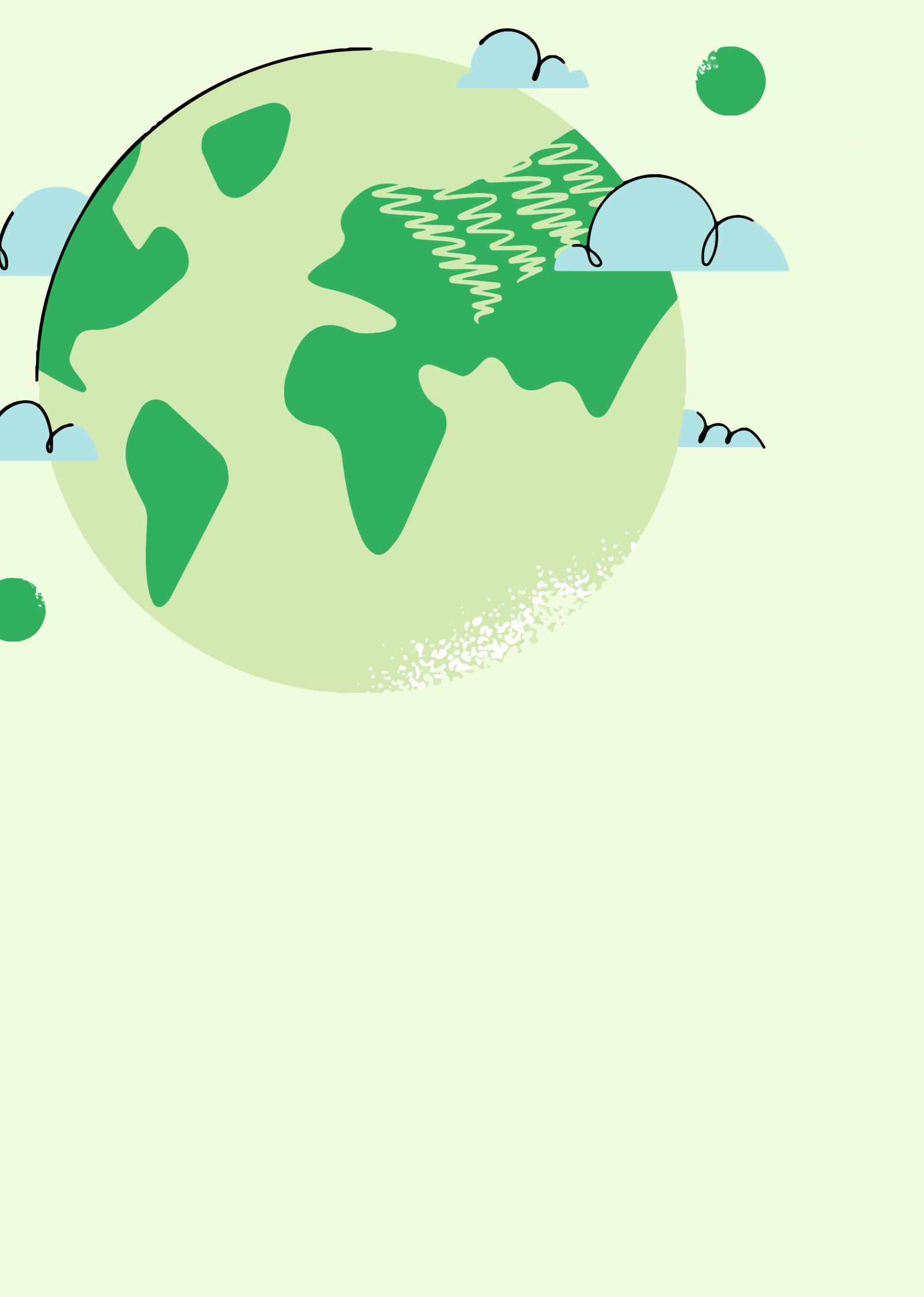
YOUTH CLIMATE AGENDA

3.0

2040



JONGE
KLIMAAT-
BEWEGING



**“We cannot
solve our
problems with
the same
thinking we
used when we
created them.”**

—
Albert Einstein

On our way to a livable future.

Utrecht, September 2022

It has been almost five years since we wrote the first version of the Youth Climate Agenda. Since 2017, we have handed this over to the Dutch cabinet, we have participated in the negotiations on the Climate Agreement, and the generation test and the Climate Authority have been included in the coalition agreement. In these five years, the climate debate has changed enormously and major steps have been taken: the climate goals have become more ambitious, the Climate Fund was established and a Minister for Climate & Energy was appointed.

A lot has happened since 2017, but not enough. Globally, we are far from being on track to achieve our climate goals. Temperatures continue to rise, ice caps and glaciers continue to melt, and weather conditions are becoming increasingly extreme. Biodiversity continues to decline at a rapid pace. The science is clear about our deadlines: we don't have thirty years left to act. Now that the effects of climate change are undeniable, we have no choice but to increase our ambitions.

That is why we wrote the Youth Climate Agenda 3.0, a new vision document. Not for 2050, but for 2040. More extensive, more concrete, and more ambitious than ever.

In the Youth Climate Agenda 3.0 you can read what young people want the Netherlands to look like in 2040. How do our economy and energy system work, how do we deal with nature and how do we live, travel, eat or learn? It outlines an ambitious vision: a future dream of the young Netherlands. A dream that not only contributes to reducing climate change, but that also makes the Netherlands a fairer country.

The Youth Climate Agenda 3.0 is not just an accessory for your bookshelf. It is a motive, a support, and a signpost. This vision of the future can point us in the right direction in the uncertain times of transitions by showing what is possible. The agenda is on the table in all our conversations with politicians and policymakers. For example, the Youth Climate Movement bases its work on the Youth Climate Agenda to achieve its goal: to reduce climate change. With this vision for the future, we strive for a sustainable world, in which climate justice, youth participation, inclusiveness, and empathy are central principles.

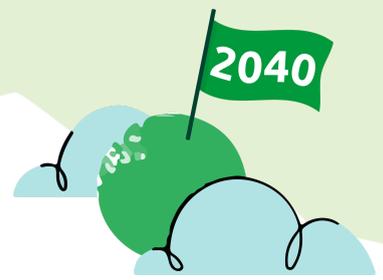
We cannot do all this alone. The Youth Climate Agenda 3.0 unites the voices of more than 70 youth organizations. We would like to thank all youth organizations, volunteers, experts, and other individuals who contributed ideas, contributed to writing, and signed. Thank you for attending our Climate Dialogues, for completing the questionnaires and for your inspiring ideas. Your input makes this agenda important and worth sharing.

Finally, thank you for your trust. Without trust we could not have written this vision and without trust we cannot realize this vision. In the coming years we will do our utmost best to make your dreams come true.

On behalf of the Youth Climate Agenda working group and the board '21-'22,

Tessa Dool
Board Member Youth Climate Agenda

Aniek Moonen
Chair



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READING GUIDE

What does a world look like in which we stay within planetary boundaries and everyone – today and in the future – has the chance to live a happy life? Over the past year, we have investigated this, together with young people and (young) experts. In this Youth Climate Agenda we create our spot on the horizon: what do young people want their future to look like?

This document is the start of a conversation about our future, so that we can take the necessary steps towards it together.

Because if we don't know what our life should look like in 2040, how are we supposed to work towards it?

Our new story originated from two starting points: the **seven integral themes** and **thinking from 2040**.



1. Seven integral themes

Our vision is made up of seven themes: *Economy, Energy & Industry, Biodiversity & Nature, Education, Food, Housing* and *Mobility*.

- **Economy** rewrites the rules of the game of the economy to stay within the boundaries of the planet, while meeting everyone's basic needs.
- In the **Energy & Industry** theme, we discuss how we have achieved an emission-free energy system through saving energy and making the system more sustainable.
- **Biodiversity & Nature** revolves around the relationship between humans and nature, and how we can be happier on a healthy planet by living nature-inclusively.
- In the **Education** theme, we describe what an education system looks like in which young people and the elderly learn to build this green future together.
- The **Food** theme describes how in 2040 our food system can contribute to our own health and to biodiversity recovery and a clean planet.
- The **Housing** theme shows how we can live in a relaxed, lively and green environment in 2040, where we lose as few raw materials and little energy as possible.
- Finally, in **Mobility**, we argue for a mobility system in which we no longer focus on the fastest but on the best way from A to B.

Based on these seven themes, we discuss how we can live sustainably in 2040. But beware: ***you cannot see these themes separately from each other***. They are inherently linked by opportunities and challenges. For example, windmills and solar panels can take up space for nature, but also make more space for nature.

We highlight these opportunities and challenges by discussing the following theme-transcending topics: plastic, energy conservation, production and consumption, learning about sustainability, health, light pollution, water use, climate adaptation and spatial planning.

2. Thinking from 2040

For real system solutions, we have to think beyond the issues of the day. Investing in electric cars may seem like a logical step as of now, but if we look ahead at how we will travel sustainably in 2040, investing in public transport is especially necessary. What seems impossible today may be the exact step that is needed. That is why we have not written our vision from the limitations of today, but from the possibilities of 2040. In our conversations with young people and (young) experts, the question we asked was always: what should 2040 look like in order to make the 1.5 degree society a reality? But also: what do we actually want 2040 to look like? What do we, young people, really think is important?

We use this spot on the horizon as our signpost. This is how we ensure that we take steps today towards a sustainable future in 2040.

SUMMARY

Climate change is one of the greatest threats of our time. Young and future generations will be increasingly exposed to more and more extreme heat waves, longer periods of drought, more severe flooding, and more brutal food and water shortages. To prevent this as much as possible, we must limit global warming and adapt to the inevitable consequences. This will only work if we organize our society, our economy, and our lives differently. How do we want to live in 2040?

Economy

In 2040 we don't just live to work. Our well-being comes first, with as little impact on the earth as possible. Our main goal is not economic growth, but broad prosperity. The new economy is less about buying. Instead, we repair, share, borrow, and reuse as much as possible. The economy is transparent, local, and circular. We no longer see nature as an inexhaustible resource from which we can earn unlimited money, but as a resource to invest in.

Energy & Industry

In 2040 we use as little energy as possible. We limit our own energy consumption, have said goodbye to certain polluting companies and have made the remaining industry energy-positive and circular. We only use renewable energy: primarily solar and wind energy, supplemented where necessary with limited nuclear energy and sustainable biomass. Where

necessary, we use negative emission technologies. We have a European electricity grid, local energy communities, and a smart energy system.

Biodiversity & Nature

In 2040 we live in a nature-inclusive society. Policy-makers and citizens alike take nature into account in every choice they make. Within 10 minutes, everyone can be in a park, forest, neighborhood garden, or nature reserve full of plants, trees, and water. We give more space to nature, restore original landscapes, and create connections between areas of nature. We use nature, or technologies that mimic nature, as a solution against climate change.

Education

In 2040, everyone is climate literate. Schools set a good example and from an early age we learn about nature, the exhaustibility of the earth, and how to deal with this. Young people learn how to support a balance between nature and society through interdisciplinary lessons and project-based education. You don't stop learning on your eighteenth birthday. At a later age you can easily retrain for another profession in which you can make a positive contribution to society.

Food

In 2040 everyone has access to healthy and sustainable food. We mainly eat local, seasonal, and plant-based products. Our food system is circular and we waste as little as possible. We match the demand for and supply of food, have almost zero packaging waste and do not grow unnecessary products. Our farmers work with regenerative farming methods, ensure healthy soil, and help with nature management. Our food chains are transparent, fair and sustainable. Everyone pays the real, fair price for the products they buy.

Housing

In 2040 everyone has a home thanks to the extensive and flexible housing market. Our cities are designed in a nature-inclusive way, according to the 15-minute city. We share more space and as a result have more room for nature and relaxation. Our homes are energy-positive and we only use sustainable heat. We build modular and circular homes with natural materials. We build these new homes with and on the water, taking into account the rising sea levels.

Mobility

In 2040 we share mobility where possible and travel as little as possible. Our living environment is compact, which means that our cities can be car-free. Asphalt and parking spaces have made room for sustainable paving materials or nature. We mainly travel by bicycle or via a strong public transport network. Existing means of transport run on sustainable fuels. We travel across the border less often, less far and for a longer period at a time. We transport fewer goods for less far distances, because goods are mainly produced locally.

**THE YOUTH
CLIMATE AGENDA
3.0**

Introduction

Climate change and exploitation of the earth

The causes and immense consequences of climate change were known before we were born.¹ Yet, over the past 30 years, more greenhouse gasses have been emitted than ever before, and the earth has already warmed by more than 1.0 degree.² The Paris Agreement signifies an agreement to limit warming to 1.5 degrees, but countries are still doing far too little.²

Because if all countries would achieve their intended ambitions, we might just limit global warming to 2.0 degrees.³ Unfortunately, mitigation ambitions have so far not been a guarantee of success, while global warming has and will continue to have serious consequences for our and future generations.²

This last summer was the coldest summer of the rest of our lives: young people and future generations will experience more heat waves, forest fires, periods of drought, floods, tropical cyclones and crop failures than older generations.⁴ The more the Earth warms, the more we have to deal with: extreme weather, natural disasters, sea level rise, and devastated ecosystems.

Every tenth of a degree counts.

Unfortunately, climate change is just the tip of the iceberg. We have crossed all kinds of planetary boundaries in recent years.⁵ We take more than the earth can give. We use too many natural resources at the expense of **future generations**, depriving them of a stable climate.

Because we have designed our system as if there are no limits to what the earth can provide, insufficient responsibility is taken for these crises. New, smart innovations or future generations will have to solve it, without any guarantee that this will work.

Our current way of life is already at the expense of people on the other side of the world, of young generations, and of nature.

System change and culture change

We are facing fundamental choices. As long as we live in a system where the sustainable option is the more expensive or difficult choice, we always have to go against the grain to solve problems. Flying by plane, eating meat, or buying new things cannot remain the cheapest, easiest, and default choice. We need to move to a system where the boundaries of the earth are not ignored, but instead are central. We need a system **change**.

The current system consists of a collection of individuals: ourselves. So the systemic change that is necessary to live within the limits of the earth requires something from us. What is needed is a **culture change**. We must learn to deal with nature in a different way and no longer try to find our happiness in quick, easy, and cheap consumption, but in the things that really give meaning to our lives.

Only with system and culture change can we secure the future of everyone on Earth – for current and future generations.

Time for justice

Short-term interests are now too often chosen over the well-being of future generations. That is why we advocate **generational justice**: we must consider not only what appears to be beneficial in the short term, but also consider what influence this has on young and future generations.

In addition, we strive for general, international **climate justice**. At the moment, people and countries that contribute almost nothing to climate change are often the first and most impacted victims of climate change.⁶ Women, people with less money or with a non-Western background and minorities

are now often hit the hardest by climate change, pollution, water and food shortages, or environmental damage, because they have less access to resources that can protect them.⁶ To reduce this inequality, we need to go through an inclusive systems transition, where everyone must have access to the resources to be **healthy** and **happy**.

A new story

It's time for a new story about our future. Many young people in our generation grew up with the idea that we would eventually get a permanent job, pay a mortgage, and retire with a good pension.

Unfortunately, this is no longer self-evident.

Due to climate change, the ecological crisis and growing shortages, our lives will not look like those of our parents. Fortunately, this doesn't have to be a problem: our parents' lives also look very different from those of our grandparents. But it is important that we adapt our story now that the old one is no longer correct. The pursuit of infinite economic growth is no longer fitting. The world is changing.

So, what will our lives look like in 2040?

Economy



In 2040, our economy will work completely differently. Making money is important, but not the highest goal. Instead, it's about happiness, health, fairness, and sustainability. Moreover, we do not only look at how we ourselves are doing, but also think about our influence on people on the other side of the world, future generations, and nature.

Our lives are less about how much we can buy. We no longer need a new phone every year or a new outfit for every party. When we buy something, we pay the real price for it. We also borrow and rent.

Because we work less, we have more free time for fun things like volunteering, friends, family, and hobbies. The work we do, paid and unpaid, adds real value to the world. The companies we work for are committed to a mission in which the happiness and health of people and nature come first. This way, in 2040 we will live in a world where the economy is designed to stay within the limits of the planet and to give everyone the chance to be happy.





Why did we need to change?

In 2040 we have broken with the old economic system. In the past, people did not take responsibility for 'externalities'. The rules of the game of the economy rewarded the exploitation of people and nature with earning money. As a result, we produced and consumed at the expense of other people, nature, future generations and our own future.⁷

Therefore, in 2040 we live in a **new economy**, in which the balance between the well-being of people and the well-being of the earth is central. We strive for broad prosperity.⁸ This new economy is **nature-inclusive, fair, and transparent**.

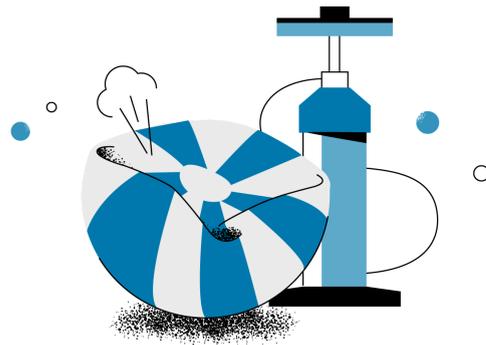
How do we work in 2040?

In 2040 we no longer just live to work, but our **well-being** comes first. The work we do is **meaningful** and useful, with positive impact.⁹ Professions that add a lot to society are the most valued, socially and financially. We distribute unpaid work fairly, such as volunteer work, housework and care tasks. We see how meaningful these tasks are to ourselves and our community. Hurrying, profit maximization and overconsumption are a thing of the past. Things that really make us happy are central in our lives.

Due to this different view of (paid) work, our workweek is shorter and we are relieved in our work where possible. Automation and consuming less have helped to make this possible.¹⁰ This allows us to spend our **free time** on things like learning, volunteering and other unpaid work, being in nature, and spending time with friends and family.

Consuming less

In 2040, the economy revolves less around consumption and we have a new relationship with goods and services. Abundance seemed positive and was a status symbol, but it actually stood for overconsumption, unequal distribution and exploitation.¹¹ In 2040 we therefore consciously deal with our belongings by **repairing, sharing, borrowing and reusing**. Advertisements telling us that we need more stuff, or advertisements of polluting products, are a thing of the past in 2040. We use as much local stuff as possible, share electronics like washing machines and cars, and borrow tools and other stuff that we only need occasionally from a local tool library.



New ideas: a different view of nature and value

In 2040, nature is no longer seen as an inexhaustible resource from which we can earn as much money as possible. We are aware that we are not above nature, but are part of it ourselves. Reciprocity is therefore central: when we take, we give back. To stay within the limits of the planet, we must not only stop harming nature, but actively restore nature.¹²



Well-being first

In the new economy, creating financial value is not the main goal, but a means of creating social and environmental value. It is about **broad value** or **multiple value creation**. Creating financial value at the expense of people and nature is no longer rewarded. It is about the well-being of people on a healthy planet: happiness, health, equality, sustainability, and safety are central.

In 2040, countries promote the well-being of their inhabitants at the lowest possible burden on the earth. Well-being is central to all government planning and budgeting, in drafting, implementation, and evaluation. That is why the government no longer focuses on Gross Domestic Product (GDP), but on broad prosperity, both here and now, and later and elsewhere.

Society is thus not about economic growth, but about the growth of **broad prosperity**. This change does not have to be at the expense of people's quality of life: improving well-being mainly requires conscious policy aimed at this, not just simply increasing GDP.¹³ Only in this way can we give everyone the chance to have a good life, within the limits of the earth. The limits of the earth are also the limits of our actions: we will never go beyond them.

We think carefully about the **fair distribution** of the resources we have. To ensure that people are not left out, basic services such as public transport and health care are accessible to everyone.

In 2040 we enterprise and innovate with the well-being of people and nature as our goal, according to the principles of **People, Planet and Profit**.¹⁴ Innovation and digitization are no longer a goal in themselves but tools for progress that really benefits people.

Companies not only look for a gap in the market, but also look at what problem they want to solve.¹⁵ Internal and external incentives for close control on financial value are a thing of the past. Company ownership structures are designed to oversee the conduct of the company's mission, not just to maximize shareholder value. In 2040, companies are transparent about the positive and negative impact they make and how they can improve this in their social annual accounts.¹⁶ In this way, well-being and general prosperity are also paramount for companies and thus contribute to a happier, healthier society within the borders of the planet.





A circular economy

In 2040 our economy is **circular**, so that our resource consumption is brought back to within the limits of the earth. We produce stuff that we really need and that lasts a long time.¹⁷ We reuse, repair, share and borrow as much stuff and raw materials as possible.

If a product or raw material can no longer be recovered, we recycle it where possible. Only in extreme cases do

raw materials receive the status of waste. We also ensure that we recover finite materials without damaging them as much as possible.¹⁸

The government has stimulated this transition to circularity, for example by lowering the tax on labor and increasing the tax on raw materials.¹⁹ The use of raw materials in the first cycle of use of the material is particularly heavily taxed.

Plastic

Disposable plastic is long gone by 2040. Our food supply is better geared to demand and comes from local producers, so we need less packaging ([view Food](#)). We buy less stuff and the stuff we buy is produced locally, so that less packaging is needed for transport ([view Mobility](#)).

The packaging we still use is reusable or biodegradable, made from more sustainable alternatives to plastic. Where hard plastic is still needed, such as in healthcare, we make hard bioplastics. These are not made from fossil fuels.

Unfortunately, there is still a lot of plastic waste in seas and landfills. Ways are being explored to get rid of all that plastic in a good way.²⁰ We don't dump it in nature reserves or the sea and burn as little as possible. There are pilot projects for certain types of bacteria and fungi that may be able to break down non-reusable plastic.²¹ There are also studies into effective purification of (micro)plastics from sewage water.

In 2040, **circular business models** are the standard, such as products-as-a-service. Companies make money with products and services that we can use for a long time. Overconsumption and exhaustion is no longer a revenue model.

Products are designed **modularly** and companies are responsible for the stuff they make. The products must meet **quality requirements** for use and reuse

and there is a focus on **extending the life** of products. Planned obsolescence is a thing of the past. Companies communicate transparently about the lifespan of their products, by sharing to what extent a product can still be repaired.

A transparent and local economy

Our economy in 2040 is **transparent**, in order to be able to manage the social and ecological impact of our actions. Chains



and production processes are transparently mapped and the impact on people and nature is reported in a uniform manner.

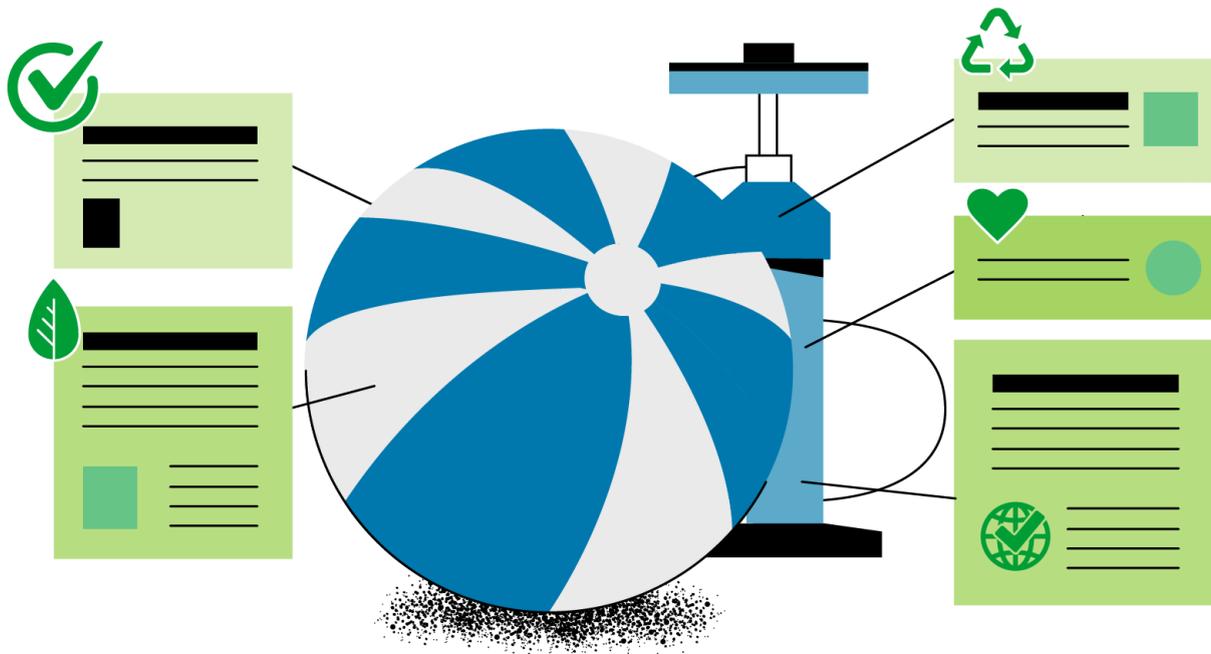
We pay the **real, fair price** for things: including social costs and environmental costs.²² In this way, all costs are 'internalized'. When we buy (or borrow, rent or share) something, it is clear how the price is established and what the positive and negative impact is.

To have a transparent and fair economy, the economy is more **local**. In this way we more easily map supply chains and we need less international transport. Polluting production cannot simply be

relocated, which means that you can no longer evade environmental legislation.²³ Since all kinds of raw materials are not available everywhere, the starting point is local *where possible*.²⁴

In this more local economy, we bear international responsibility at the same time. In the globalized economy of the past, many countries with developing economies were dependent on large economies. It is precisely these countries that are included in the decision-making process, in order to include them in the transition to a local economy. Global agreements are made to ensure a **just and fair world economy**.

Thanks to these changes, we have a new economy in 2040 that focuses on the well-being of people and nature.



Energy & Industry



In 2040 our energy supply is completely sustainable. We no longer use fossil fuels, such as natural gas, coal and oil, and therefore no longer emit CO₂. Our energy comes from renewable sources, mainly sun, wind and geothermal energy. This energy, in part, goes directly to our households and, in another part, is stored in sustainable energy carriers such as hydrogen. The industry has also completely switched to renewable energy sources.

In 2040 we are much more conscious of our energy. We generate it safely and produce, transport and store it with the least possible negative impact on people and nature. We use energy wisely and waste next to nothing. Where possible, we focus on saving energy because that is the most sustainable option. We do this, for example, by consuming less as citizens, so that the industry has to produce less. A win-win situation!





Why did we need to change?

We used to burn huge amounts of **fossil fuels** such as coal, oil and natural gas to meet our large energy needs. Gas extraction in Groningen caused earthquakes.²⁵ Greenhouse gas emissions led to global warming, with all its consequences.²

Dutch industry caused pollutants in nature, resulting in diseases in humans and animals.²⁶ This had to change. In 2040 we therefore use much less energy than in the past. The industrial sector has shrunk and the energy supply is 100% sustainable.

How do we use energy in 2040?

Energy saving

In 2040 we use as little energy as possible in all sectors. We have reduced our **demand** for energy as much as possible by saving where possible. Saving energy has become even more important than making our energy **supply** more sustainable.

In this way we buy much less stuff, which therefore does not have to be produced or transported ([view Economics](#)). We also save energy by traveling less and more sustainably ([view Mobility](#)). Where possible, we travel by public transport, rather than by car or plane. We only travel by plane for long distances and only for special occasions. All our homes are well insulated, so we use less energy at home ([view Housing](#)). We export far fewer horticultural products, as a result of which the greenhouse horticulture sector has shrunk and requires less energy ([view Food](#)).

We also save energy because we have redesigned industrial processes and have made them fully electric.²⁷ In 2040, the Dutch industry is completely **energy-positive** and **circular**, and therefore no longer emits greenhouse gasses.

Factories run only on green electricity, generated by the sun or the wind, geothermal heat, hydrogen, or green gas. The industry uses its energy as efficiently as possible, wastes nothing and shares its remaining energy with the built environment via heat networks.²⁸



Production and consumption

Overconsumption and overproduction are things of the past ([view Economics](#)). In 2040, some industries have disappeared because they no longer fit our new consumption patterns. For example, we no longer produce fertilizers, because all agriculture is organic and regenerative ([view Food](#)). Other industries have been able to adapt to our new way of life. In 2040, for example, we use much less steel, because in construction we only work with renewable materials ([view Housing](#)). The steel we still use is sustainably produced and is infinitely recycled by the steel industry. We also need much less asphalt, because we mainly build natural roads ([view Mobility](#)). In 2040, new industries have also emerged, for example repairing and recycling products and raw materials or producing sustainable materials.

In 2040 we have a **smart energy system**, which allows us to continuously match the demand for energy and the supply of energy.²⁹ At times when a lot of energy is available, such as when there's a lot of wind or when it is very sunny, energy is cheap. If this is the case, the industry produces extra and, for example, our washing machines switch on automatically. At times when little energy is available, the industry postpones production and the washing machine waits a little longer.

We mainly store electricity that we do not need immediately in **batteries** and **hydrogen**.³⁰ This helps us to store energy for times when sustainable energy generation is not or less possible. For example, neighbors in a residential area share a battery to store the energy generated from their roofs. Companies do the same in an industrial area.

Because these storage techniques require a lot of scarce materials, we do a lot of research into improving techniques and recycling.



Sustainable energy supply

In 2040 we will no longer use coal, natural gas and oil for energy production. We produce energy from **renewable energy sources**, such as solar and wind energy. We deploy **solar panels** on a large scale throughout the country.³¹ Because they are available in all kinds of different colors, shapes and sizes, we can integrate them well into the environment, such as in buildings or roads, so that you usually don't even see them.³²

We also generate a lot of sustainable electricity with the energy from the wind. Most of these **windmills** are at sea. Offshore wind mainly consists of floating windmills, because they affect the soil

and nature the least.³³ There are also many windmills on land, but mainly along roads and industrial estates. Both the solar panels and the wind turbines we use are **circular**: they last a long time and can be recycled at the end of their life.³⁴

In 2040 we will only generate a limited part of our sustainable energy in **nuclear power plants** if necessary. Nuclear energy is not necessary for a 100% sustainable energy system as long as we save enough energy and generate a lot of solar and wind energy. *So we first make maximum use of all options for energy saving and the generation of electricity from wind and sun.* If nuclear energy proves unavoidable for a reliable energy supply, we focus our attention on new techniques that limit nuclear waste, such as modern power stations with salt reactors that run on thorium, and the best possible disposal of nuclear waste. Because we first had to do years of research into this, we can only build these power stations after 2040.³⁵ The nuclear power stations that were built earlier can continue to operate as long as necessary.

In 2040 we will only use **sustainable biomass** and we will also focus on protecting forests. Biomass is mainly used as food and as a raw material in industry, for example for bioplastics. In addition, we are producing more and more biomass based on algae and seaweed.³⁶ We also make biofuels from this, which we use in aviation.³⁷ A small part of sustainable biomass is used as an energy source. These biomass plants are only used if too little (stored) energy from sun and wind or storage is available.³⁸ At a local level, we use

biomass from residual flows to produce green gas.³⁹

In addition to solar, wind, uranium and biomass, we will continue to **research** new sustainable energy sources in 2040. For example, we continue to improve relatively new technologies for energy generation, such as kites, living plants, salt and freshwater, or wave energy.⁴⁰

In 2040, our electricity and hydrogen network will not only connect producers and consumers within the Netherlands, but also **internationally**.⁴¹ We share our electricity system with other European countries. If Spain, for example, generates (too) much solar energy, we can transport it to areas where there is a high demand for electricity at that time. In this way we keep the energy system as **stable** as possible.

We import green hydrogen from countries with a surplus of sustainable energy. We pay attention to our **energy independence** and to the fact that we do not import hydrogen from countries that actually need that energy for their own sustainability.

We are not only well connected internationally, but also locally through **energy communities**.⁴² Where possible, we try to coordinate energy generation with the neighborhood.

Throughout the Netherlands, groups of citizens own local windmills or solar roofs. Citizens generate energy together, share it with each other and sell the surplus. They are therefore energy users and energy producers.



Energy is no longer something that is 'just' there, but something that a large part of us is actively involved in generating. The energy communities contribute to making energy available and affordable for all people. People with a (social) rental home can easily become the owner of a sunroof of a company or along the highway.

Digitization

Digitization can help make society more sustainable, but at the same time the amount of energy required can be so great that it is no longer sustainable. In 2040, therefore, it is still a matter of finding a balance between energy savings and energy demand from digital technologies.⁴³ Digitization is mainly used if it saves energy or is an alternative to polluting activities. Standards, requirements and preconditions have been developed for dealing with data and the associated energy consumption.

Negative emissions

Although the Dutch industry will no longer emit greenhouse gases in 2040, until then it will have to invest in **carbon capture and storage (CCS)**.⁴⁴ This is only used if a company really cannot use any

other methods, because saving and making energy more sustainable always has the priority. Until it is possible to completely switch to sustainable energy, companies will have to capture their emissions during production.

After 2040, it will remain important for industry to invest in **negative emission technologies**, to remove previous emissions from the air.⁴⁵ In this way, we ensure that the earth does not heat up more than 1.5 degrees.

A well-known example of negative emission technology is the planting of trees, which store CO₂ in their trunk, roots and leaves. Trees that are planted to remove CO₂ from the air are always planted in collaboration with the local population of a country, whereby nature conservation and restoration are paramount.⁴⁶ In addition to carefully planting trees, we have also developed technologies in 2040 that filter CO₂ from the air.

In this way, in 2040 we will be able to meet our energy needs in a sustainable way, thanks to our reduced energy demand.



Biodiversity & Nature



In 2040 we live together with nature. It is no longer distant from us. Instead, we feel part of nature and take good care of it. Thanks to this changed relationship with nature, the amount of plant and animal species has increased again and there are more protected natural areas.

There is no separation between city and nature: in 2040 everyone has the opportunity to relax and rejuvenate in nature at any time. From the center of Amsterdam to the endless meadows of Friesland, there is more room for trees, shrubs and flowers. In towns, villages and industrial estates we apply the following rule: take out the tiles and replace them with greenery, flowering, buzzing and birdsong in return. This also ensures less flooding in extreme weather and makes the summers less hot and dry. In this way, we live safer, healthier and happier lives!





Why did we need to change?

For a long time, Dutch nature and biodiversity were under severe pressure.⁴⁷ This was partly due to the **fragmentation** and decline of nature reserves because of a lack of space. **Pollution** from industry, traffic and the then intensive agriculture also played an important role.⁴⁸

The decline in biodiversity and the poor state of nature was not only harmful to plants and animals, but also to humans. Poor air and water quality and the lack of greenery around us was harmful to our physical and mental health.⁴⁹ Fortunately, we realized in time that we really depend on nature and the **ecosystem services** that nature provides. We realized the importance and value of a clean, green living environment with a lot of biodiversity, which will enable us to take good care of nature in our country by 2040.

How do we live with nature in 2040?

In 2040 we live in a **nature-inclusive society**: in everything we do, we prevent damage to nature and give something back to nature. We strive for a **climate-positive impact**, whereby we actively work on nature restoration and strengthen nature and biodiversity with our actions. In this way we protect that which keeps us alive and will help us survive in the future.

In 2040, as a citizen it is natural and normal to include nature, biodiversity and sustainability in the choices we make every day. This is easy now that we are more in touch with nature, both in the city and beyond.⁵⁰ Our living environment

is greener and more (bio)diverse, which means that we are often in nature to relax, discover, and learn. This increases our awareness, our admiration, and our respect for nature.⁵¹

In 2040, an exclusively green environment such as a park, a forest, community garden or a nature reserve is accessible to everyone within a 10-minute walk. **Contact with nature** not only helps us make green choices, but also promotes our health and general well-being.⁵²



More nature and better connections

In 2040 we provide more space for nature in the Netherlands to keep our **ecosystems** healthy and increase biodiversity.⁵³ The boundaries between nature and our living space are fading. We have more protected natural areas and there is more nature in cities, villages, in the countryside and in industrial areas, thanks to green parks, neighborhood gardens and strips of greenery and streams.

While we are making the Netherlands more nature-inclusive, we try to restore the **'original' landscapes** as much as possible. What original entails, is different in each place and is for experts to determine, but we use the landscapes that existed there before industrialization and urbanization as a guideline.⁵⁴ As part of this, we fill parks, green roadsides and green strips as much as possible with native species. For example, we gradually re-wild parks, gardens and (urban) forests.⁵⁵

In order to strengthen biodiversity, we do not only have more space for nature in 2040, but nature reserves are also connected to each other to prevent fragmentation.⁵⁶ **Ecological connections**, for example through green corridors, have become an important part of Dutch infrastructure.

Connections of nature underwater have also been reconnected. **Fish migration roads** have been opened up as much as possible, allowing fish to migrate back from the sea to freshwater to reproduce. This is crucial for global biodiversity, because freshwater fish are part of food webs and ecosystems that spread far beyond Dutch waters.⁵⁷ To achieve this, the number of pumping stations, weirs, dams and dikes has been reduced and we make more use of natural protection against the water.⁵⁸





Nature-based solutions

Despite the fact that we are climate neutral in 2040, due to previously emitted CO₂ we still have to deal with extreme weather events, such as heat stress, periods of drought and the threat of flooding due to heavy rainfall and sea level rise.⁵⁹ Therefore, we have to protect ourselves against the negative effects of climate change. We must set up the Netherlands in a **climate-adaptive** manner ([view Housing](#)).

We can protect ourselves against the consequences of climate change by using **nature-based solutions**.⁵⁸ Here too, more space for nature is of great importance.⁶⁰ For example, by 2040 we give Dutch rivers more space by allowing them to meander naturally through the landscape and create tributaries. In this way, we protect our towns and villages against flooding during water quantity peaks. In addition, we make good use of this extra water storage during dry periods. To promote biodiversity, we build soft banks instead of paved quays as much as possible.⁶¹ These natural banks are overgrown with plants and ensure that there is no hard border between the river and the land. The dikes have been heightened where necessary.

We also use the possibilities that nature offers for **climate mitigation**. An example is the use of nature to capture and store greenhouse gasses from the air, for example in trees, plants and some animals.⁶²

Nature policy and management

In 2040, nature plays a central role in national and local policy. The government is assisted by an **advisory council** of scientists that assesses whether new policy plans meet the standards of a nature-inclusive society. There is also a **national knowledge network** in which scientists and various groups of people are united who work in and with nature every day.⁶³ This group can include, for example, farmers, foresters and volunteers who monitor animal and plant species.

Because every place in the Netherlands has its own special nature, **local customization** is central to policy. In policy-making on nature and biodiversity, the government actively involves citizens, farmers and nature organizations to have open and informed conversations in which all arguments are taken seriously.⁶⁴



Our **nature management** looks different in 2040. Because we have a different relationship with nature, based on reciprocity, we intervene less and work together with nature. Intervention is also less necessary because we give nature more space, which lessens the pressure on biodiversity. Because there is more nature and greenery everywhere, the pressure from tourism and visitors on protected nature areas is decreasing.

In 2040, nature has also been given rights in various places in the Netherlands.⁶⁵ Nature reserves, such as the Maas, the North Sea, and the Biesbosch are no longer regarded by law as the property of people, but as their own **legal entity**. Lawyers defend the interests of nature in court. In this way, the nature reserves are better protected under the rule of law.⁶⁶

In this way, in 2040 we live in a nature-inclusive society, in which biodiversity is restored and we can fully enjoy the benefits of nature around us.

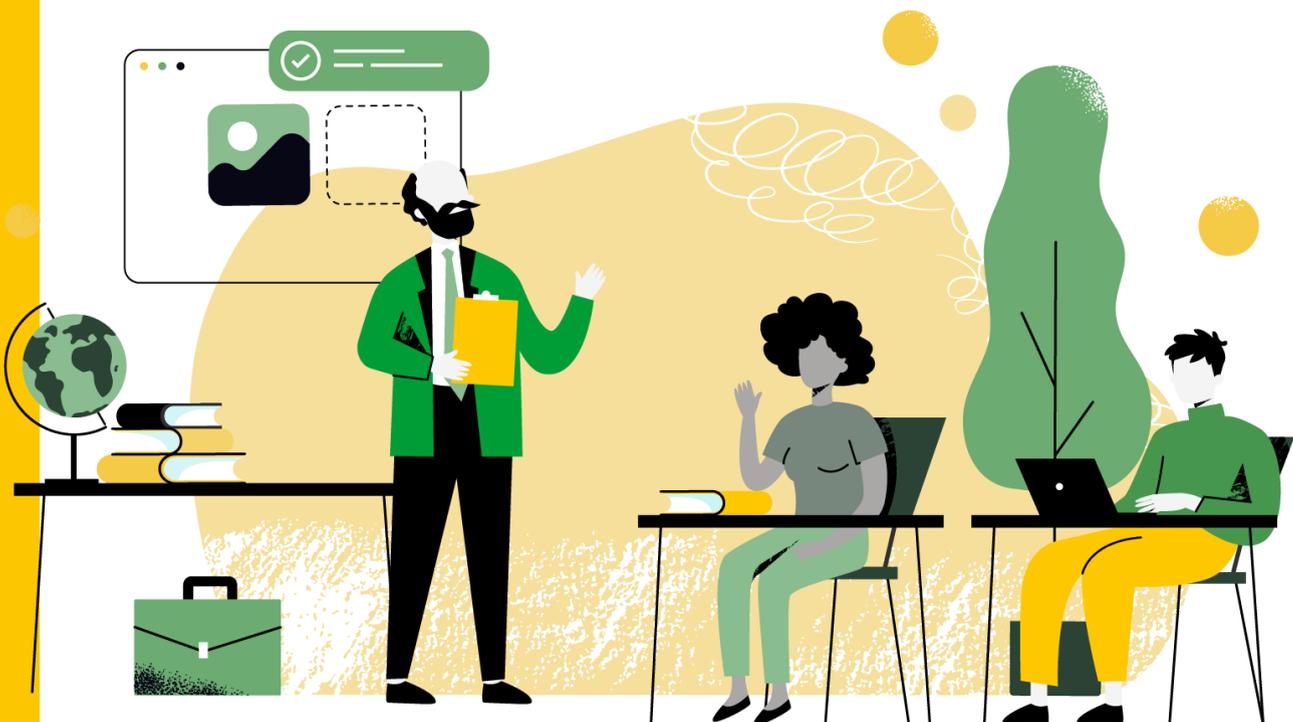


Education



In 2040 we do not only learn about sustainability, but we experience it. Schools are an important part of a sustainable society and use nature and the environment as a classroom. The school is a prime example of what a sustainable world looks like in terms of what you learn, how you learn, and where you learn.

As young people, we get the opportunity to contribute to a more sustainable world through our education by working on practical assignments such as generating sustainable energy or growing organic vegetables. We work together between all kinds of education and with experts from the field to make this happen. We learn during our entire life and even after our studies we still have the opportunity to train to become a real sustainability expert. In this way, younger and older people all develop the skills necessary for building a green future together.





Why did we need to change?

In the past, young people were trained for the economy of that time. We were taught (almost) nothing about sustainability issues and instead learned how to maintain a society that was fundamentally unsustainable.⁶⁷ We were taught how to reach maximum profit for our companies without considering the

negative consequences of that profit, such as child labor and the violation of human rights.⁸ We were taught to pursue infinite economic growth, consuming as many resources as possible and passing the costs on to nature. In 2040 this is completely different: in every year of our education we are taught how we can contribute to a good, sustainable future.

How do we learn about sustainability in 2040?

Sustainability is woven into everything we do: whether it's what and how we buy, eat, travel or act.⁶⁸ Therefore, it's important that everyone has a basic understanding of sustainability, so that everyone understands what the long term consequences of our actions are for the well-being of the earth, people and nature. That is why in 2040 all young people receive the necessary knowledge and skills during their education to organize society in a sustainable way.

For example, we learn about setting up the circular economy ([view Economics](#)), implementing a sustainable food system ([view Food](#)) or shaping the inclusive energy transition in policy terms ([view Energy & Industry](#)). This requires certain skills such as collaboration, thinking about the future, systems thinking and communication skills that we all learn in 2040.⁶⁹ We learn these skills from experts in the field and stakeholders.

In 2040, we have determined the basic level of knowledge of sustainability that everyone should possess. We call this **climate literacy**.⁷⁰ To achieve this, sustainability is mentioned in the core objectives and attainment targets of all levels of education and study programs. In addition to this minimal level of climate literacy that everyone acquires, there are numerous other opportunities to specialize further and become a sustainability expert in a particular field.

In order to understand and solve sustainability issues, students should not approach the question from the perspective of one discipline, but from that of multiple disciplines: they should learn to think **interdisciplinary**.⁷¹ For example, they should apply theories from different subjects such as economics, history or biology. In order to properly incorporate this way of thinking in lessons, sustainability education in 2040 is largely **project-driven**.⁷² Pupils are challenged to actively work together through projects on 'real' issues in the environment.

In 2040 we no longer speak of “high-” or “low-level” educated people, but value everyone for their specific knowledge. Within their interdisciplinary studies, students are given plenty of opportunities to **collaborate** with each other, as both practical and theoretical knowledge is needed for a green future.

Learning at all ages

In primary education, children get acquainted with sustainability because the school sets a good example, for example with solar panels, vegetable gardens, sharing things and healthy and sustainable food in the canteen. All school buildings are green and energy efficient.

From an early age we learn about nature and biodiversity by spending a lot of time in nature.⁷³ In secondary education, you get to work on sustainability issues in an interdisciplinary setting. Here, you learn about sustainability in all your courses. For example, you are taught to work in the new economy by learning about circularity, lifespan extension, resource conservation and sustainable innovations. During each follow-up study you learn more about sustainability in your field.

In this way, we all learn how we can contribute to a sustainable future, while it is very clear to us why we learn what we learn. In 2040, education does not only contribute to a sustainable world, but also to a meaningful existence.

Even after your studies, there are plenty of opportunities to **retrain** to become a sustainability expert. Many courses are offered in modules, giving you the opportunity to study specifically what is needed for your new profession.

For people who lost their job due to sustainability transitions, money was available to follow the right module for a new job. In 2040, which labor force will be needed in the future for further transitions is closely monitored, so that there are no shortages. We do this in collaboration with regional education institutes, labor market authorities and companies. In this way, we prevent an imbalance between available jobs and job seekers, and everyone gets the opportunity to contribute to a sustainable world in a meaningful way.

Sustainable teaching

Lecturers are trained to be able to convey sustainability in a well thought-out manner. For example, they are extensively trained in interdisciplinary thinking about sustainability. Not only the working week has become shorter, but the teaching week as well. This gives teachers more time outside of class, during which they can further retrain or delve into sustainability issues.



Food

In 2040 we eat healthy and sustainably. We don't produce more food than we need, so we don't exhaust the soil. Instead, through our agricultural practices, we take good care of the soil. We eat seasonally and mainly plant-based.

In the shops where we buy our food, it is clearly indicated where our products come from and what is in them. Our food comes as much as possible from the local farmer, who gets a fair price for it. This farmer contributes to healthy nature on a daily basis by means of regenerative farming methods. In this way, our food contributes to our own health and a clean planet.





Why did we need to change?

In the past, our food system and our system of intensive agriculture put enormous pressure on nature and biodiversity in the Netherlands. Examples include soil depletion due to over-fertilisation and the loss of biodiversity through the use of pesticides and the creation of monocultures.⁷⁴

In addition, many greenhouse gasses and nitrogen were emitted by agriculture.⁷⁵ This mainly concerned methane and ammonia from livestock farming and CO₂ from greenhouse horticulture, which contributed to climate change and biodiversity loss.⁷⁶ In 2040 this is completely reversed: the food system contributes to climate adaptation and nature restoration.

How do we eat in 2040?

In 2040 we all have access to **food sovereignty**: the right to healthy food, produced in an ecologically responsible and sustainable manner.⁷⁷ Therefore, healthy, affordable and sustainable food have become the norm for everyone in 2040.⁷⁸ Efficiency and the lowest price no longer determine what we eat, but instead we look at **food quality, nutritional value, animal welfare** and contribution to **biodiversity recovery**.

To achieve a sustainable food system within the limits of the planet, our products are **local** and **seasonal**, from local farmers. These products have to travel fewer kilometers and are therefore less harmful to the climate.⁷⁹

The plant-based, local and seasonal choice is the most visible, most available and most attractive choice, in terms of both price and taste. **Short food chains**, such as farm shops, food boxes from the local farmer and community gardens, connect local residents and farmers.⁷⁹ This connection ensures that local residents are willing to pay a **fair price** ([view Economy](#)) and that they are more intentional and conscious about their food.⁸⁰



In 2040 we eat less animal protein such as meat, fish and dairy, and more **meat and dairy successors** made from plants, such as vegetables, legumes, algae, nuts and seaweed.⁸¹ This **protein transition** was important, because plant proteins result in less CO₂ emissions and require less raw materials and water than animal proteins.⁸²

In recent years, **less livestock** has been kept in the Netherlands for this reason.

This resulted in less nitrogen and methane emissions in the Netherlands and less deforestation and water consumption in countries where feed for 'our livestock' was grown.⁷⁶ We also started eating much **less and other fish**, because the oceans needed to recover from overfishing.⁸³ Fortunately, a largely plant-based diet is also healthier for people than eating a lot of meat.⁸⁴

Health

In 2040 we have healthy food, clean air, clean water and lots of greenery around us. Healthcare is primarily about staying healthy and to a lesser extent about regaining health again. In food lessons we learn how to develop a healthy and sustainable diet for a healthy weight, low risk of diseases and smaller environmental impact.

The prices of fruits and vegetables have been reduced, making it easier to have a healthy lifestyle. Air quality has improved due to lesser car usage ([view Mobility](#)) and a smaller industry ([view Energy & Industry](#)). A green environment ([view Housing](#)) and more free time ([view Economy](#)) ensure good mental and physical health. In nature we can relax, it helps us to recover faster when we are sick, it makes us more empathetic and creative and makes us move more.⁸⁵

Circularity: we waste as little as possible

In 2040, we have a **circular** food system. We used to throw away 10% of our food, but in 2040 we have almost no food waste.⁸⁶ We are not put off by a funny shaped cucumber, a spot on our tomato or a differently colored apple. Suppliers of food better coordinate **supply and demand**, for example by discounting food that has a limited shelf life. Therefore, we accept if there are fewer products in the supermarket at the end of the day, because we believe it is more important that all products are used. Food that is not sold on time is used in the hospitality industry, food bank or other charities. If food is really no longer edible, it is processed circularly and is used as a residual flow in agriculture.⁸⁷

In 2040 we have almost **no packaging waste** anymore. We need less packaging because we better match the food supply to the demand and many of our products come from local producers. We only use packaging if it prevents food waste and thus reduces CO₂ emissions. We only use biodegradable or recycled materials for this packaging.⁸⁸ Consumers are also aware of packaging and use as much of their own, reusable packaging as possible to prevent waste.

In line with **consuming less**, we have largely stopped growing and exporting products that cost a lot of energy and do not meet people's basic needs, such as cut flowers and other floriculture. As a result, greenhouse horticulture has shrunk enormously, which has resulted in a major reduction in energy consumption and light pollution.

Light pollution

The transition from day to night largely determines the rhythm of life on earth. Artificial light disrupts this cycle, which has consequences for the well-being of animals, plants and people.⁸⁹ In order to influence the rhythm of people and other organisms as little as possible, in 2040 lights are only on when it is really necessary.

For example, all street lighting in quiet places has a motion sensor or a timer. These lamps are less bright, shine less widely and have a warm color instead of blue hue. Office buildings no longer light up the whole sky at night, (illuminated) advertisements almost no longer exist ([view Economy](#)) and thanks to the decline in greenhouse horticulture, the Netherlands is a lot darker at night. This way, we can see the stars again in 2040.

Regenerative agriculture

In 2040, farmers work in a new way, in which agriculture contributes to **healthy nature**. This is important, because healthy nature provides more ecosystem services ([view Biodiversity & Nature](#)), such as the right temperatures, clean water and fertile soil, all of which are important for agriculture.⁹⁰ In order to take better care of nature, the separation between agriculture and nature has faded and we now have mostly **regenerative agriculture**. This focuses on restoring degraded soil, groundwater and biodiversity.⁹¹ Regenerative agriculture does not mean monocultures but crop rotation, not only fields but also food forests and no use of artificial fertilizers, concentrates and chemical pesticides. As a result, nitrogen emissions have been reduced enormously and the soil has been restored.⁹²

Healthy soil is soil that is teeming with insects, worms, fungi and bacteria. With worms in the soil, plants grow better and water is absorbed more easily.⁹³ Many of the organisms in the soil keep pathogens at bay.⁹⁴ Healthy soil also sequesters much more carbon than depleted soil.⁹⁵

Thanks in part to the healthy soil, agriculture has become **climate neutral** by 2040. In addition, the soil can hold more water if it contains more carbon, which helps to better protect farmers' crops against extreme weather conditions.⁹⁵





Water usage

Climate change increases uncertainty about the available water resources. That is why we use our freshwater supplies more wisely in 2040. In the past, a third of water in Europe was used by the agricultural sector.⁹⁷ In 2040, measures such as irrigation with wastewater have significantly reduced this. Thanks to the healthy soil, rainwater is better absorbed and retained. Poor water quality due to contamination by pesticides and fertilizers is a thing of the past.

Everywhere in the Netherlands, water is reused as much as possible. Cities and villages are designed to retain water and to be able to drain it quickly during heavy rainfall. This is ensured by replacing tiles, asphalt and concrete where possible with greenery and giving rivers more space ([view Housing and Mobility](#)).⁹⁸ Wastewater in homes is no longer immediately flushed away. Instead, it gets a new purpose, such as flushing the toilet. Everywhere, the quality of water gets the attention it deserves.

Water in cities and villages is continuously purified and sewage treatment processes are further optimized in 2040 to keep foreign substances out of nature as much as possible.

Fair policy and a fair chain

A **fair food policy**, in combination with a new social norm, ensures a sustainable food culture. The government encourages a healthy and plant-based diet, for example through campaigns or financial incentives.

In 2040, farmers are paid the **fair price** for their products ([view Economy](#)). The land must be leased at a fair price price, to give farmers the means to work in an

environmentally friendly way. This fair price makes it profitable and viable, on an ecological, social and economic level, to have sustainable production, distribution and consumption. In 2040 we import as little as possible and we mainly export food to places where it is badly needed. International trade agreements set an international fair price that protects ecosystems everywhere from exploitation.



For everyone working in the food chain, **fundamental human rights and labor standards** are respected with fair pay and safe working conditions. Liability and accountability for social abuse extends across the entire chain. The associated

monitoring and reporting on living and working conditions are required by law. Respect for the traditional knowledge of indigenous peoples and farmers is essential for this.

In this way, everyone can eat healthy and sustainable food by 2040, while we take good care of our planet.



Housing



In 2040 we live in a relaxed, lively and green environment. We share more spaces in our neighborhood and at work, which creates more space for homes and greenery in the city. With more green and blue, such as parks, green belts, rivers and ditches, we live healthier and more relaxed lives!

Our houses are also more sustainable in 2040. We build with sustainable materials, such as natural materials that store greenhouse gasses. When demolishing houses, we can store these sustainable materials and reuse them for a new house. Buildings are insulated as well as possible, energy efficient and therefore pleasant in all seasons. Building facades and roofs are full of solar panels and nature! In this way, we lose as few raw materials and energy as possible and our houses contribute to a green future.



Why did we have to change?

In the past, young people were the main victims of the **housing crisis**: they could not find a room, apartment or house. The homes that were available were often unaffordable, in inconvenient locations and unsustainable.⁹⁹ Young people wanted to save energy and raw materials at home, but good insulation, solar panels and economical electronics were often too expensive. This housing crisis is solved by 2040 and everyone is able to find and afford a sustainable and suitable home.¹⁰⁰



How do we live in 2040?

In 2040, everyone in the Netherlands has a home. The housing shortage has been reduced thanks to the **extended and flexible housing market**. We build higher and more compact buildings in existing cities. In addition, we deal with the existing buildings in the Netherlands in a smart and efficient way.¹⁰¹ Empty buildings, such as offices, have almost all been converted into homes. In existing neighborhoods, the housing supply is increased and made more suitable, for example by adding floors on terraced houses or by building new homes where there were previously roads, parking spaces, petrol stations or garages.¹⁰²

In 2040 we **share** as much space as possible, whether it concerns living space, greenery in the neighborhood,

workplaces or sports facilities. Different forms of cohabitation are encouraged to increase our sense of community and mutual support. For example, people often share a kitchen, a garden, a home office or a sports field or space.

Communal housing is popular, especially in (old) farm houses outside the city. We are at home more often and there is a greater bond between residents, which makes it easier to borrow and learn from each other. The average living space per person has fallen sharply.¹⁰³ Hardly anyone lives in a house that is too big or too small. To make this possible, flexible flow to suitable homes is clearly encouraged.

Cities are designed according to the principle of the **15-minute city**.¹⁰⁴ In the 15-minute city, all daily necessities such as supermarkets and schools but also cultural institutions such as museums and theaters can be reached by everyone within 15 minutes. This does not mean that cities have had to build many new museums, but that existing buildings have been given multiple functions.

Sustainable building

In 2040 we only build **modular, circular and energy-positive homes**. Buildings are constructed in such a way that they can be adapted, expanded or divided.¹⁰⁵ This modular way of building means that buildings consist of building blocks that can be easily moved or modified. This makes it easier to transform office buildings into homes, but also to extend or divide existing homes. As a result, we can easily adapt our homes to the



different phases of our lives, from student house to single-family home.

Our buildings and their materials are part of a circular economy in 2040 ([view Economy](#)).¹⁰⁶ By building in the existing built environment, maximum use can be made of the building materials that are there or that become available through demolition. In order to make **circular construction** easier in the future, so-called materials passports accurately map which materials are used where.¹⁰⁷ There are storage areas, where construction materials that are released during demolition are temporarily stored for reuse. Unless they really cannot be saved, buildings are renovated or adapted, rather than demolished and used for new construction.

When new materials are needed in construction, we primarily use **natural materials** such as hemp, flax, straw, wood, bulrush or even sheep's wool.¹⁰⁸ In the future, these materials can be processed and transported more easily than heavily polluting materials such as steel, cement and concrete. The use of natural materials in construction means that we can store CO₂ in new homes.¹⁰⁹ Significant investments are being made in the production and application of these materials in construction – not only in new construction but also in the insulation of existing homes.

(Energy)positive housing

In 2040, our homes use as little energy as possible. All homes are well **insulated** and very **energy efficient**. As a result, we lose almost no heat and we do not waste any energy.¹¹⁰ We continuously check the insulation and efficiency of our homes and make adjustments if it can be made more sustainable, more economical or better insulated.¹¹¹ We have gathered a great deal of knowledge about making our buildings more sustainable. We have cheap and easy standard solutions for every type of building, which we deploy as much as possible per district, village or city.¹¹²

Converting our homes not only ensures that we use less energy, but also ensures that we **live comfortably**. In the hot summers, our homes remain nice and cool even without air conditioning and in the winter they remain comfortably warm. Indoors, a lot of attention is also paid to good air quality. Sustainable ventilation systems provide healthy and fresh air, and at the same time make optimal use of the available energy and heat from the outside or inside air.¹¹³

By 2040, most buildings have become energy producers, meaning that our homes generate more energy than they use: they are **energy positive**. Because solar cells have become smaller and even more efficient, they can be utilized better and more often in the built environment. Solar energy is no longer harvested with sturdy panels, but often in barely visible ways. Façades, roof tiles and windows in favorable locations can all be used as solar panels. In this way, we generate more and more energy but see less and less of it.³¹

We only use **sustainable heat** to heat our buildings. We no longer rely on natural gas, but mainly use electric heat pumps to heat our homes. In places where electrical solutions are not possible, such as in old city centers, we have set up heat networks or use green gas or hydrogen.¹¹⁴ Our water is heated by

sustainable heat sources, such as geothermal heat, residual heat from sustainable industries or heat from water. Large buildings such as shops and office buildings are heated and cooled with thermal energy storage.¹¹⁵

Climate adaptation

Due to climate change, we increasingly face extreme weather events. In order to prepare ourselves for this as much as possible, we set up the Netherlands in a **climate-adaptive** way. In our cities we make room for greenery by living smaller and building vertically.¹¹⁶ We have fewer tiles, concrete and asphalt, and have more trees, plants, rivers and ditches. This nature throughout the city absorbs water when there is a lot of rain, retains water and provides essential cooling during heat waves.

The nature in the city is more lively and diverse because green strips and ditches connect all pieces of nature with each other. A large part of the former motorways within cities have been replaced with green walking and cycling paths that invite people to exercise ([view Mobility](#)). Regenerative agriculture ensures healthier soil, which can hold more water and thus better protect crops against extreme weather conditions ([view Food](#)).

Healthy and climate-proof living

We also live **nature-inclusively** ([view Biodiversity & Nature](#)). Roofs and facades are covered as much as possible with plants and flowers, sometimes in combination with solar panels. This gives animals and insects a safe home in the city, but also filters the air, provides cooling in hot summers, and collects greenhouse gasses.¹¹⁷ In constructing and renovating buildings, animals are taken into account by adding nesting or wintering spaces to the



building. It has become the norm to design gardens and balconies as green oases with a variety of plants and flowers.¹¹⁸ Allotments and other forms of urban agriculture are cherished and also made possible at neighborhood level.

In 2040, our built environment takes into account rising sea levels. **Living together with the water**, or even on it, is more visible and normal in 2040.¹¹⁹ We do this by building and investing in forms of housing that can take a hit. Floating neighborhoods and cities are increasingly

popular. We build more sustainable homes by constructing floating homes in rivers and canals and large bodies of water such as the IJsselmeer.¹²⁰ We actively share our knowledge of these architectural styles with countries that are already losing the battle against sea level rise.

Spatial Planning

In the past, the plan for the Dutch landscape mainly consisted of houses, asphalt, and agriculture and horticulture. In 2040, that space is divided up differently, the boundary between humans and nature has become less and less visible ([view Biodiversity & Nature](#)). For example, regenerative agriculture and nature smoothly flow into one another ([view Food](#)). Less export and a smaller livestock population also means that the need for agricultural land is smaller and that there is more space for nature.

Cities have far fewer cars ([view Mobility](#)). Where there used to be parking spaces, there are now green oases and small homes. Solar panels with green roofs underneath color the urban landscape from above. Nowadays, a solar panel can be found on almost every suitable roof and there are wind farms at sea. As a result, there is less need for solar panels and windmills on land, and this space has been returned to nature. Now there's more space for nature inside and outside the city.

In this way, in 2040 we are all able to afford a sustainable and future proof home that we also enjoy living in.



Mobility



In 2040, our well-being is most important, even when we are on the road. We think differently about travel and no longer focus on the fastest, but on the best way from A to B, for ourselves, our stuff and our nature. This allows us to travel more calmly and without stress.

We have brought travel destinations such as schools, work and nature closer together so that we have to travel less distances on a daily basis and so that we can enjoy being on the road again. We have created a mobility system in which peace and happiness are most important and which can be used by everyone, regardless of income, gender or health. We travel in lesser amounts and more meaningfully, and therefore much more sustainably.



Why did we need to change?

Our mobility system used to be about more: more money and more kilometers, all as fast as possible. To be able to travel faster, we spent years building more roads, for but we never reached our destination faster: because we started to travel *more*, the traffic jams always returned.¹²¹

Despite 600 road deaths a year and deteriorating air quality, we continued to value our car and speed.¹²² Although owning a car equaled freedom, 10% of the Dutch population suffered from transport poverty: they had no car, could not go where they wanted to go and therefore could not fully participate in society.¹²³ This had to change. In 2040, our travel behavior is therefore relaxed, inclusive and sustainable.

How do we travel in 2040?

Our cities in 2040 are designed for living, not for travel or transportation. Facilities inside and outside the city are closer together, as are living and working environments. Thanks to this 15-minute city ([view Housing](#)) and our flexible working hours and places ([view Economy](#)), we drive **fewer kilometers** in 2040. The distances we do have to travel, we do so sustainably. For short distances we walk or use the (electric) bicycle or scooter. For long distances, we mainly use public transport, such as buses, trains, trams and metros, while reading a book or enjoying our view.

Our **public transport network** is designed differently than it used to be, so we make more and better use of it. All the different vehicles that are part of our public transport are offered via Mobility as a Service (MaaS), as one journey that takes us door-to-door.¹²⁴ In MaaS, all types of transport in the Netherlands come together in one travel planner app. The different modes of transport connect seamlessly here. Thanks to this app, we can plan, book and pay for the entire journey from start to finish in one central place. Due to the wide range of transport options, MaaS is flexible and can respond to different numbers of travelers at any time, who we can always inform about the best, cheapest and most sustainable route.

MaaS is present throughout the country by 2040. More distant locations within and outside the city now have at least one bus, tram or train connection. Outside the cities, the **Bus Rapid Transit** system plays a major role.¹²⁵ These express buses run their routes on free bus lanes. They drive flexible routes, connecting villages and urban suburbs with each other. Smaller, self-driving buses are available for people who have less mobility.¹²⁶ These bridge shorter distances and take people to transport hubs, such as major bus stations and train stations. If we use a car for remote areas, we leave it at a Park & Ride on the outskirts of town. From there, we switch to a rock-solid urban public transport network and travel further into the city center.

Because everything in the city is close by and thanks to our good public transport network, Dutch cities are almost completely car-free, without any problems. Polluting asphalt roads have often made way for spacious bicycle paths made of **sustainable paving materials**, such as olivine sand.¹²⁷ This nature-friendly paving keeps all houses accessible for necessary vehicles, such as the rescue services. The 225 square kilometers of parking spaces of the past have largely been replaced by vegetable gardens, playgrounds and additional homes.¹²⁸ The remaining parking spaces are available for residents who need their own car, such as disabled people, and for the provision of services by for example electricians and plumbers.

Shared mobility

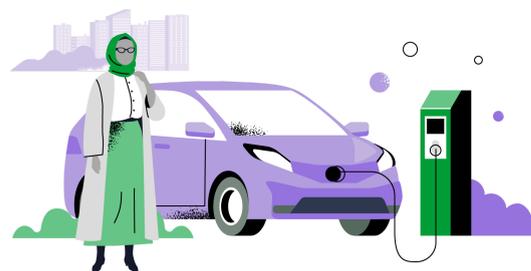
In 2040, a sharing economy ([view Economy](#)) has emerged within our travel system, in which we make use of **shared mobility**.¹²⁹ These are means of transport, such as bicycles, scooters and cars, that everyone can use. They can be found in strategically located places, such as at train and bus stations, and near residential areas.

In addition, we often use means of transport together. Thanks to **ride-sharing**, a shared car transports three to four people, instead of the average of 1.4 people of the past.¹³⁰ Thanks to shared mobility and ride-sharing, we need to produce far fewer cars, which saves a lot of raw materials and energy.

In a world that revolves around wellbeing, we no longer have to work 40

hours a week. As a result, our commute has changed. In addition to working less, our working hours and locations are also easier to adjust. In addition, there is more freedom to work at home or at flexible work locations one or a few days a week. for professions that allow it.

These changes have ensured that we travel less and more evenly throughout the day. We no longer have to stand still in traffic jams or stand crammed together in the train, because the morning and evening rush hours are a thing of the past.¹³¹ Employers and municipalities help to ensure the accessibility of paid and unpaid work locations by means of a flexible **mobility budget**, where sustainable options receive higher compensation.



Sustainable across borders

When we cross the border for family visits, holidays or business trips, we do so sustainably. When we go on holiday for a weekend or week, we look for destinations closer to home. When we go on holiday far away, we take the time for this and we go away for a longer period of time. Thanks to our shorter working week, there is room to go on holiday for longer periods, so that traveling more slowly is no problem. Our vacation is not

about seeing as many places as possible, but about valuable experiences. So, we stay in one place for a longer while. This has put an end to mass tourism, cruise vacations, and saving passport stamps. For example, we have greatly reduced our holiday kilometers and CO₂ emissions.¹³² Companies have a very limited CO₂ budget and therefore apply strict rules to business trips.



We also travel sustainably on holiday, such as by **train**, **hydrogen boat** or **electric shared car**. Until climate neutral flying is possible, we will fly much less. In line with the emission exchange system, airlines have a maximum number of kilometers that they are allowed to fly annually.¹³³ This means that flying in Europe for distances up to 1500 km is no longer possible.¹³⁴ For these trips we use the rock-solid European train network, consisting of (high-speed) trains, night trains and the first hyperloop routes, all of which offer a comfortable journey.¹³⁵

Thanks to the **fair price** (*view Economy*), train tickets are cheaper than flying. For journeys under 500 km we are just as fast by train as or even faster than by plane.¹³⁶ For longer distances, we are on the road for a longer period, but we are happy to accept this because we know that faster travel does not necessarily mean more

valuable travel and we know more about the negative consequences of aviation.¹³⁷

Making existing means of transport more sustainable

Thanks to the energy transition (*view Energy & Industry*), we travel using **sustainable fuels**. The transition to sustainable fuels has been smooth thanks to measures such as a kilometer charge for fossil cars and trucks, and emission-free zones in cities. As a result, all fossil fuel vehicles have been removed from our roads by 2040.

When choosing a suitable energy source for a means of transport, diversification is central and the following applies: electric where possible, other options where necessary. Most lighter short-haul transport is powered by electricity.¹³⁸ Heavier long-distance transport is powered by hydrogen or synthetic fuels.¹³⁹

Scarce raw materials needed for batteries and hydrogen engines, such as lithium and cobalt, are extracted in a sustainable and fair manner. Making the global north more sustainable must not lead to the pollution of drinking water and unsafe working conditions in resource-rich countries.¹⁴⁰ By focusing on shared mobility, innovation and effective recycling, we needed much **less scarce raw materials** for our transition, and the transition was able to proceed smoothly and quickly.¹⁴¹

The transition to 100% sustainable transport is almost complete in 2040. Only airplanes are still developing. For example, in 2040 the first **hydrogen aircraft** that can cover increasingly

greater distances already flies.¹⁴² We are working towards the point where all long-haul flights are also made with hydrogen.¹⁴³ Until then, aircraft will use synthetic kerosene that closes existing carbon cycles.

Smart, short and transparent goods chains

Our goods are also transported sustainably in 2040. Thanks to the end of the throw-away society ([view Economy](#)), there are far **fewer goods to transport**. Fortunately, times in which 15.3 million overflowing containers with cheap items arrived in the port of Rotterdam within one year are long gone.¹⁴⁴ International container shipping has declined sharply, because we mainly produce locally, use our items for a long time (or reuse them) and favor quality over quantity. Packages are shipped and delivered more slowly, which means less impact on the climate. This measure also creates better working conditions in packaging stores and leads to less work pressure for deliverers. Freight transport by plane only takes place in emergency situations.

Thanks to largely local food and goods production, our everyday products travel much shorter distances. We load electric trucks and barges optimally and then transport goods within as few kilometers as possible to strategically located **delivery hubs**. Smaller electric vans and bicycle couriers then deliver orders to markets and other stores. We collect personal packages from strategic collection points close to home. In this way, we reduce our transport kilometers and emissions.

Finally, we are working on **transparent goods supply chains** and now, in 2040, we know exactly where a package comes from. Thanks to this growing transparency, we have been able to choose the items that followed the most fair and sustainable route and companies were encouraged to become more and more sustainable. In 2040, this has resulted in companies being climate neutral. Because we place increasingly higher demands on our products, these transparent chains can ensure that some chains even become climate positive!

In this way, in 2040 we travel less, slower and more pleasantly within and outside the Netherlands, and we have ensured a safer and cleaner living environment.



CONCLUSION

Our way of life exhausts the earth. We are warming the climate, damaging biodiversity and polluting the living environment of our planet. The consequences of these environmental and climate crises are becoming increasingly visible and tangible. We are taking small steps to solve these problems, but the disasters are increasing in strength and number.

System crises require system solutions. We need a vision, a comprehensive plan for 2040 and beyond. A positive story and vision of the future that motivates us to make significant changes as quickly as possible and to say goodbye to the status quo. The story above is such a vision of the future.

System solutions require a different policy strategy. Instead of thinking from the perspective of the present, we ask you to use the future as a starting point. What kind of country do we want to live in twenty years from now? And what steps can we take now to get closer to that dream future? We leave symptom control in the past. Instead, we stimulate behavioral change, shift money flows, make information publicly available, and aim for radical cooperation.

Young people are ready for these system changes. In fact, they ask for it. Let this climate agenda be an example of that. It is not an invitation to a conversation, but a call to action. We believe that there is still a chance that our future will not become worse, but more beautiful, greener, more social and healthier. It won't be easy, but it's possible. And for that, we need you.

We believe that everyone, from politicians to entrepreneurs and from students to retirees, can contribute to this brighter future.

So, what is your role in this story?

“Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.”

—
Margaret Mead

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