

Systemic change



Activists demonstrate ahead of an advisory opinion on what legal obligations nations have to address climate change, July 23, 2025, in The Hague, Netherlands. (AP Photo/Peter Dejong)

How the systems behind the climate crisis work

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The purpose of these educational materials is to help young people understand the climate crisis on a systems level through engaging with the topics and foster agency through the skills and techniques of journalism.

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These educational resources have been developed to the best of our knowledge, using reliable and widely-recognized sources. While every effort has been made to ensure accuracy and clarity, we cannot guarantee that the materials are free from errors or omissions. Climate change is a field of knowledge that continues to evolve, and teachers and learners are encouraged to consult up-to-date scientific sources (e.g. IPCC, IPBES or national agencies) to complement and enrich these activities.

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Learning objectives

1. Explain what a system is and what systemic change looks like for climate change;
2. Understand what leverage points are and how they can trigger systemic change;
3. Research case studies and communicate the systems driving a conflict;

✓ GreenComp alignment:

- Systems thinking
- Futures literacy
- Exploratory thinking

Unit guide

Begin by hearing about the renewable energy transition in Uruguay, to get students thinking and talking about systems change in regard to fossil fuel use.

Read the Project Instructions prior to going through the Learn texts, to give students a sense of what they'll need to do following the lecture. We recommend spending more than one class on the text, to allow time for comprehending each leverage point.

You can decide what sort of report the students produce in their project, but the researching and analysing in terms of systems is the main task. For more information on producing journalistic content, see our units on journalism.

Optional activities to further analyse leverage points and to get students to think about what sort of "changemaker" they are, are at the end of the document, as well as a few extra resources on systemic change and systems thinking.

Here is the link to the **lesson slides**.





Watch and discuss

Watch this 3-minute video on Uruguay's energy transition and discuss the below questions

(10 minutes)

Ramon Mendez, Uruguay's Energy Secretary, says that renewable energy is the cheapest form of energy. According to him, what is in the way of many country's transitioning to using renewable energy as its main source?

What are some of the benefits he says come from having renewable energy as a country's main source of energy?



[Watch video on YouTube](#)

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Storytelling

Find and research a case study

Using an online database on environmental justice called the [EJAtlas](#), your task is to find a few case studies involving a certain commodity and pitch a story based on the questions that arise from looking at these case studies.

Think of a product (for instance a phone, a chair, a burger, a leather jacket, etc.) and select a commodity that was used to produce it (e.g. lithium, copper, wood, meat, leather).

Read at least 2 cases from the EJAtlas (or other sources) of environmental justice struggles that involve this commodity in different parts of the world and at different steps of the commodity chain (i.e. extraction, transportation, processing, disposal, etc.).

First, re-write the case studies into headlines.

For example, you might choose a T-shirt – something everyone owns – and look into the environmental justice case studies involving cotton.

On the EJAtlas website, on the right hand side, click down on Filters and choose Commodity = Cotton.

You can also use the EJAtlas word search engine to select the cases that involve the commodity you choose. Each case will be identified with a point and a colour, each colour relates to a different type of conflict (mining, processing, transport, waste, etc).

If you click on the point you can read the full case.

One case refers to a community in Brazil whose plants and water sources were found to have residues of toxic chemicals from the pesticides used for the nearby cotton plantations, and another case shows how the Aral Sea in Turkmenistan dries up due to irrigation for increased cotton production to feed the textile industry.

The headlines:

1. Indigenous community in Brazil relies on polluted river due to large-scale cotton plantation
2. Irrigation for the cotton industry has come at the expense of livelihoods in the regions surrounding the Aral Sea.

Then, note down what questions come to mind so that you could explore the systems at the heart of these case studies.

Questions I could ask to start my pitch:

1. Who are the main importers of cotton globally?
2. Is there legislation in place anywhere to prevent the use of pesticides?
3. What is the impact of pesticides on human health?
4. What is the average lifecycle of a cotton t-shirt?

Write a pitch based on one of your questions.

See our unit on *How to write a pitch*.



Climate change is a global, complex issue involving many interconnected systems and actors. Tackling it fairly requires a just and systemic transformation.

Understanding how climate change is deeply linked to both the biodiversity crisis and issues of justice, and recognising the many actors involved, can feel overwhelming, but it can also be empowering.

By learning and understanding how systems work, we can think of solutions which are systemic – or transformational – for everyone's wellbeing and for the planet, and we can identify those that are less suitable for tackling the issues at hand.

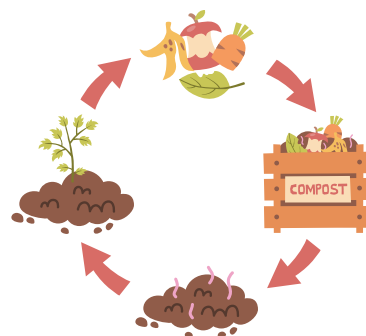
1. What is systemic change?

What does it mean by 'systemic change'? Why is systemic change important? And how can we bring about systemic change?

These are by no means easy questions to answer. We will start by explaining what a system is. Then, we will see why systemic change is important. We will then delve into what systemic change is and how we can bring it about to address climate change.

For the moment, keep in mind that systemic change to address climate change means changing the systems that are driving climate change to make it easy, fair, and affordable for every country, company and individual to reduce their CO₂ emissions and adapt to the effects of climate change.

How does systemic change come about? Well, it doesn't just come about. People generate systemic change when they get together to think, work and engage as citizens.



1.1 What is a system and how do systems interact?

A system is defined as "a regularly interacting or interdependent group of items forming a unified whole" (Merriam-Webster Dictionary).

For example, you can think about your school as a system: hundreds or thousands of students make up classes and interact with teachers and staff in a specific building, every weekday. Although your school is composed of different people and is located in a specific place, when you think of your school, you probably also think of it as a thing in itself.

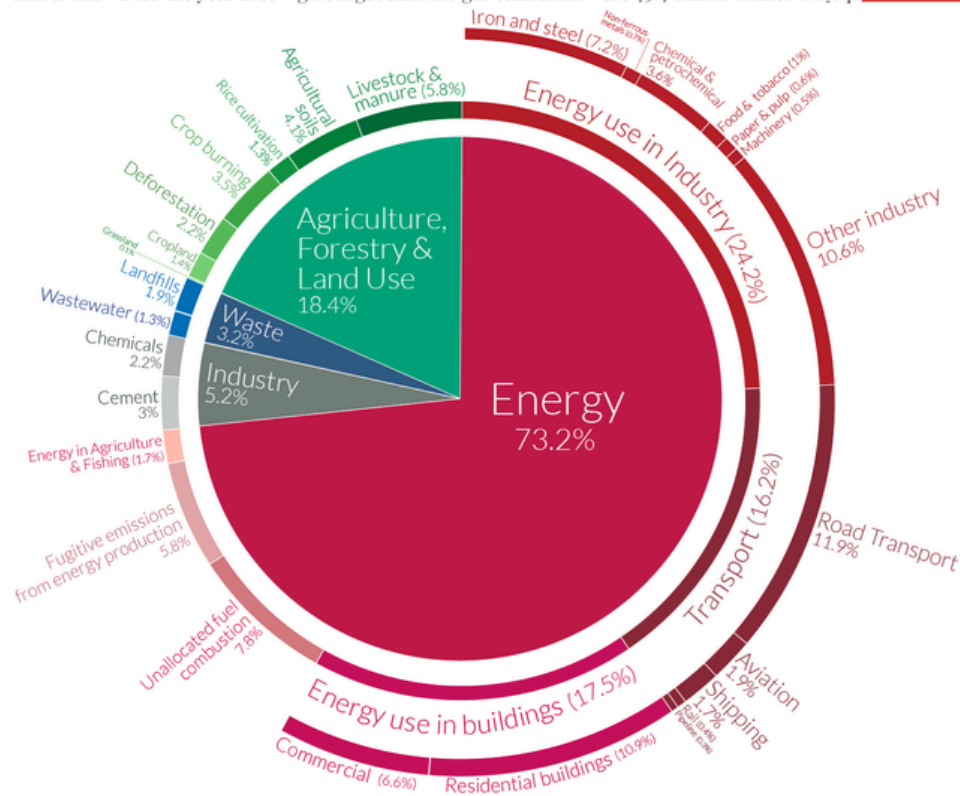
This is what a system is: it's a thing in itself, whilst also being composed of members interacting with each other. You can also have smaller systems within larger systems. For instance, you can think of your class as a smaller system within a larger system, which is your school.



Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.

Our World
in Data



OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

Licensed under CC-BY by the author Hannah Ritchie (2020).

Figure 1: Chart illustrating the sectors responsible for global greenhouse gas emissions. Chart from Our World in Data. ¹

Other systems include the transport system, the food system, the fashion system, the energy system, the global trade system or the legal system.

Now, systems can interact with each other. Think of the last time your class got together with another class, to play a game or attend a school ceremony. You weren't just 20 students sitting next to other 20 students, but also two classes or systems interacting with each other.

You can also think of your body as a system, with many interacting subsystems: the digestive system, circulatory system, the nervous system, and so on. If one part of the system fails (if the lungs don't supply enough oxygen), the whole system is

affected – fatigue, organ stress, possible collapse.

The global energy system is a key system, as it affects many other systems that organise our lives. For this reason, it occupies a central place in conversations about the environmental crises.

To understand how these systems are connected, take a look at the chart below. It shows which sectors were responsible for global greenhouse gas emissions in 2016. You'll see that when we group all emissions linked to energy use, they make up about 73% of global emissions! That's because most systems, like transport, food production, chemicals and construction, rely on energy to function.



1.2 The fossil fuel-centred energy system

Let's first clarify the difference between electricity and energy. Energy and electricity are linked, but not the same.

Energy is the capacity for something to work. Energy comes in different forms, depending on its source:

- Light energy from the sun;
- Chemical energy from natural materials like fossil fuels and wood;
- Mechanical energy from the movement of water or wind.

These are examples of primary energy. Primary energy cannot be distributed directly through power lines to power your house. Primary energy first needs to be transformed into electrical energy or electricity - a secondary form of energy - to power your house.

The process of burning fossil fuels to make electricity releases CO₂.

Combustion cars, planes and ships do not run on electricity. They are powered directly with energy coming from burning fossil fuels like gasoline, jet fuel and oil. This process of burning fossil fuels to power transport also releases CO₂.



Most heating and cooking does not run on electricity either. Heating and cooking typically run on burning natural gas which is another fossil fuel. The process of burning natural gas to cook and heat homes also releases CO₂.

Because the energy system - whether providing electricity, powering transport or heating homes and fuelling cooking - relies heavily on fossil fuels, we talk about a 'fossil fuel-based energy system'.

Turning renewable sources of energy like sunlight and wind into electricity releases very little CO₂. So, to decarbonize, three broad changes are needed, among others:

- Replacing fossil fuel-generated electricity with renewables-based electricity;
- Electrifying transport, heating and cooking and powering these with renewables-based electricity;
- Finding alternatives to powering planes and ships with fossil fuels;
- Making all uses of electricity and energy as energy efficient as possible, and reducing energy consumption.



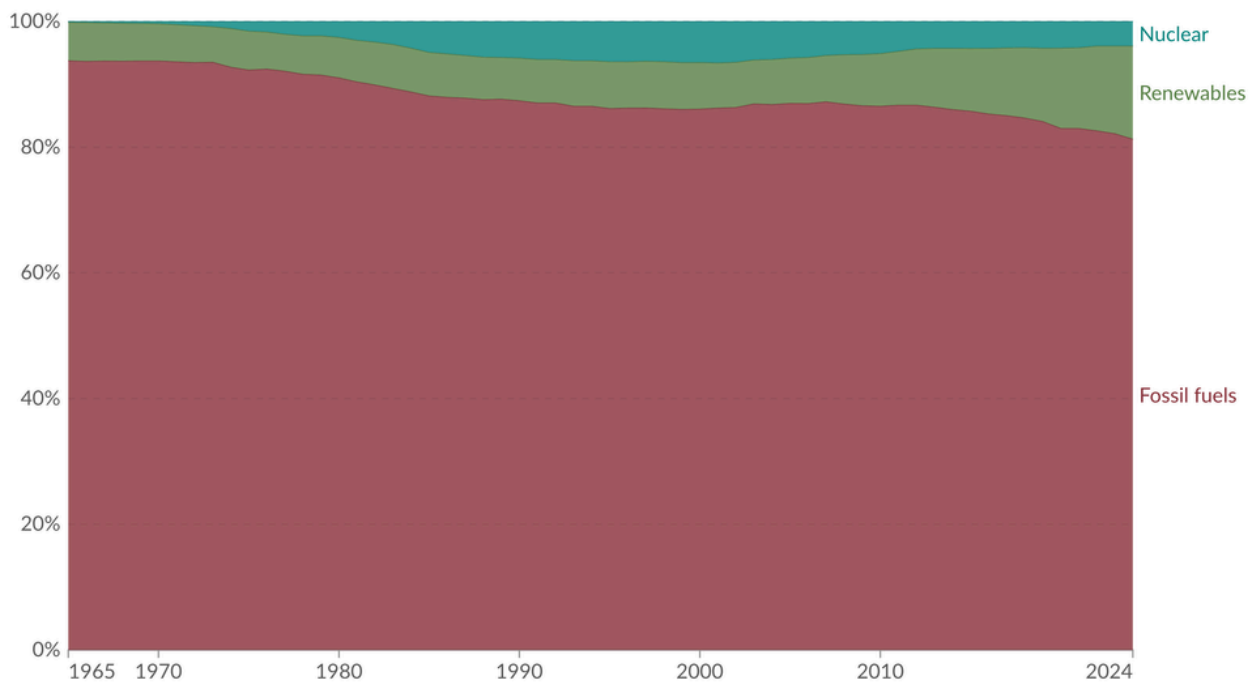


When the energy system is still dominated by fossil fuels, as the chart below shows, despite calls for 'decarbonisation', the other systems which require energy also end up producing huge amounts of CO₂ emissions.

Primary energy consumption from fossil fuels, nuclear and renewables, World

Our World
in Data

Primary energy¹ is based on the substitution method². Renewables include hydropower, solar, wind, geothermal, wave and tidal, and bioenergy, but not traditional biofuels.



Data source: Energy Institute - Statistical Review of World Energy (2025)

OurWorldinData.org/energy | CC BY

1. Primary energy Primary energy is the energy available as resources – such as the fuels burnt in power plants – before it has been transformed. This relates to the coal before it has been burned, the uranium, or the barrels of oil.

Primary energy includes energy that the end user needs, in the form of electricity, transport and heating, plus inefficiencies and energy that is lost when raw resources are transformed into a usable form.

You can read more on the different ways of measuring energy [in our article](#).

2. Substitution method The “substitution method” is one method used to adjust primary energy consumption for efficiency losses experienced by fossil fuels. It tries to adjust non-fossil energy sources to the inputs that would be needed if it was generated from fossil fuels. It assumes that wind and solar electricity is as inefficient as coal or gas.

To do this, energy generation from non-fossil sources are divided by a standard ‘thermal efficiency factor’ – typically around 0.4

Nuclear power is also adjusted despite it also experiencing thermal losses in a power plant. Since it's reported in terms of electricity output, we need to do this adjustment to calculate its equivalent input value.

You can read more about this adjustment [in our article](#).

Figure 2: Chart illustrating the types of fuels used for primary energy consumption. Chart from Our World in Data.²



If you want to reduce your carbon footprint by changing your lifestyle, yet you live in a country where the energy system is dominated by fossil fuels, it will be difficult for you to reduce your carbon footprint. You can learn more about this in the Individual Carbon Footprint Unit.

The interaction between the energy system and the transport system is very clear in the case of electric vehicles.

If you switch your internal combustion car for an electric vehicle in a country where the energy system is still fossil fuel-based, your carbon footprint may not be reduced by very much.³

If the energy system was renewables-based, you would be able to reduce your carbon footprint considerably more by switching to an electric vehicle.

However, just to complicate things a bit further, both the mining of minerals needed to make electrical car batteries, and the manufacturing process, both release CO₂ emissions directly and indirectly and damage ecosystems.



Illustration: Betje Ton



1.3 What is systemic change?

In general, systemic change refers to changing parts of a system and the way these interact to create a new system that is different from the initial one.

In relation to climate change, systemic change means transforming those systems at the root of the climate crisis and the way they interact with each other to create new systems which promote everyone's wellbeing within the limits of our planet's capacity.

Think about the difference between fixing symptoms vs fixing the cause of an issue. Imagine you have a headache because you are dehydrated. Taking a painkiller will make the pain go away, but it won't address the cause of your headache – drinking water will.

The same goes for climate change. If we want to treat the root causes of climate change, we have to turn to systemic change, rather than trying to put band aids on our current system.



1.4 Why does systemic change matter?

You may wonder why systemic change is so important to address the climate crisis. Imagine you're riding a bicycle on a road filled with potholes. Each time you hit a pothole, your bike gets a flat tire. You could keep stopping to patch up the tire each time it punctures, but that's only a temporary fix.

If we stay with the metaphor of the bicycle, systemic change for the climate crisis is like changing the entire road infrastructure to make it adequate for cycling and pothole-free. We need to change the systems which are the root cause of the climate crisis to address the climate crisis and not just 'patch up' its effects.



(AP Photo/Peter Dejong)



2. How can we bring about systemic change?

The general way in which people think of change is in a linear way: if A happens, then B will happen.⁴ This works for basic math exercises, but rarely in real life.

In practice, change is much more complex because nature and human societies are made of systems interacting with each other.

To bring about systemic change, we need to find specific points within the system, where it is most effective to intervene. These points are called 'leverage points'.

2.1 What are leverage points?

Leverage points are specific 'entry' points in a system where a small change can lead to big changes in everything.⁵ Because they influence how the whole system behaves, acting on leverage points can create deep and lasting transformation.

This makes intervening in a leverage point truly transformative in a system.⁶

According to Donella Meadows, one of the leading systems thinkers, some of the most effective leverage points within a system are the rules of the system, its goal and the mindset or paradigm out of which the system arises.⁷

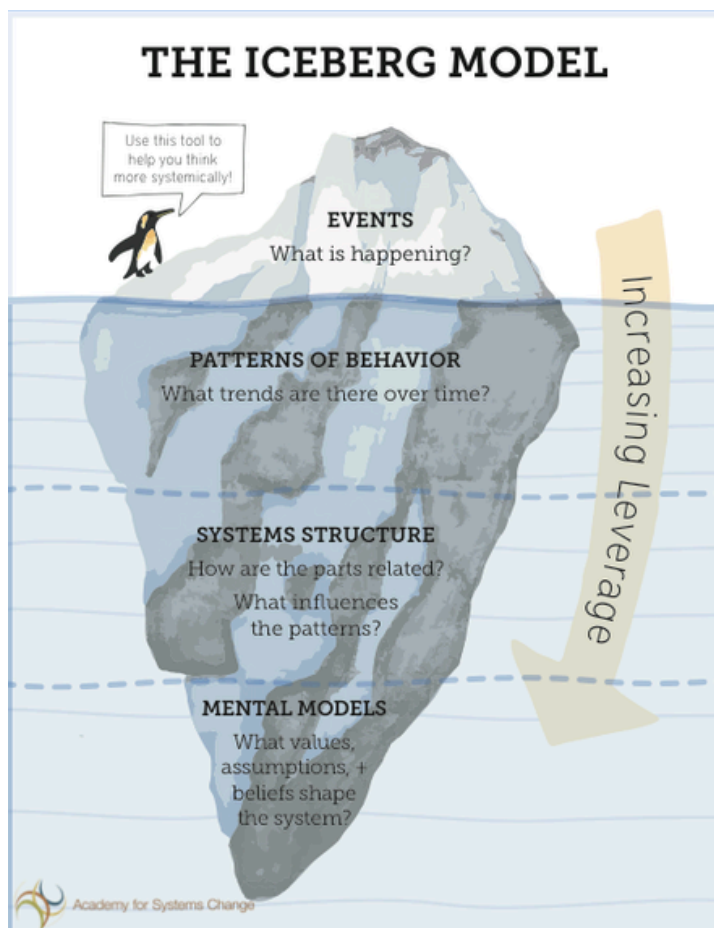


Figure 3: The iceberg model helps us think in a more systemic way by showing that what we see on the surface, like a single event, is often just a small part of a much bigger picture.

Like an iceberg, most of what's really going on is hidden beneath the surface. This includes patterns, structures, and beliefs that shape what happens.

By looking deeper and making these connections, we can better understand problems and come up with solutions that deal with the root causes of the issue, not just quick fixes. [Here](#) you can find a video that explains the iceberg model.

Source: The Donella Meadows Project: Academy for Systems Change.⁸



You can also think of a system as a new game that you want to play with your friends. When presented with a new game, you'll want to understand the following:

1. The **rules** of the game - how do you play the game?
2. The **goal** of the game - what does it mean to win the game?
3. The overall **mindset** of the game - is it a competitive game, or a collaborative game?

Let's look at each of these leverage points in more detail.

2.2 The rules of the system

Every system has in place some **rules**. Sometimes the rules are very explicit and formal: think of the legal system or the code of conduct of your school. Other times, the rules are implicit or less formal than a code of laws, yet the members of the system are aware of the rules and follow them. For instance, a group of friends may promise to each other not to share their secrets with people outside the group. Many social rules exist as well, like not yelling on the bus from the top of your lungs.

There are also rules governing the interactions between the parts of an ecosystem, such as biological laws and physical laws. Think of a forest: the biology of most trees is such that their leaves fall. The leaves will fall to the ground rather than remain suspended in the air – this is a basic illustration of the physical law of gravity. The leaves which fall to the

ground are eaten by tiny creatures, such as ants and snails. The decomposed leaves then pass into the soil and are absorbed by the trees and other surrounding plants, which enables them to grow. We can't change these biological rules.

Rules are very important for a system to continue to exist: the rules keep the system in place and allow the system to meet its goal(s).

Can we change the rules of a system? Not biological and physical laws – these are absolute laws.⁹ An apple will fall from the tree rather than remain suspended in the air. Climate change will continue to alter weather patterns around the world, to a degree which depends on the amount of CO₂ that we continue to emit, regardless of whether we like it or not.





However, rules that have been put in place by people – social laws – can absolutely be changed. Some rules can be changed with more ease than others. A country's constitution is more difficult to change compared to a law, and a law is more difficult to change compared to the rule that you should wash your plate after finishing your meal.¹⁰

Because so many rules have been put in place by people, they can also be changed by people. Rules are very powerful leverage points.

When you change the rules of the system, the system also changes. Imagine completely different rules in your life and how these new rules would change a system. What if your class was graded as a group, and not as individuals – would you help each other more?

What if you were guaranteed a job after graduating – would you choose different studies? What if the constitution banned the government from subsidising the fossil fuel industry and instead set legally binding targets for climate action?

What if the Paris Agreement required Global North countries who are responsible for climate change to compensate Global South states who are on the frontline of climate change? What if the law gave the right to life not only to human beings, but also to ecosystems?



2.2 The goals of the system

Each system has one or more goals. Rules keep systems in place and allow them to meet their goals. Sometimes goals are explicit and formalised, sometimes less so. Think of your school. At least one of its goals is to educate young people like yourself. The goal of a hospital is to heal people.

Because it determines the system, a system's goal is also a very powerful leverage point. Moreover, the more important the system, the more its goal(s) influence the other systems that interact with it.

In most countries around the world, the economic system is the most important system and influences the other systems. Our food system, energy and transport, education and health systems are all part of and dependent on the economic system.

The most important aim of our current economic system is growth in Gross Domestic Product (GDP). GDP is a measure of everything that has been produced, spent and earned within an economy over a period of time.

In most economies, GDP growth is expected to be continuous and endless. One issue here is that GDP growth depends, to a bigger or smaller extent, on the use of natural resources. Natural resources are limited on our planet.



GDP also leaves out many important aspects, like unpaid care work, environmental damage, inequality, or whether people's wellbeing is actually improving.

Similarly, companies always have the aim to increase their profits. This means that if the head of a company had to choose between a lucrative business decision which would negatively impact the environment and local communities, and a business decision which is more environmentally friendly but less profitable, the head of the company would likely have to go down the most profitable path.

An increasing number of researchers, activists, politicians and civil society argue that we should change the goal of our economies from never-ending GDP growth to human and planetary wellbeing.

While economic growth does bring about many good things, such as hospitals, roads and schools, having it as the main aim of our economies can have a negative impact on both people and the planet. The Easterlin Paradox explains this- above a certain point, GDP growth stops correlating with people's happiness. If you are interested in exploring further the caveats of GDP as the goal of our economies, turn to our unit on Degrowth vs Green Growth.

Although it might seem like we are stuck in the current global economic system and that it is unchangeable, some people have created and maintained this system in place - so we can very much change it.

Government policies can be redesigned to focus on wellbeing rather than on economic growth, provide work in areas that benefit society and turn subsidies towards activities that improve the environment and human wellbeing directly.

For example, we could introduce universal basic income, that gives everyone a regular payment which is enough to cover basic needs regardless of work status, and combine it with universal basic services such as free healthcare, education, public transport, internet, energy and housing for everyone.

These policies can be funded through tax reforms, introducing progressive taxation on wealthy individuals, corporations and large land ownership, as well as luxury consumption.

Local economies can be strengthened by encouraging community-owned businesses - cooperatives - and local currencies. All these ideas stem can be made possible by changing the goal of our current economic system.





2.3 *The mindset out of which the system arises*

Every system arises from certain mindsets or paradigms. Mindsets are "the great big unstated assumptions – unstated because unnecessary to state; everyone already knows them [...], or [they are the] deepest set of beliefs about how the world works".¹¹



Mindsets are incredibly powerful leverage points because they are the sources of systems around us. A system is designed and organised in accordance with the mindset out of which it arose.¹²

Comparing the buildings in Ancient Egypt and those in the contemporary United States, Donella Meadows illustrates mindsets with the following example: "The Ancient Egyptians built pyramids because they believed in an afterlife. We built skyscrapers, because we believe that space in downtown cities is enormously valuable".¹³

Now, think about the economic system's goal of economic growth.

Behind it, there is a mindset that 'more' is automatically better. At least in Global North countries, this mindset is pervasive. This is not to say that growth is always bad – it's great as long as it enables us to meet our needs and our potential, whilst not sacrificing someone else's needs or potential. Yet, nothing on this planet grows continuously – think about humans, or plants, even mountains. Isn't the economy also part of this planet? Why would it have to grow continuously?

You can imagine that it will not be easy to transition to an economic system which focuses on 'wellbeing for people and flourishing for the planet' when a common mindset in Global North countries – but not only – is obtaining more money, large cars and mansions. Changing the mindset out of which the system arose is very difficult, yet extremely effective at changing a system.



Our mindsets are influenced in multiple ways – through media, pop culture (think movies, songs and trends), propaganda and politics.

The kinds of mindsets that were mainly present in the Global North are spreading rapidly to everywhere on our planet. The power of media plays a big role here - think of how many American movies you have seen compared to movies coming from another country, such as Peru, or Serbia. Movies, TikToks and Instagram videos, and songs all influence what kind of life we want to have.

Companies also have a big role in influencing what we want and think we need - they invest billions every year into marketing and commercials. Companies use psychology and other sciences to influence us into thinking that their product is what we need to be happy. However, their end goal is making profit.

Social norms also play a role in influencing our wants and practices. If having a big car and three mansions was seen as something that is unnecessary, excessive, and was judged by other people, we probably wouldn't want them. If having a lot of expensive clothes became uncool, while fixing your clothes was something that people respected and valued, we would likely change what we buy and how much.

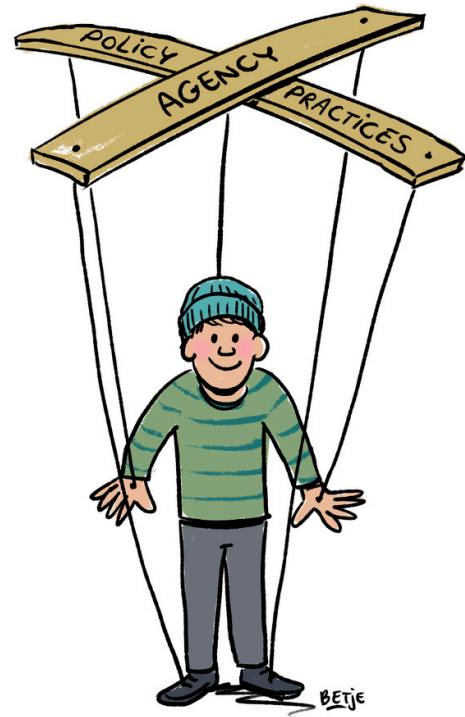


Illustration: Betje Ton

All this is not to say that you, as an individual, are necessarily wrong for wanting or having a big house and a big car. It's just to say that maybe you should ask yourself why you want all these things, and who has influenced you into wanting it, and whether they will actually make you happier.



2.4 Systems change for climate change

According to estimates, transitioning the global energy system to renewable sources requires an estimated annual investment of \$4.5 trillion each year until 2030 to allow us to reach net-zero emissions by 2050.

Net zero emissions refers to the situation where the amount of greenhouse gases emitted is balanced by the amount removed from the atmosphere.

In comparison, \$7 trillion was spent on subsidising the fossil fuel industry in 2022, including through subsidies, tax breaks, and health and environmental damages that were not accounted into the cost of fossil fuels.¹⁴

Even if you are not good at maths, hearing about these statistics you probably see there is somewhat of a political will problem in solving the climate crisis, or a systems problem, not a practical one.

The current system works as follows:

Governments investing in fossil fuels keep the current production and transport costs low and quick, which supports short-term economic growth.



Energy companies, who profit from burning fossil fuels, exercise undue political influence through lobbying.

Lobbying is the act of trying to influence decision-making of government officials or policy makers, often through advocacy or direct communication.

The five largest oil and gas industries invest around \$200 million a year in lobbying efforts aimed at controlling, delaying or blocking climate policy. Large corporations don't only influence politicians but also media and citizens, influencing and halting directly and indirectly climate change policies.¹⁵

In a nutshell, powerful corporations profit from burning fossil fuels and influence governments, who subsidise fossil fuel activities in order to support short-term economic growth. If fossil fuels are subsidised, then they become cheaper to produce and consume, meaning that there is a higher demand for it. As long as the supply can meet the demand, there is economic growth.

The economic system's goal of endless growth also arises from the mindset of living from nature as opposed to living with nature.



Nature is often seen as an exploitable resource to be mastered and used without limit. As Donella Meadows puts it: "We can't find a proper, sustainable relationship to nature, each other, or the institutions we create, if we try to do it from the role of omniscient conqueror."¹⁶

But this worldview is relatively new. Indigenous people, communities that live in touch with nature and many ancient civilisations see themselves as part of nature and interconnected with the ecosystems that surround them. This alternative mindset can completely shift the system.

3. Which leverage point to act on to bring about systemic change?

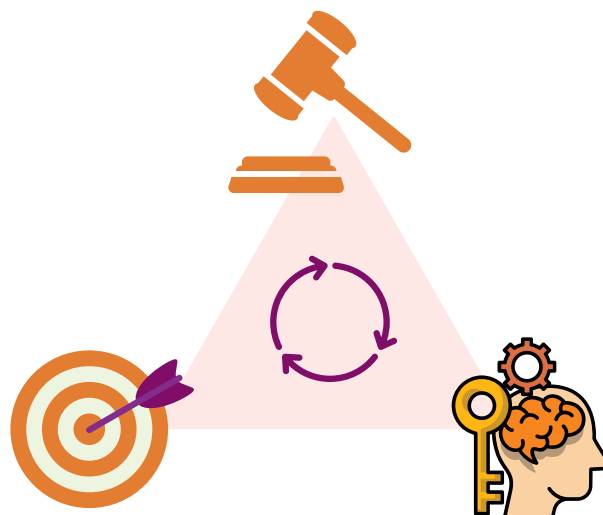
By now, you may think we should start to bring about systemic change.

We could start by changing the rules of the system – the laws. How about introducing legally binding climate action targets in the Paris Agreement? Well, it will be difficult to get all the countries which have agreed to the Paris Agreement to approve this change, given their goals revolve around economic growth rather than wellbeing for people and flourishing of the planet.

Let's change the goal of the economic system then! Sure, but many people, and particularly those with decision-making power, find economic growth desirable and care less about whether the energy is fossil fuel or renewables-generated, as long as it's abundant, profitable, and cheap!

The leverage points that we have presented – the rules of the system, the goals of the system, and the mindset out of which the system arose – are all very powerful to activate transformation of the systems that have provoked the climate crisis.

Because the climate crisis is so urgent, we need to intervene in different leverage points at once to activate transformative change for the people and the planet. We need to work on changing the laws, changing society's and the economy's goals, and changing peoples' mindsets about what's worthwhile pursuing: the wellbeing of people and of the planet.





Don't think that you need to do all this work, all by yourself!

On the contrary, transformative change happens when people get together and work together to activate leverage points: changing the rules, changing the goals, changing mindsets.

And, it doesn't take to get everyone on board to trigger revolutionary change. Protests that have engaged 3.5% of the population rarely fail to bring about change!¹⁷

Also, the beauty of working in a group is that each of you have unique and valuable qualities, knowledge and skills that you can contribute towards transformative change.

Maybe you're really good at research, maybe your talent at drawing can turn a boring poster into an engaging visual that will spark people's interest around your initiative, maybe you're excellent at bringing people together around an initiative, or at baking cookies for people to keep them motivated. Maybe you'll discover through your journalistic project that you're a great communicator and storyteller.

Just don't shy away from making your voice heard and bringing what you

have to the table – any contribution is valuable when you focus on activating systemic change by intervening in a leverage point.

When you approach people to talk about climate change, the need for transformative change and your systemic change initiative, make sure to talk to them with empathy and respect.

Each of us sees the world around us in a unique way. This is what makes each of us special, but also what makes human societies beautiful and rich (think of society as a system!). The way we see the world and interact with it – with other people, with nature, with different situations – comes partly from our personality and our behaviour, but also from the way we were raised, what we've gone through, our culture and religion. It's always good to remember that other people see things and live differently from the way you do, and that you should treat this difference with respect and as a source of inspiration and of learning.

Yet, climate change is impacting all of us and in particular those people and groups who are already marginalised. Its effects will only increase, so be confident when you talk to people about climate change, why we need transformative and just change, and your systemic change initiative.

If you want to see an example of young people working together to act on leverage points for systemic change, see our unit called *Climate Justice Case Study*.



Leverage Point Mapping Exercise

Objective: Understand what a leverage point is and explore how changing one part of a system can create wider change.

Time: 20–30 minutes

Materials: A3 paper or whiteboard, pens/markers, sticky notes (optional)

Instructions:

1. Choose a system-related issue. A system-related issue is a problem that arises from the way different parts of a system interact with each other rather than from one single cause. These issues are often complex, interconnected, and persistent, with causes and effects that influence each other in loops. (e.g., food waste, fast fashion, car-based transport, energy inequality are systems issues, while a leaking roof is a simple-to-solve, isolated issue).
2. Draw three sections on your paper:
 - Rules: What are the current rules/laws or habits that define how this system works?
 - Goals: What is the purpose or goal of the system? (e.g., profit, speed, convenience)
 - Mindsets: What beliefs or assumptions support this system? (e.g., "growth is always good" or "more is always better")
3. Write your ideas for each section.
4. Discuss: If you could change one thing, a rule, a goal, or a mindset, what would it be? How would it change the rest of the system?
5. Share and compare with other groups.





Find what kind of changemaker you are

If you want to identify what kind of 'changemaker' you are, you can take this [Changemaker Personality Quiz](#) from The Story of Stuff project.

Once you identify where your strengths are, and have the determination to either start your systemic change initiative, or join an existing one, you need to find other people to work with.

This could be two more people, or a hundred. You can start talking about your ideas to your friends, classmates, even teachers and other adults in your community.

The EYES community of young people and educators around the world is a great place to get together and start thinking about bringing about systemic change. If you have an idea that you'd like to share with other students from EYES, you can always reach out to the EYES team who will be very happy to help you!



Source: (AP Photo/Peter Dejong)



Systems thinking: supplementary materials

Donnella Meadows is one of the world's most acknowledged systems thinkers. Her book *Thinking in Systems* is one of the most recommended introductions to systems thinking.

You can also visit the [Academy of Systems Change](#) website where you can find her essays, lectures and other useful systems thinking resources.

[Compass Education](#) makes educational tools and resources for teaching sustainability and systems thinking.

There are multiple videos and other resources on what systems are and how students can better understand systems thinking on the PBS Learning Media in their [Systems Literacy collection](#).



Endnotes

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