

# MEGATRENDS 2026

Towards a new  
social contract

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and Jenna Lähdemäki-Pekkinen**

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**Megatrends 2026**

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# Summary

We live in a time of unrest marked by uncertain prospects and overlapping crises. The tectonic plates of global politics are shifting, environmental tipping points are approaching, technological development is rapid, and population growth is starting to decline in many countries. In Finland, the economy has not grown, and the crisis in public finances is challenging both the funding and the service promise of the welfare state. It feels as though one disruption barely eases before the next is already knocking at the door. Fast-moving and slow-burning crises intertwine, making it increasingly difficult to perceive where we stand today – let alone where we are headed.

Megatrends help us gain a better understanding of the overall picture of change and the root causes behind this age of unrest. A megatrend is a general trend and a broad trajectory of change encompassing multiple phenomena. Megatrends signal global shifts that evolve slowly and are widely recognised. To better grasp recent and ongoing developments, we must look beyond listing global megatrends and instead interpret them from Finland's perspective. What are the boundaries within which the future will be built? What is changing? And what opportunities could be seized?

In this report, we outline the overall picture of change, and the constraints and the opportunities relevant to Finnish society to offer support for decision-making. We interpret megatrends from Finland's perspective through four themes: people and culture, power and politics, nature and resources, and technology and the economy.

**People and culture: Towards a society of longevity.** Finland will soon have a majority of older people and a minority of young people. Birth rates have been very low for years, and population growth has come from immigration. The increase in life expectancy is also a significant success and opportunity. How do we move towards a diverse society characterised by long life courses? This requires continuous learning, new forms of community and the appreciation of diversity.

**Power and politics: The transformation of the world order tests the strength of democracy.**

A new world order is taking shape. Finland must define its place and goals within it. How committed are we to defending and renewing democracy? We need to invest in reliable information, opportunities for people to participate and democratic innovations.

**Nature and resources: The environmental crisis demands adaptation and renewal.** We have exceeded the limits of nature's carrying capacity, and the consequences of climate change and biodiversity loss are intensifying. How can we reform our society so that it enhances the vitality of nature? Opportunities can be found in the circular economy, the enhancement of natural capital, renewable energy, and nature-based health services.

**Technology and the economy: Artificial intelligence is transforming the foundations of society.** Artificial intelligence (AI) challenges knowledge institutions such as research, education and decision-making. How do we learn to use AI, and how will it affect society? When used responsibly, technology offers many opportunities. Applied AI can improve productivity and create competitive advantage. The combined use of disruptive technologies is a significant strategic opportunity for Finland.

There are many individual opportunities. However, megatrends and the current time of unrest point to a need for a broader reform. Finland needs a new social contract – a new and inspiring promise for the future. It could be built on a vibrant democratic culture, the strengthening of nature's vitality, the bold and sustainable use of technology, a renewed welfare state, and the collaboration of a diverse and longer-living population. Finland has every opportunity to succeed in its pursuit of a flourishing future if we truly commit to the effort.

# Sammanfattning

Vi lever i en tid av oro, präglad av osäkra framtidsutsikter och flera samtidiga kriser. Kontinentalplattorna i världspolitiken är i rörelse, miljöns kritiska brytningspunkter är nära, teknikutvecklingen är snabb och befolkningstrenden vänder neråt i många länder. I Finland har ekonomin inte vuxit, och krisen i de offentliga finanserna sätter finansieringen av välfärdsstaten och servicelöftet på prov. Det verkar som om en omvälvning knappt är överstånden innan följande står för dörren. Akuta kriser flätas samman med långsamare, och det blir allt svårare att känna in var vi befinner oss för tillfället, än mindre i vilken riktning vi är på väg.

Megatrender kan förbättra förståelsen för den övergripande bilden av förändringarna och grundorsakerna till den oroliga samtiden. Med megatrender avses allmänna utvecklingsförlopp som omspannar flera olika fenomen. Megatrenderna beskriver globala förändringar, de förändras långsamt och är relativt bekanta. För att få ett bättre grepp om de senaste och pågående förändringarna, måste vi gå från att räkna upp globala megatrender till att tolka dem ur Finlands synvinkel. Inom vilka ramar sker framtidsbygget, var är det förändringar på gång och vilka möjligheter kan vi ta tillvara på?

I den här rapporten – som är avsedd som stöd för beslutsfattandet – skissar vi upp en helhetsbild av förändringarna, ramvillkoren och möjligheterna för det finska samhället. Vi tolkar megatrender utifrån Finlands perspektiv genom fyra teman: Människor och kultur, makt och politik, natur och resurser samt teknik och ekonomi.

**Människor och kultur – siktet inställt på ett långlivat samhälle.** I Finland kommer den äldre befolkningen inom kort att vara i majoritet och den unga i minoritet. Nativiteten har varit mycket låg i flera år, och befolkningsökningen har uppkommit genom invandring. Att vi lever allt längre är samtidigt också en betydande framgång och möjlighet. Hur ska vi gå mot ett pluralistiskt och

långlivat samhälle? Det kräver kontinuerligt lärande, nya former av gemenskap och uppskattning av mångfald.

**Makt och politik – omvälvningar av världsordningen mäter demokratis styrka.** En ny världsordning håller på att ta form. Finland måste definiera sin position och sina mål i den processen. Hur engagerade är vi i att försvara och reformera demokratin? Vi måste satsa på tillförlitlig information, människors påverkansmöjligheter och demokratisk innovation.

**Natur och resurser – miljökrisen tvingar fram anpassning och reformer.** Gränserna för naturens bärkraft har överskridits, och konsekvenserna av klimatförändringarna och förlusten av biologisk mångfald förvärras. Hur ska vi reformera samhället så att det stärker naturens vitalitet? Vi hittar möjligheter bland annat inom cirkulär ekonomi och ökning av naturkapitalet, från förnybar energi och naturnära hälso tjänster.

**Teknik och ekonomi – AI skakar om samhällets grundpelare.** Artificiell intelligens utmanar kunskapsinstitutioner som forskning, utbildning och beslutsfattande. Hur ska vi lära oss använda AI och hur påverkar den samhället? Teknik ger många möjligheter när den används på ett ansvarsfullt sätt. Tillämpad AI kan bidra till att öka produktiviteten och skapa konkurrensfördelar. Samanvändning av disruptiv teknik innebär en betydande strategisk möjlighet för Finland.

Det finns många enskilda möjligheter. Megatrenderna och den oroliga samtiden visar ändå att det behövs en mer övergripande reform. Här i Finland behöver vi ett nytt samhällskontrakt, ett nytt inspirerande löfte om framtiden. Dess byggstenar kan vara till exempel en kultur av levande demokrati, ökad vitalitet i naturen, djärv och hållbar användning av teknik, reform av välfärdsstaten samt samarbete hos en pluralistisk och långlivad befolkning. Finland har alla förutsättningar att lyckas i sina insatser för en god framtid, om vi tar itu med uppgiften på allvar.

# Tiivistelmä

Elämme rauhattomuuden aikaa, jota leimaavat epävarmat tulevaisuudennäkymät ja päällekkäiset kriisit. Maailmanpolitiikan mannerlaatat ovat liikkeessä, ympäristön keikahduspisteet käsillä, teknologian kehitys nopeaa ja väestönkasvu kääntymässä laskuun monissa maissa. Suomessa talous ei ole kasvanut ja julkisen talouden kriisi haastaa hyvinvointivaltion rahoituksen ja palvelulupauksen. Tuntuu siltä, että edellisestä mullistuksesta ei päästä eroon, kun seuraava jo kolkuttelee ovelta. Nopeat ja hitaammat kriisit kietoutuvat yhteen ja on yhä hankalampaa hahmottaa, missä ollaan nyt, saati mihin suuntaan ollaan menossa.

Megatrendien avulla voi saada paremman käsityksen muutosten kokonaiskuvasta ja juurisyistä rauhattomuuden ajan takana. Megatrendi on useista ilmiöistä koostuva yleinen kehityssuunta, laaja muutoksen kaari. Ne kertovat globaalista muutoksesta, muuttuvat hitaasti ja ovat melko tuttuja. Jotta viimeaikaisiin ja meneillään oleviin muutoksiin saisi paremman otteen, pitää siirtyä globaalien megatrendien listaamisesta niiden tulkintaan Suomen kannalta. Missä rajoissa tulevaisuus rakennetaan, mikä on muutoksessa ja millaisiin mahdollisuuksiin voisi tarttua?

Tässä selvityksessä hahmotamme päätöksen tueksi muutosten kokonaiskuvaa, reunaehdot ja mahdollisuuksia suomalaisen yhteiskunnan kannalta. Tulkitsemme megatrendejä Suomen kannalta neljässä teemassa: ihmiset ja kulttuuri, valta ja politiikka, luonto ja resurssit sekä teknologia ja talous.

**Ihmiset ja kulttuuri: suuntana pitkäikäisten yhteiskunta.** Suomessa on pian enemmistö ikäänntyneitä ja vähemmistö nuoria. Syntyvyys on ollut erittäin alhaisella tasolla jo vuosia ja väestönkasvu on tullut maahanmuutosta. Elinaikojen pidentyminen on myös merkittävä onnistuminen ja mahdollisuus. Miten siirrymme kohti monimuotoista ja pitkien elämänkaarien yhteiskuntaa? Siihen tarvitaan jatkuvaa oppimista, uudenlaista yhteisöllisyyttä ja monimuotoisuuden arvostamista.

**Valta ja politiikka: maailmanjärjestyksen murros mittaa demokratian voiman.** Uusi maailmanjärjestys on muotoutumassa. Suomen on määritettävä oma paikkansa ja tavoitteensa sen rakentamisessa. Miten sitoutuneita olemme demokratian puolustamiseen ja uudistamiseen? On panostettava luotettavaan tietoon, ihmisten vaikutusmahdollisuuksiin ja demokratiainnovaatioihin.

**Luonto ja resurssit: ympäristökriisi pakottaa sopeutumaan ja uudistumaan.** Luonnon kanto-kyvyn rajat on ylitetty ja ilmastonmuutoksen ja luontokadon seuraukset pahenevat. Miten uudistamme yhteiskuntamme sellaiseksi, että se lisää luonnon elinvoimaa? Mahdollisuuksia löytyy esimerkiksi kiertotaloudesta ja luontopääoman vahvistamisesta, uusiutuvasta energiasta sekä luonnon tarjoamista terveyspalveluista.

**Teknologia ja talous: tekoäly mullistaa yhteiskunnan perustaa.** Tekoäly haastaa tiedon instituutioita, eli esimerkiksi tutkimusta, koulutusta ja päätöksentekoa. Miten opimme käyttämään tekoälyä ja miten se vaikuttaa yhteiskuntaan? Teknologia tarjoaa vastuullisesti käytettynä paljon mahdollisuuksia. Soveltavalla tekoälyllä voidaan lisätä tuottavuutta ja saada kilpailuetua. Murros-teknologioiden yhteiskäyttö on Suomelle merkittävä strateginen mahdollisuus.

Yksittäisiä mahdollisuuksia on paljon. Megatrendit ja rauhattomuuden aika osoittavat kuitenkin tarvetta laajemmalla uudistuksella. Suomessa on tarve uudelle yhteiskuntasopimukselle, uudelle innostavalle lupaukselle tulevaisuudesta. Se voi pohjautua esimerkiksi elävän demokratian kulttuurin, luonnon elinvoiman lisäämisen, teknologian rohkean ja kestäväen käytön, hyvinvointivaltion uudistamisen sekä monimuotoisen ja pitkäikäisen väestön yhteistyön varaan. Suomella on kaikki edellytykset onnistua ponnistuksessaan kohti hyvää tulevaisuutta, jos työhön tartutaan tosissaan.

# Foreword

“The old world is dying, and the new world struggles to be born: now is the time of monsters.” This often-quoted line by the Italian philosopher Antonio Gramsci is echoed throughout this report.

Indeed, world history has shown that in the vacuum between a dying order and one yet to be born, there is often room for monsters to roam without restraint.

For Finland, living next to an increasingly restless Russia, the chill is felt particularly acutely. Defence now accounts for a growing share of public expenditure, while our economy has seen little growth for nearly two decades. Stagnant economic growth and the crisis in public finances are already calling into question the societal model we have come to know as the welfare state.

Finland is also facing an accelerating transformation in its demographic structure. A shrinking share of our population is young, while the number of older people is growing rapidly. Fortunately, longer lifespans also bring more years of activity and well-being. The population is growing, but it is based entirely on immigration.

The current era of global turbulence and the major future forces of change – the megatrends described in this report – underline the need for Finland to move from reactive responses to goal-oriented action: renewing society in a determined way so that it can withstand future change.

Finland has already demonstrated excellent foresight by maintaining its national defence capability and by joining NATO. Yet the combined impact of the megatrends now requires more extensive renewal.

Finland will likely need to find new ways for older generations to participate in society, while also reducing the burden of responsibility placed on younger generations. Different population groups must experience the division of work and responsibility as being fair. It is also evident that a balanced future, built on the wise use of natural resources,

needs to be supported by new technologies that are applied boldly and sustainably.

All this is only possible if we are able to create a new and inspiring promise for the future. In this megatrend report, we refer to this as a new social contract.

The necessary changes are so significant and require such sacrifice that they must be underpinned by a sufficiently shared will. This requires the renewal of democracy: people must genuinely feel that they have opportunities to influence and participate in decision-making. At the same time, difficult decisions must also be made.

Controlled renewal is not easy. Often the path to better – or worse – runs through crises. Lessons on controlled reforms can be found in Sweden and Denmark, where a long-lasting foundation for well-being has been built over time. Ireland, on the other hand, renewed itself through crisis, rising from the financial and economic downturn into new prosperity through clear policy choices backed by broad public debate.

Finland’s own history powerfully demonstrates how crises and periods of transition create space for action, and how the seeds of a new era are sown in times of unrest. Successful renewal requires courage, cooperation and the ability to recognise opportunities.

We hope that this megatrend review will serve as a spark and a source of support for Finland’s renewal. The review is part of Sitra’s long-term foresight work, which aims to strengthen Finns’ future-oriented thinking and their capacity for foresight in decision-making across Finland.

**Atte Jääskeläinen**

President

**Veera Heinonen**

Director, Foresight and Training

# Introduction: In a time of unrest, the seeds of the future are sown

In 2026, we are at the beginning of a new era. The familiar world order is dissolving, which creates confusion and the need for completely new ways of thinking. The Italian political philosopher Antonio Gramsci once described such a period of transition as characterised by the fact that “the old is dying and the new cannot be born”. From a Western perspective, the return of war to Europe, the detachment of the United States from its traditional foreign policy doctrines, such as the defence of democracy, and the disintegration of the multilateral international system, have led to a point at which it can be said that “the old is dying and the new is about to be born”.

After the Second World War, a new multilateral world order and a deep European peace were built, protected by a transatlantic relationship and strong international institutions. The celebrated highlights of this period included the fall of communism, the end of the Cold War and the opening of the world, as people, services, goods, ideas and capital could move freely. The 2010s were hailed as be “the best decade ever” by *Foreign Policy*, the flagship publication of international policy, and marked the last full decade of that world order.

In our 2020 and 2023 megatrend reviews, we talked about “postnormal times” as the world order was rapidly dissolving. The current era has also been characterised as a time of polycrisis. It seems

that one disruption barely eases before the next is already knocking at the door. Fast-moving and slow-burning crises intertwine, making it increasingly difficult to perceive where we stand today – let alone where we are headed.

In Western societies, the past decades have seen unrest due to phenomena such as slow economic growth, changes in economic structures caused by globalisation, wars, the pandemic, the ecological crisis, immigration, inequality and uncertainty about future prospects. The tectonic plates of global politics are shifting, environmental tipping points are approaching, technological development is rapid, and population growth is starting to decline in many countries. This is reflected in political instability, people’s dissatisfaction, and general pessimism in Finland and elsewhere. Policymaking focuses on curbing the pressure, but the tensions and unrest are likely to be released in one way or another if the root causes of the instability are not genuinely addressed.

While this time is characterised by turmoil, it also creates space for action. In this moment, the seeds of a new era are being sown. For example, in the current situation, the European Union has unique opportunities to transform its latent economic power into active political capacity – if it chooses to seize these opportunities. Strategic cooperation and new types of alliances with free

and prosperous democracies could form a strong point of orientation in an increasingly multipolar world.

Because decisions made today shape the future, it matters who sets the course. Populist parties are gaining ground across Europe. It is entirely possible that their agendas will define Europe's future and significantly change EU policy. On the other hand, this may push traditional political parties to reform society more radically or even give rise to new social movements.

Finland might also ask itself: what would the welfare state look like if it were built today from scratch, using current resources and for the population the country will have 30 years from now? What should we let go of, what should remain essential, and what should we invest in? What does a society of long lifespans look like? What would a forward-looking model for immigration be? What if participating in democratic tasks was the assumed default rather than something handled mainly by professionals? How can we live in harmony with nature? How do we seize technological opportunities sustainably and responsibly?

A polycrisis does not disappear through wishful thinking, denial, passivity or short-sighted solutions. We need clarity and a far-sighted analysis of major arcs of change, as well as determined decision-making based on that understanding. The future will not be the same as the present, but we can influence what shape it takes.

The structures and mindsets born out of the Second World War risk losing their power if they no longer generate well-being for people and foster trust in the future. It is impossible to reform the whole society at once, and no government can perform such a feat alone. However, what is possible is to break the challenge into smaller pieces and pursue new and better solutions ambitiously with others who are committed to the same goal, whether in government, services, political parties, business, culture, civil society or education. To achieve this, we must understand the situation and develop visions of desirable futures. Visions only have value if they can be turned into action.

## Understanding megatrends as a basis for action

Megatrends can help us gain a better understanding of future boundary conditions, key changes, uncertainties and opportunities. A megatrend is a general trend and a broad trajectory of change encompassing multiple phenomena. Megatrends are often seen as happening at a global level, and their trajectories are often assumed to continue in the same direction. They help us form an overall picture of change and understand the root causes behind our current time of instability.

Sitra has published trend analyses since 2011. In 2016, we published our first megatrend report outlining the big picture of change. In this study, we reflect on the current situation in relation to what the future looked like ten years ago in the 2016 report. A lot has happened in ten years.

In addition to reviewing the past and present, we also look ten years ahead – to 2036 – with the aim of gaining a better understanding of the change and opportunities.

This report has been written from the perspective of Finnish society to support decision-making and future-oriented action. The primary target group is decision-makers, but it is intended for anyone interested in the future. The study outlines the overall picture of changes, boundary conditions and opportunities to influence the future.

**1. Overall picture of changes:** No society can solve all the world's problems at once, but neither can individual challenges be addressed in isolation. A sufficiently simple overall picture is required to understand how one's own actions fit into a broader context. The overall picture of change also helps organisations identify trends and opportunities emerging beyond their own sector.

The next chapter outlines this picture from both the global and Finnish perspectives. The aim is to identify key questions that Finland should address for the future.

**2. Boundary conditions:** Although multiple futures are possible, and the future can be influenced, not everything is possible. Decision-making requires that we understand the boundary conditions – what we must adapt to, and what we wish to foster and protect. Boundary conditions help specify possible and desirable futures while also excluding impossible alternatives, which often obscure public debate and decision-making. At the same time, it is worth bearing in mind that certain boundary conditions have changed significantly in recent years, and that they may also shift again.

In this report, we list relevant boundary conditions associated with each megatrend.

**3. Opportunities to influence the future:** In this era, the importance of preparedness and adaptation is emphasised. However, we cannot prepare for everything – nor rely on reactive action alone – to create a desirable future. It is therefore important to identify new possibilities and opportunities to influence the future. Uncertainty means that the future is not predetermined, and that in times of transformation, new systems are built from individual solutions. We should understand what is changing, but also the kinds of changes we wish to support.

In this study, we highlight the need for a new social contract and outline the possibilities associated with the identified themes.

**4. Multiple perspectives:** Many changes are similar globally and in Finland, but their impacts differ, they are experienced differently, and the ability to respond varies. To be able to implement various measures in practice, it is important to understand different perspectives on change.

We have considered the tensions stemming from different perspectives when describing the dynamics of change. And although many changes are global, we analyse them from the perspective of Finnish society. We also present how Finnish people themselves view the megatrends and changes.

## Structure of the report

The next chapter presents the megatrends and their implications for Finland. What boundary conditions do megatrends and the previous changes impose? What key shifts and uncertainties should Finland respond to, and what opportunities are emerging? We identify four themes for deeper analysis: people, nature, power and technology.

Each theme is discussed in more detail in its own chapter. We first list the key boundary conditions, and how they have evolved over the past ten years. We then describe the broader picture of changes, their interactions and tensions. The goal is to provide a framework that remains relevant for the next decade. We also highlight opportunities, solutions and shifts in mindset that take us forward. These are actions that can be taken now or at least within the next ten years, and which may shape Finland's long-term development, potentially redefining the boundary conditions.

Since our focus is on describing the overarching development rather than listing individual phenomena, certain important developments are left unmentioned. Because of this, each chapter concludes with a list of related trends, which are also available as a separate megatrend card set. For each theme, we also identify one key uncertainty or particularly interesting topic. We are highlighting them, as they are issues worth watching closely. Since the future always brings surprises, each chapter includes a few “wild cards” that could significantly alter the situation.

Finally, we outline the need for a new social contract. The analysis of megatrends for Finland underscores both the necessity and the opportunity for significant renewal. What kind of future promise could shape Finland for the decades ahead? How should we reform the social contract? What questions should it at least answer, and what foundations are necessary to build a better future?

The appendix describes the theoretical basis, the process and the choices behind the report. The sources are listed by theme at the end.

# Megatrends and their significance for Finland

Megatrends are fairly well known among Finns, and most trend reports mention roughly the same issues. However, interpreting these megatrends is more important than merely listing them. Within what boundaries are we shaping Finland's future, what should we respond to and prepare for, and, on the other hand, what opportunities can we seize?

## Global megatrends

Globalisation, world trade and power politics are increasingly intertwined, technology affects us in every area of life, and the sustainability crisis requires an entirely new way of seeing the planet, the economy and well-being. These issues were already identified ten years ago in Sitra's Megatrends 2016 report. Although the world has seen a fair amount of turmoil, the core elements of the megatrend analyses from different years have remained remarkably similar.

In the megatrend reports, recurring global themes include climate change, biodiversity loss and resource scarcity - topics related to nature; geopolitical tensions and social unrest (power); ageing populations and urbanisation (people); digitalisation, artificial intelligence and disruptive technologies (technology); as well as geoeconomics and the concentration of wealth (the economy).

Megatrends change slowly and are characterised by continuity. They may also remain fairly abstract. To better grasp recent and ongoing shifts, we must move beyond listing megatrends and instead interpret their meaning. Megatrends and the current age of transformation naturally affect Finland as well;

we are not isolated from global developments. This is why this report focuses on what megatrends actually mean for Finland specifically. What kinds of boundary conditions do they set? What boundaries shape Finland's future more broadly? What does the overall picture of change look like for Finnish society? What is possible, and what must be considered in its renewal? After listing the global megatrends below, we delve into their interpretation from the perspective of Finnish society.

## People: Ageing populations and urbanisation

The ageing of populations is a major phenomenon particularly in Europe and East Asia. Longer lifespans and falling birth rates worsen the dependency ratio, increasing the pressure on social security, care services and the labour market. In many parts of the world, populations are shrinking and ageing, but in India and many African countries, populations continue to grow rapidly. Urbanisation also proceeds at pace: more and more people live in cities, and megacities of more than 10 million inhabitants are particularly concentrated in Asia and Africa.

## Power: Geopolitical tensions and social unrest

The rules-based international order is eroding, and multilateral institutions are losing their capacity to function. Global power relations are changing, and geopolitical tensions are escalating. States are increasingly pursuing their own interests, which heightens friction and undermines trust in international cooperation. At the same time, the rise of authoritarianism challenges the principles of liberal democracy.

The transformation is not limited to relations between states: social unrest and polarisation are also intensifying at the national level. Social media and information influence operations and deepen divisions, weakening the ability to find compromises and increasing the risk of internal conflicts. The result is growing uncertainty in the economy, security and people's sense of psychological safety.

## Nature: Climate change, biodiversity loss and resource scarcity

We have exceeded planetary boundaries – particularly in relation to climate change and biodiversity loss – and this is reshaping both our current and future operating environment. Human activity is pushing beyond the limits of the earth's carrying capacity. This has consequences for the economy, security and well-being, as ecosystem services such as clean water and food production deteriorate. Competition for the remaining resources is intensifying, which is reflected in geopolitics and the global economy.

## Technology: Digitalisation, artificial intelligence and disruptive technologies

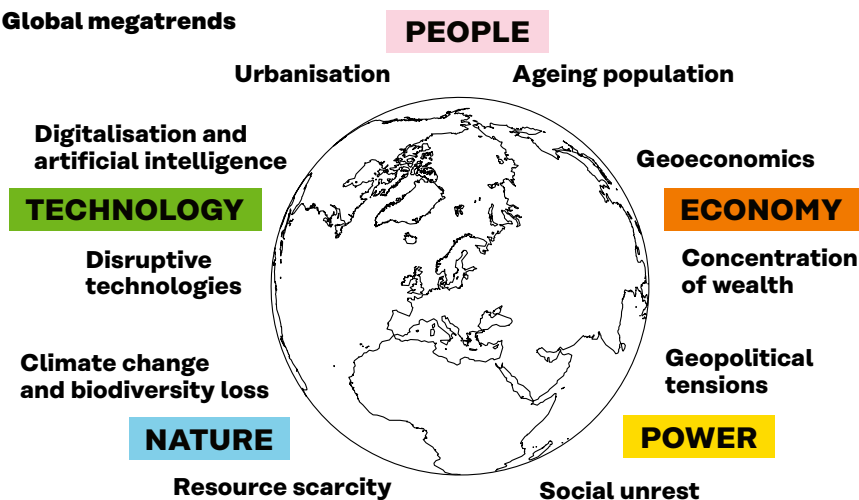
Technology is developing exponentially and is also being deployed at an accelerating pace. The expansion of data volumes and digitalisation has enabled the spread of artificial intelligence, which is now becoming embedded into work, decision-making, communication, entertainment and society at large. This is transforming our work and how we do it. New disruptive technologies such as quantum technology, synthetic biology and space technology open up unprecedented opportunities but also bring new risks and complex ethical challenges.

## Economy: Geoeconomics and the concentration of wealth

The economy has become a key instrument in geopolitical competition. Trade policy, technological standards and investment are used as strategic tools for increasing the influence of governments. Economic interdependences are increasingly viewed as security issues, contributing to protectionism and regional blocs.

Growth and innovation are shifting towards Asia and other emerging economies. China, India and Southeast Asian countries are strengthening their position in global value chains while Western countries are struggling with slower growth and ageing populations. The concentration of wealth is increasing to an unprecedented extent both globally and nationally. Large corporations and wealthy individuals control a significant share of wealth, reinforcing inequality and political tensions.

Figure 1. Global megatrends



# Boundary conditions – what are the limits for building the future of Finland?

Megatrends and the changes that have already materialised define what is possible now and in the future, and set the limits within which the future should be built. The clearest boundary comes from nature. We only have one planet, and if we wish to secure liveable conditions for future generations, we cannot make it uninhabitable. Yet this is what we are currently doing, as we have exceeded seven of nine planetary boundaries, and several tipping points are approaching. For Finland, this means accelerating the sustainability transition while at the same time adapting to extreme weather conditions and growing global uncertainty.

Global uncertainty has already increased due to geopolitical tensions and conflicts. An essential boundary condition for Finland is our geography and political alignment: we share a long land border with Russia and are a member of the EU and the NATO defence alliance. This defines the geopolitical position and community in which we operate and build a more sustainable future.

The availability of resources is an essential connected question. The sustainability transition and the adoption of new technologies require critical materials, infrastructure and expertise. Currently, these leverage points are concentrated primarily in the United States and China. Finland and the EU must therefore find ways to operate within these boundaries – for example, by investing in the circular economy and increasing their own digital infrastructure.

The building of a good future also requires people. Finland's population is ageing, the birth rate is very low, and the population growth over the past decade has depended solely on immigration. At the same time, Finns live longer in good health and remain highly educated. Over the next ten years, we must reform society to better accommodate long lifespans and to remain attractive to both those who already live here and those who might consider moving here.

<b>Theme</b>	<b>Boundary conditions</b>
<b>People and culture</b>	Demographic structure: especially age distribution, birth rate, and level of immigration Level of education and competence Health and well-being
<b>Power and politics</b>	Finland's geographical location Membership in the EU and NATO
<b>Nature and resources</b>	Planetary boundaries: especially climate change and biodiversity loss Availability of resources
<b>Technology and economy</b>	Globalisation and geoeconomics Technological development and availability Outlook for Finland's economy

# The overall picture of change – what must Finland respond and adapt to?

An analysis of the boundary conditions already gives some sense of the kinds of questions Finland will face over the next ten years. In addition, we must examine the broader picture of change, the interactions between developments, and key uncertainties. In this report, we interpret megatrends from Finland's perspective through four themes: people and culture, power and politics, nature and resources, and technology and the economy.

## Towards a society of longevity

Finland is facing an unprecedented change, as an ever larger share of the population is older, and the proportion of young people is shrinking. The birth rate is low, and population growth has come from immigration. At the same time, people in Finland are living longer and healthier lives.

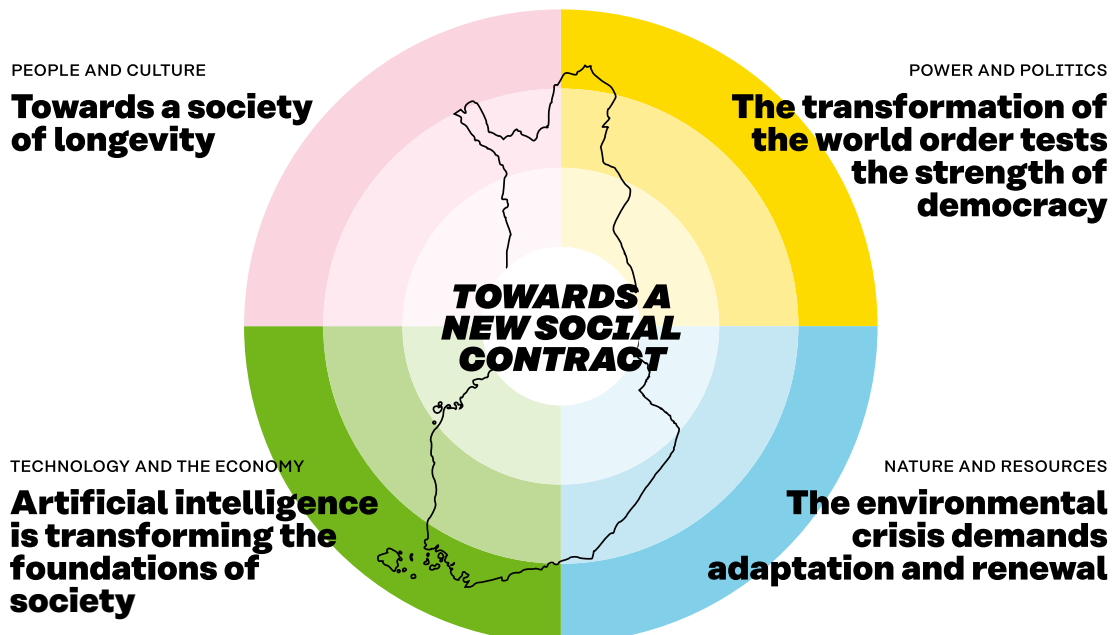
Over the next ten years, Finland must find ways to reduce segregation between generations, regions and cultures, bolster confidence in the future and

respond to demographic change. When it comes to people and culture, the key question is **how we move towards a diverse society of long life courses.**

## The transformation of the world order tests the strength of democracy

A new world order is taking shape, and Finland must define its place and goals within it. Security has become a dominant theme, and as the rules-based order erodes and the transatlantic relationship shifts, the importance of the EU is growing. Meanwhile, the logic of populist power – fuelling division and confrontation – weakens the conditions for decision-making in both the EU and Finland. Today's media environment and social media algorithms aggravate the situation, and information influence is increasing. We can no longer take democracy for granted; it is something that requires active effort.

**Figure 2. Megatrends from Finland's perspective**



Over the next ten years, the resilience and capacity for renewal of democratic processes in both the EU and Finland will be tested. Our ability to defuse simmering social conflicts through compromise will determine how well we can build the future. For power and politics, the central question is **how committed we are to defending and renewing democracy.**

### **The environmental crisis demands adaptation and renewal**

The first steps have been taken in climate action, the fight against biodiversity loss and the green transition, but recently, the political climate around the necessity of the green transition has changed dramatically. The US is putting the brakes on and supporting the use of fossil fuels, and even in the EU, the green transition is no longer at the heart of politics in the same way as earlier. Meanwhile, emissions in China have started to fall even as economic growth continues due to massive investment in renewable energy. For Finland and the EU, the need to increase self-sufficiency in energy and resources adds another layer of tension, but can also support a shift towards renewable energy and the circular economy. From a long-term perspective, it is clear that delaying climate and environmental action will only push us past tipping points and undermine the foundations of future well-being.

The next ten years will show which path we should take, what Finland must prepare for, and

what role we can assume as part of the global sustainability transition. In terms of nature and resources, the key question, therefore, is **how we reform our society so that it enhances the vitality of nature instead of degrading it as is currently happening.**

### **Artificial intelligence is transforming the foundations of society**

Technology continues to evolve rapidly – and to be adopted rapidly. The development and combined use of various disruptive technologies will significantly affect what is possible. Finland has expertise and favourable conditions for using many of these technologies. A great deal is expected from artificial intelligence, and it could substantially increase productivity. At the same time, it challenges existing institutions of knowledge such as the processes of research, education, decision-making and the circulation of information. Current applications also consume huge amounts of energy and resources.

Over the next ten years, we must find ways to use technology sustainably and in ways that strengthen people's agency. Although Finland has not been at the forefront of the development of AI, we can be a forerunner in its responsible application, building on high levels of trust and our earlier digital developments. For technology and the economy, the essential question is **how we learn to use AI and how it affects society.**

## **Opportunities – where can Finland's renewal begin?**

Finland has strong foundations for building a strong future, provided we undertake the task with determination. We can promote intergenerational fairness and view long lifespans and diversity as valuable resources. We can reinforce and renew democracy and trust, and help contribute to a

stronger EU and NATO. We can invest in the circular economy and nature-based health benefits, and move towards a regenerative economy. We can find new productivity and growth opportunities in emerging technologies and their combined applications.

There are many individual opportunities. However, megatrends and the current time of unrest point to the need for a broader reform. In our view, Finland needs a new social contract – a rethinking of how power, responsibilities and rights are distributed in society. We must renew Finnish society so that it is better equipped to meet future challenges. We also need a new promise about the future: one that is credible and inspires action.

In the final part of this report, we outline our own interpretation of the key elements of such a new social contract. The aim is to provide answers and guidelines to essential questions about the future so that the debate on renewing Finland can gather momentum. The boundary conditions, including the size of the population or Finland's geography, inevitably place limits on the reforms. At the same time, factors such as technological development, Finnish expertise, the tradition of cooperation and a functioning democracy open up possibilities to address the areas required for renewal.

A new social contract is ultimately about choices. Will we build a society that takes population decline and long lives seriously? Are we committed to strengthening and renewing democracy? Can we find ways to live in harmony with nature and enhance its vitality? Will we learn to use technology in general – and AI in particular – in ways that primarily benefit people and societies?

Answering these questions is not enough on its own; we also need ambition and action. The core of

the welfare state can be rebuilt so that equality, education and basic security are implemented in a high-quality and sustainable manner, using technology and freeing resources for human-centred work. A strategic model for immigration can strengthen the labour market and attract experts, while open dialogue can build trust.

The changing security environment, NATO membership and a forward-looking EU policy give Finland an opportunity to be an active player in strengthening Europe's stability, influence and competitiveness. New forms of participation and an active commitment to living democracy can deepen people's sense of community and create space for new ideas.

Ecological sustainability and a regenerative economy offer Finland a pioneering role in the circular economy, the energy transition and the use of nature's well-being benefits. The prospects for economic growth are favourable if companies invest in growth and the future. Public research, development and innovation (RDI) investments support these opportunities. New initiatives in the defence industry and EU-level investments open up export opportunities and can also drive civilian innovation.

A new social contract can be built through broad participation and by turning tensions into creative solutions – just as Finland has done many times before in its history.

## Wild cards

Megatrends draw attention to broad arcs of change and continuities. Yet we live in a time of surprises, in which individual events can trigger major global shifts. For example, large-scale geoengineering projects could alter local climates and natural cycles in significant and unpredictable ways. The outbreak of global conflict could upend the world order and completely change which futures are even possible. The misuse of new technologies could trigger a disaster with far-reaching, unforeseen consequences.

It is equally possible that something unexpectedly positive happens, opening up significant new

possibilities. Global multilateral cooperation could be significantly strengthened in response to shocks and crises. Technological breakthroughs could dramatically improve access to energy, for example.

The exploration of wild cards helps us remember that while we can know and infer quite a lot about the future based on the present and the past, we cannot be certain about what will happen. This does not mean that we should stop striving for the best possible future – quite the opposite. It means we must stay sensitive to signals of change and remain open to surprising futures.

# PEOPLE

“When as many as half of an age cohort live to 100, the landscape of the life course looks completely different from today. A much more socioeconomically heterogeneous group will live a longer life than before. Whereas a very long life used to be rare, and those who reached it were often better educated and better off financially and socially, in the future, a long life will be mainstream.”

**Anu Siren, Professor of Gerontology at Tampere University**



# Towards a society of longevity

Finland is facing an unprecedented demographic shift. We are moving towards a society in which the majority of people are older, and younger generations are in the minority. Fertility is at a very low level, and population growth has come from immigration. Yet we have not fully internalised these demographic changes and their implications. Now is the time to move from lamenting ageing towards a new society of long life courses which embraces diversity, strengthens a sense of community across generations and backgrounds, and recognises the opportunities that long lives bring.

## BOUNDARY CONDITIONS

### Population structure and skill

The size and age structure of the population are key boundary conditions that shape the development and opportunities of Finnish society. The size of the population is affected by fertility, mortality and migration. In the long term, Finnish society is likely to follow the global trend, and the population will start to decline.

In addition to population size and age structure, another boundary condition is the well-being of the population in Finland, including the levels of skills and education. These factors affect how good and attractive a place Finland is to live in, and what our chances are over the next ten years to respond to the challenges of an era of multiple crises and to build new solutions.

#### **An ageing population and low fertility**

Finland is one of the most aged countries in Europe. There are 1.3 million people aged over 65, or about one quarter of the population. According to the stochastic population projection, in twenty years' time, there will be more than 50 per cent more people over 80 than today. In itself, the ageing of people in Finland is a very positive development: healthcare has improved, and living standards have risen. The additional years of life are, for the most part, additional healthy years. At the same time, longer life expectancy poses a challenge for the pension system and the dependency ratio.

The fertility rate has decreased in Finland, and in 2024, the total fertility rate was the lowest in recorded history, at 1.25. In a relatively short period of time, Finland has shifted from being a country with high birth rates to one with low birth rates. In 2010, the total fertility rate per woman was still 1.87. The population replacement rate is 2.1, which would keep the population size stable over the long term. Although people with a foreign background have higher birth rates than those with a Finnish background, the differences have narrowed and the birth rate among people with a foreign background has declined in recent years. This very low level creates major challenges for the sustainability of institutions, as the population is rapidly shrinking. However, this is a global phenomenon, and birth rates have fallen worldwide faster than expected. The world's population is projected to start declining by the 2080s at the latest, and possibly as early as the 2050s.

Fertility is a perennial topic in public debate, and there are no easy solutions. While it is a central question for society, it also falls within the private sphere and the right to self-determination of each person with a womb and each family. On average, people in Finland say they would like to have two children, which is more than what the statistics show is actually happening. Childlessness has increased rapidly, particularly among people with lower levels of education. The change has affected men in particular: more than one in three men remain childless.

## **Immigration and the number of people of working age**

Immigration and emigration are key factors influencing how many people live in Finland. Finland's population growth is based on immigration. Between 2000 and 2024, the number of people with a foreign background in Finland increased by more than half a million. The largest age group moving to Finland are 25–34-year-olds – people of prime working age. Without immigration, Finland would have 450,000 fewer people of working age, and the population would be ageing even faster.

In recent years, more immigrants have come to Finland than before, and if this pace remains the

same, the number of people of working age may continue to increase. However, all other EU countries are facing the same situation of low fertility and a rapidly growing older population. Over the next ten years, competition for foreign labour will further intensify, and both attractiveness and retention will become more important: is Finland a place where people want to come to, and also a place where they want to stay? For example, 45 per cent of international professionals have moved away within five years of arriving in Finland.

In addition to migration, the length of working careers affects the number of people of working age. People in Finland retire later than twenty years ago. Over the next ten years, we must invest in ensuring that older people who wish to continue working have the opportunity to do so.

## **Educational level and skills**

Educational success has long been a key part of Finnish society and identity. However, in recent years, we have fallen behind other OECD countries in the share of highly educated people, and in learning outcomes. Finland's goal is that half of 25–34-year-olds will complete a higher education degree by 2030. Currently, 39 per cent of people in this age group have a higher education degree, compared to the OECD average of 48 per cent.

Finland no longer performs as well in Pisa tests as it did previously. Between 2000 and 2006, the skill levels of Finnish 15-year-olds were among the highest in the world. Since then, the relative level of skills has declined rapidly and persistently, and the fall in learning outcomes relative to other OECD countries shows no sign of slowing. The PIAAC survey, which measures the skills of the adult population, tells a brighter story, as the level of basic skills of the Finnish adult population as a whole was the highest among the countries studied.

Learning also happens outside the education system, and continuous learning is important. Human capital accumulates throughout life. As lifespans lengthen, we cannot assume that a degree completed early in life will carry a person through a career lasting decades. Both degree-oriented and informal learning are important. Digitalisation and

artificial intelligence create their own skill demands for participating in society, and the skills required in working life are changing rapidly. Over the next ten years, we must invest in a fundamentally new way, making continuous learning a reality in every person's life in Finland.

## Health and well-being

Perceived health among people in Finland improved dramatically until the early 2010s, and life expectancy has increased, but the lack of physical exercise and increasing obesity pose serious health threats. Lifestyle factors have improved – for example, smoking and alcohol consumption have both decreased – but drug use has increased.

Mental health symptoms have become more common, and most people in Finland encounter a mental health disorder at some point in their lives. This particularly applies to young people and girls. According to the 2025 School Health Promotion study, about one in three girls and one in five boys experienced moderate or severe anxiety.

Poverty in families with children gives an indication of how inequality is evolving in Finland. During the 2010s, child poverty decreased, but has since begun to rise again. In 2023, 120,000 children in Finland lived in a low-income family, and the figure is expected to increase to 150,000 children due to the cuts in social security. The experience of poverty in childhood increases the risk of poverty in adulthood. Inequality challenges social cohesion and trust in society.

## CHANGE

# Confidence in the future is under strain in ageing societies

The 2016 megatrend report stated that the age pyramid of ageing societies is turning into a diamond- or square-like shape. It explored society's ability to renew itself in a situation in which younger generations do not automatically move into leadership roles, but rather where generations work together. Older people must also be able to adopt new technologies, sustainable lifestyles and, more broadly, new ways of thinking and acting. Now, ten years later, this need for renewal is even more pressing. How do we build trust and confidence in the future across generational, regional and cultural divides?

## Old promises about the future are losing credibility

Finnish people's confidence in the future is under strain. Future optimism has traditionally been associated with young people and young adults because their attitude to the future strongly

influences their education choices, career decisions and decisions about having children. These life choices have significant and long-term impacts on society's capacity for renewal and vitality. While by many indicators, most young people in Finland are doing well, several surveys over the past decade have reported that young people's faith in the future has begun to falter.

At the heart of this wavering confidence is a discrepancy between the future people hope for and the future they consider likely, as well as the sense of intergenerational injustice that arises from this. For example, young people's fears about the planet's liveability and their distrust of the pension system point to a deep distrust towards society and decision-makers. Studying at the best general upper secondary schools or universities no longer guarantees a stable career or balanced financial situation.

The Finnish economy has not grown in 17 years, which means that there is an entire age cohort in Finland that has never experienced economic growth and the dynamism it brings. Over

the next ten years, Finland's economy will remain under pressure, as defence spending and welfare costs increase, the state seeks to reduce its debt, and the green transition requires public investment. Yet, the majority of people in Finland still believe that the future can be influenced. This is a resource we could leverage much more efficiently.

## **Growing divergence between regions, generations and cultures**

Increasing fault lines also undermine confidence in the future. The idea of a unified Finland built through cooperation is being challenged by regional divergence, declining intergenerational fairness, and the deliberate fuelling of divisions as society becomes more diverse.

In Finland, the population is increasingly concentrated in the Helsinki Metropolitan Area and other growth centres. According to population projections, three in four municipalities in Finland will see their population decline over the next ten years. The challenges are already visible in the poor condition of infrastructure such as water pipes and roads, for example. In many municipalities, the number of schoolchildren will also decrease significantly, which may result in fewer friends and social connections.

The growth of regional disparities is an international phenomenon, but Finland's long distances and sparse population make the situation particularly acute. Researchers note that social equality and taking care of the well-being of the whole country have been the fundamental pillars of Finnish society. Finland's regional segregation and the concentration of people in growth centres have happened faster than anticipated. How can we ensure that municipal finances withstand these changes – and at the same time safeguard social equality between regions?

The number of centenarians will continue to grow in Finland. Of those born in the early 2000s,

half will probably live to 100. Yet Finnish society has not been designed for citizens with such long lifespans. Longer lives mean that society's systems must be renewed from education and social security to healthcare and the pension system. The milestones of the life course are shifting, and the sequencing of life phases must be rethought to match the length of a long life. This means that life will no longer automatically follow the linear path of childhood and youth, followed by studies, working life and then old age.

More and more older people wish to continue working. Research from the United States shows that staying in work longer is beneficial for health. This is linked to a sense of meaning and the opportunity for self-realisation – key building blocks of a good life. We should now be building a society in which different generations interact more actively. At the moment, a relatively small working-age population under pressure is bearing the weight of society.

In a low-fertility society, there will also be far more older people without children than before. How will this affect old age? For men in particular, childlessness is not random; it is often intertwined with various vulnerabilities that accumulate over the course of life and multiply with age. At the same time, while many parents of small children are exhausted, many older people would be willing and able to give of their time for the benefit of the community. To support this, we also need a cultural shift away from “coping alone” with everyday life.

Finnish society is diversifying rapidly, and the diversity of values, attitudes, backgrounds and cultures is growing. Finland has only had net immigration since 1981. Because the history of immigration is short in Finland, we are still going through a learning process on how to build a diverse society that supports the inclusion of everyone. Diversification is also a regional issue, as people with similar socioeconomic backgrounds, values and attitudes tend to cluster in the same areas. The vast majority of immigrants move to the Helsinki Metropolitan Area, and internationalisation is concentrated in growth centres.

## OPPORTUNITIES

# Building a long-lived and diverse society

Fostering intergenerational fairness is one way to bolster confidence in the future. What unites us is that we want a good life for our children and for future generations. To renew society while preserving what is important to us, we must think long-term, paying attention to the perspective of future generations. This puts the environmental crisis, geopolitics, the economy and technological development in a more sustainable perspective and allows us to better consider what is fair from the perspective of different generations.

## Intergenerational fairness

People over 65 have more power in democratic decision-making, not only because of their relative share of the population, but also because they vote in higher numbers. For example, in municipal elections, the share of young candidates has been declining since 2008, while the share of candidates over the age of 65 has already risen to almost 20 per cent. This affects the content of politics and the decisions made, and may undermine younger generations' trust in democracy. Over the next ten years, we must move towards intergenerational decision-making that pays attention not only to young people, who are underrepresented in decision-making, but also to future generations, who have no formal representation, and whose rights depend entirely on the goodwill of those living today.

The rights of future generations have been acknowledged in both the UN and the EU. The question of how to take future generations into account in legislative drafting has also been examined in the Government Report on the Future. Indeed, it is now important to move intergenerational thinking from declarations into practice and to develop concrete ways to factor children and future generations into decisions.

As the child population is declining in Finland, we need a deeper appreciation of childhood and a

culture that is genuinely positive towards children. Childhood is a unique phase of life whose effects ripple out into society in many ways later on. Children should be able to live their childhood in peace, protected from the pressures of the world. The spread of artificial intelligence in society and the ubiquity of smartphones in daily life underscore the need to safeguard children's space for growth in the digital age.

## Creating the structures and culture of a society of longevity

Increasing life expectancy is a remarkable opportunity for both individuals and society as a whole. A longer life makes room for many phases and broadens the horizon of possibilities, as people can assume they will probably have more time. The internalisation of longevity affects how people plan their lives. Culture, too, will change as different life phases are given new meanings.

Over the next ten years, we must move towards a society that pays attention to long life courses in all activities – from education and basic services to working life. The development of immigration, the dependency ratio and intergenerational fairness are also essential for the future.

Longer life courses make the need for continuous learning tangible. One person may have several careers and many different roles over the course of their life – periods in which paid work is more central, and other periods in which care work, studies, free time or volunteering play a bigger role. Today's 70-year-olds are healthier and more active than ever before. Combating age discrimination in the labour market is crucial so that everyone who wants to work can do so.

How do we support competence building at the level of society if we live to almost 100? Competence development must be taken as seriously as the comprehensive school reform once was. While we

strive to increase the number of higher education graduates, we can also invest in making Finland a country which celebrates the joy of learning. Internal motivation and the joy of learning can be strengthened in both degree-oriented and informal learning. Continuous learning also requires a strong learning culture and practical arrangements to support it. Everyone must be given the opportunity to develop their skills throughout their lives.

### **Active old age and intergenerational coexistence**

Is the fact that an ageing society loses its vitality and dynamism simply a failure of imagination? Our image of the life course changes as we adapt culturally to the idea of a society of long lives, in which more and more people reach the age of 100. In Japan, there are already nearly 100,000 centenarians, and Prime Minister Shinzo Abe set up a council in 2017 to design a “100-year life society”. The council’s goal was to develop a societal strategy that would turn population ageing into an opportunity. It explored ways for Japan to sustain economic growth despite falling birth rates, a shrinking economy and an ageing population.

At the same time as pensioners’ healthy and active years have increased, a relatively small group of people of working age is carrying society, and they often also have children and older relatives who need care and support. The Nordic egalitarian societies also include a paradox: mothers in particular are exhausted, and parenting is experienced as intense.

In Finland, 1.3 million people live alone, equaling 47 per cent of all households. Living alone does not automatically mean loneliness, but loneliness is widespread in our society. According to a survey, support from loved ones and neighbours enhances

people’s sense of security. Among older people, there are many who would be willing to take more responsibility for the well-being of their local community. Closer everyday coexistence between different generations could bring many benefits from strengthening trust to improving well-being and life satisfaction.

### **Diversity as a resource**

Finland is already a multicultural country, home to more than half a million people with a foreign background. Multiculturalism is concentrated in the Helsinki Metropolitan Area and in cities. Diversity also encompasses the diversity of attitudes, backgrounds, values, age and gender. Over the next ten years, we need a deeper discussion about how two-way integration, which includes the climate of attitudes, the willingness of citizens to welcome newcomers, trust and integration policy can function better so that Finland is a more attractive country where people can thrive and want to build their future.

For people with a foreign background, everyday experiences at work and in the neighbourhood are crucial for how they experience Finland. The feeling of being welcome and part of the community is essential. A more community-oriented culture would support not only coexistence between generations, but also the integration of people with a foreign background into Finland.

Trust is the glue of society, and it is strengthened in the institutions that people in Finland cherish, including libraries, voluntary work and hobbies. A stronger economy requires people to make it happen – both older people staying in work for longer, and people with a foreign background. To make this possible, we need a welcoming atmosphere, a high quality of life and confidence in the future.

## A KEY POINT TO WATCH

# Development of immigration

Population is decreasing across Europe, and migration is the most important factor affecting the size of the working-age population. The number of immigrants arriving in Finland is influenced by each newcomer's individual life path, but also by geopolitical changes and the advancing impacts of the ecological crisis.

Of the more than half a million immigrants in Finland, half come from Europe. In recent years, people have moved to Finland especially from Ukraine and South and Southeast Asia, whereas previously, neighbouring countries were the primary sources of immigration. Finland's foreign-born population is highly concentrated in the Helsinki Metropolitan Area and in Helsinki, 20 per cent of residents have a foreign background. In terms of age, immigrants are significantly younger than the native population. Most migration to Finland is for work or study, or related family reunification.

Throughout the 2000s, the developments in the labour force have relied on immigrants. Without them, many activities that are essential for the smooth running of daily life would not get done. At the same time, many immigrants are unable to find work that corresponds to their education, which is a major challenge in terms of making use of the potential of people living in Finland, the economy, and people's own life experiences. Immigration brings new ideas, and research shows that hiring foreign workers increases businesses' exports.

One challenge related to immigration is learning the language. A survey suggests that people in

Finland have adapted well to multilingualism, and the majority are willing to help immigrants learn Finnish. However, there are regional and sectoral differences in attitudes to multilingualism and internationalisation in working life. In Uusimaa, attitudes are more positive than in the rest of the country.

Statistics Finland's population forecast assumes that net immigration to Finland will remain at about 40,000 people per year. Meanwhile, researchers consider this to be unlikely. It is also unclear how many of those who have arrived in recent years will stay in Finland in the longer term. This is influenced by employment and career development, the integration of spouses and families, access to services, social relationships, how welcoming Finnish society is, and people's sense of inclusion. On the other hand, even the annual net immigration of 40,000 people would be insufficient to ensure growth in the working-age population in the long term, and the number would still start to decline in the 2050s.

Over the next ten years, competition for immigrants will intensify. In this development, the climate of opinion, openness and the appreciation of diversity will play a major role. Migration is a politically divisive and emotionally charged topic in Europe. According to a survey, 68 per cent of Europeans believe that the immigration levels in their own country are much higher than they actually are. At the same time, demographic trends are creating pressure for new thinking: Europe's population is projected to start declining as early as the 2020s.

# Wild cards

## WILD CARD

### **What if there were only three million people in Finland?**

According to an alternative population projection by [Eurostat](#), Finland is one of the EU countries whose population will decline even when migration is taken into account. Finland's population is forecast to decrease to 4.8 million by 2100 despite immigration, and to 3.4 million without immigration. The corresponding figures for Sweden are 13 million and 8.8 million.

What if Finland's population shrank even faster than projected, to three million? How would we reshape society's services? What would this mean in different parts of the country?

## WILD CARD

### **What if there were eight million people in Finland?**

In recent years, net immigration to Finland has been at an unprecedentedly high level, at around 40,000 people annually. Experts consider it unlikely that this figure will remain as high in the future. However, if it did, Finland's population would grow to 6.5 million [by 2070](#). But what if Finland pursued a far more ambitious migration strategy based on attracting skilled workers – one that would already increase the country's population to eight million by 2050?

[MDI has calculated](#) that this would require around 100,000–125,000 immigrants per year. What would our society look and sound like?

How would our understanding of "Finnishness" need to evolve?

# Data

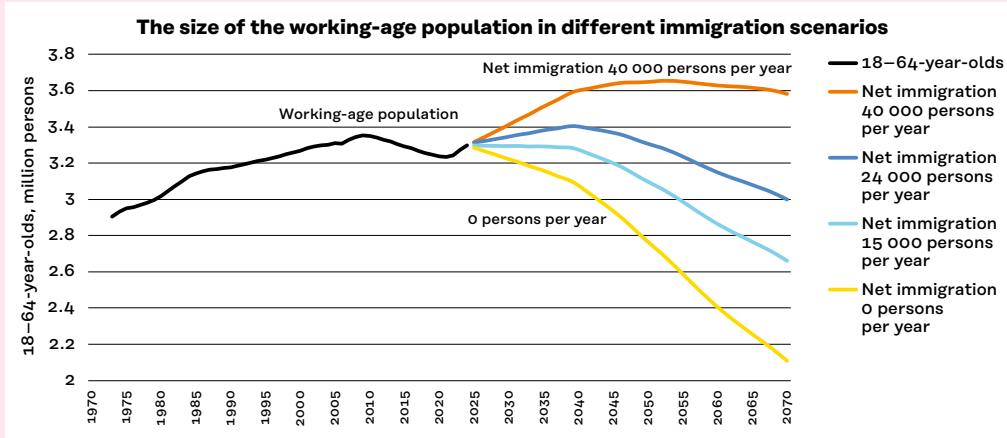


Figure 3. The size of the working-age population depends on immigration. Source: [Sitra 2025](#)

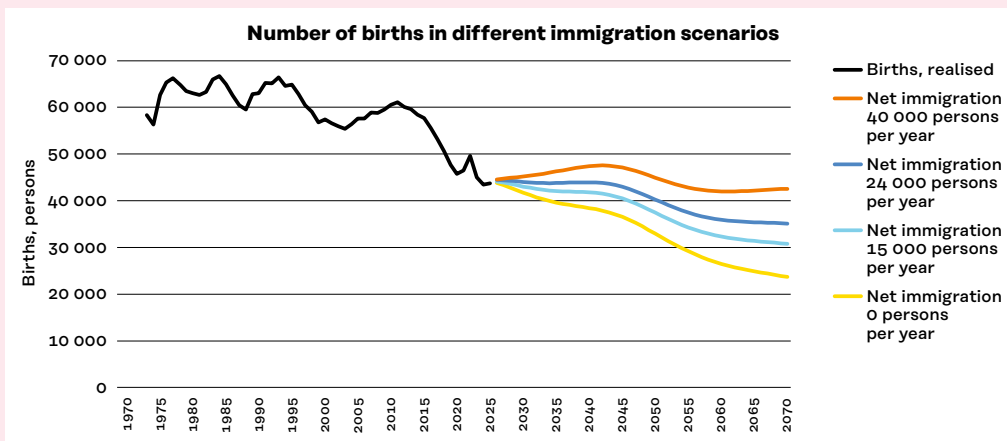


Figure 4. The number of births has fallen sharply since the 2010s, and the decline is likely to continue. Source: [Sitra 2025](#)

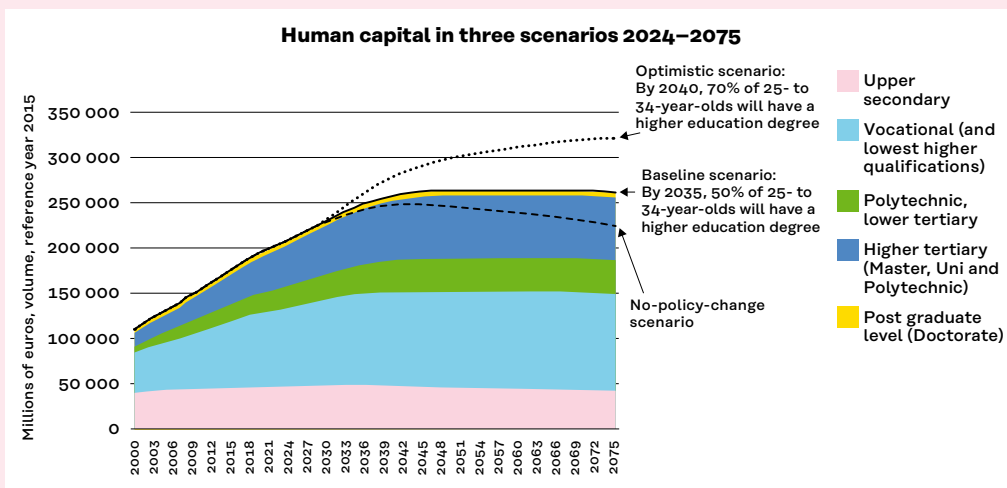


Figure 5. The growth of Finland's human capital will end in the 2040s without a significant increase in educational levels and immigration. Source: [Bank of Finland 2025](#)

# Trends

## **POPULATION GROWTH IS SLOWING DOWN**

Population growth is slowing down globally. According to forecasts, the population will grow to around ten billion before it begins to decline. Population growth is mainly concentrated in countries in sub-Saharan Africa, but in countries such as the United States, the population is also expected to grow throughout the century. In the EU, the population is expected to start declining in the coming years. In Finland, population growth depends on immigration, but even so, the population is likely to start shrinking in the near future.

## **LIFE COURSES ARE GETTING LONGER**

People are living longer with more healthy years than before. As a result of low birth rates, the proportion of people over the age of 65 is increasing, and young people are in the minority. Society must be renewed to fit longer life courses: this applies to education, working life, and care alike. The dependency ratio is weakening as the proportion of working-age people decreases, which challenges the financing of the welfare society. The need for work-based immigration is growing.

## **URBANISATION CONTINUES**

Migration from rural areas to cities is continuing globally, and two thirds of the population growth is taking place in cities. Rapid population growth is putting pressure on urban infrastructure, especially in megacities in Asia and Africa, and inequalities are increasing. In Finland a key trend is the concentration of the population in southern Finland and a few major growth centres. The gap between growth centres and municipalities losing population is widening.

## **GLOBAL MIGRATION IS INCREASING**

Global migration flows have increased as a result of changes in livelihoods, urbanisation, wars and environmental change. Climate change is making some areas uninhabitable and forcing people to leave their home regions, although most migration still takes place within countries. Immigration to Finland has grown significantly in recent years. People move to Finland particularly from Ukraine and from South and Southeast Asia.

## **PANDEMICS AND EPIDEMICS ARE BECOMING MORE COMMON**

Climate change and human activity are increasing the likelihood of widespread epidemics and pandemics. The fragmentation of natural habitats is shrinking animals' living spaces, making it easier for animal diseases to pass to humans. Floods and droughts, exacerbated by climate change, increase infectious diseases, and ancient pathogens may be released from thawing permafrost. Mobility accelerates the rapid spread of diseases. Future pandemics can be prevented by preserving animals' habitats and biodiversity.

### **HEALTH CHALLENGES ARE CHANGING**

Well-being is increasingly challenged by environmental degradation, the rise in mental health problems and physical inactivity. People in Finland are not getting enough physical activity, and obesity is becoming more common. Mental health issues are increasing, particularly among young people, and are an increasing cause of absence from work. Overlapping crises, a digitised environment and a lack of positive future prospects all add to the strain. People's health is increasingly understood to be linked to the well-being of nature. In addition to the treatment of diseases, more emphasis is placed on preventive measures and on harnessing the health benefits of natural environments.

### **ARTIFICIAL INTELLIGENCE AND DIGITALISATION ARE TRANSFORMING WORKING LIFE**

Digitalisation and the increasing use of AI are transforming work in wealthy societies. The pandemic forced many societies to make a digital leap, as remote and hybrid work became more common. AI is further changing tasks and the organisation of work. Mismatches in the labour market are increasing: there are not enough people with the right skills for the jobs available, and jobseekers struggle to find work that align with their competences.

### **WEALTH IS CONCENTRATED AND INEQUALITY IS INCREASING**

Wealth disparities are growing both in Finland and globally. In Finland, the wealthiest tenth of the population owns more than half of all net wealth, and globally, the figure is 70 per cent. The richest one per cent in the world own more than 95 per cent of humanity's wealth. The gap between the richest and the poorest is widening, and the impacts of crises are further increasing inequality.

### **LIFELONG LEARNING IS BECOMING MORE IMPORTANT**

The changing world of work requires lifelong learning. The green and digital transition is transforming job descriptions and industries. The importance of learning new skills, unlearning outdated ones, fostering creativity and understanding complex systems is increasing. Longer working careers also add to the need for continuous learning. There is growing pressure to reform the structures and practices of skills development.

# POWER

"I do not believe that liberal democracies will win the competition between systems by becoming more like their authoritarian rivals, but by ensuring that as many people as possible make it through the inevitable ecological and technological twin transition with their self-worth and confidence in the future intact. In addition to economic growth, this is fundamentally a democratic question."

**Hannu-Pekka Ikäheimo, Director of the Democratic Innovations programme, Sitra**



# The transformation of the world order tests the strength of democracy

An intense struggle is currently underway over the future direction of the international system. Over the next ten years, the political future will be shaped largely by how democracies manage to operate in a turbulent environment. It will also be essential what kinds of practices they adopt in a new world order defined by friction, competition and authoritarian approaches.

At the same time, this period of transformation offers opportunities. A crisis-prone operating environment can also highlight the strengths of stable societies such as Finland and drive concrete action towards a better future, provided that our society and democratic decision-making are themselves able to renew.

## BOUNDARY CONDITIONS

# Finland's geographic and political position

The geopolitical boundary conditions have changed dramatically over the past decade, and in 2026, Finland is in many respects in a new situation. Finland is a frontline NATO country bordering Russia, a country which in turn is waging a war of aggression. Finland also relies on the United States as its key ally – an actor whose behaviour has become unpredictable. Meanwhile, authoritarianism is gaining ground globally. The EU must adapt to a world whose rules are alien to it.

## Finland's geographical position

Geography has always imposed its own constraints on Finland. More than a thousand kilometres of shared border with Russia has long been one of Finland's most defining geographical boundary conditions, shaping its actions in various ways over the decades. Since Russia's full-scale invasion of Ukraine in February 2022, the relations have frozen. Over the coming ten years, tensions are likely to remain unless Russia undergoes a fundamental shift in its sphere-of-influence thinking and governance.

Finland is also part of the Arctic region, whose strategic importance is growing. The Arctic is warming roughly four times faster than the rest of the world. As sea ice retreats, new maritime routes are opening, and the interest in the oil, gas and

mineral resources in this region is intensifying. Military and economic activity in the region is expected to increase.

## Finland as part of the EU and NATO

The European Union is one key boundary condition that defines Finland's actions. The 2016 megatrend report already noted a possible Brexit even before the referendum took place. Over the past ten years, the EU has faced several crises and has at times emerged stronger, but internal tensions have also deepened. Nevertheless, in an increasingly adversarial global political environment, the Union is even more crucial for a small, multilateralist frontier state such as Finland.

In 2016, around half of Finns were against NATO membership, and a quarter supported it. The situation remained largely unchanged until autumn 2021 but shifted quickly when Russia launched its full-scale war of aggression against Ukraine. By spring 2022, 60 per cent of Finns supported NATO membership, and only one in five opposed it. When Finland joined NATO in April 2023, its security policy position changed profoundly, and its geopolitical position was also strengthened and clarified. In the future, NATO membership will determine Finland's choices along with its budget.

## CHANGE

# Democracy is under pressure on multiple fronts

From Finland's perspective, the key questions of the next decade are related both to the evolution of the global operating environment and to Finland's ability to address its internal challenges, which largely reflect global trends. The future of the global operating environment can be built in many ways. The dominant trend now points towards a bloc-based world order and an increasingly multipolar operating environment where new walls are built, but new alliances and new modes of operation are also developed. Domestically, the main challenges concern polarisation and pressures on democratic institutions.

## A turbulent world surrounds Finland and the EU

Since the end of the Cold War, the United States has been the leading global power and is likely to remain so for the foreseeable future, even as China catches up and becomes more strategic in its use of power and preparedness. Internally, however, the United States is increasingly divided, making compromises – necessary in politics – ever more difficult.

President Trump's administration has moved the United States sharply in a new direction. In foreign and trade policy, which are intertwined, the United States now pursues its interests transactionally – “deal by deal” – with little regard for the established practices of international politics and diplomacy or multilateral organisations. European trust in the US as a guarantor of security has been shaken. The US has also weakened its own use of “soft power” by cutting its disaster and development aid and turning inward at the expense of long-standing alliances. The judiciary, freedom of the press, academic freedom and civil rights are all under pressure, and the country is classified as a declining democracy.

China has stepped into the vacuum left by the US, combining its geopolitical interests with

financial assistance. Its cooperation with India and Russia has deepened, and China is seeking to present itself as an alternative to the Western world order. In addition to its immediate circle, China has increased its influence, particularly in African countries. However, slowing economic growth and domestic tensions could constrain its global ambitions.

The BRICS countries – originally China, Brazil, Russia, India and South Africa – have strengthened their position as an alternative economic and political power centre in relation to the Western system. The bloc has recently expanded to include new members such as Iran and Egypt. Among other areas, the cooperation between the BRICS countries is visible in their efforts to build financial institutions and trade mechanisms that reduce reliance on the US dollar. While there are significant differences between the countries' political systems and stage of economic development, they are united by the common goal of challenging Western dominance.

Africa is home to the youngest and fastest-growing populations in the world. The continent's population is expected to grow by nearly half a billion over the next ten years, and the growth is also projected to continue. In 2035, African countries will have more young people entering the labour market than the rest of the world combined. In addition to the workforce, the continent possesses critical minerals and is home to emerging megacities with growing markets. These developments will significantly increase Africa's importance and dynamism in the coming decade.

The erosion of a rules-based order at the expense of transactional politics has also made personal relationships between political leaders more influential. For a small country like Finland, this is problematic and underscores the importance of the EU, particularly if the Union can act as a counterweight to the two major powers. This will also require Europe to strengthen its defence capabilities.

## The state of democracy is being challenged in Finland

Democracy is under pressure worldwide, and its preservation cannot be taken for granted. The future of democracy is threatened by declining trust, a polarised information environment, low civic participation and the questioning of democratic structures. People's understanding of the nature of democracy is an essential future skill, as democracy is not merely a system of governance but a way of living together founded on respect, dialogue and the ability to compromise.

Finland's democratic structures remain strong, but they are underused. Political participation is declining, and an ageing population means that we will have fewer people sustaining democracy. Trust levels in Finland remain high by international comparison, although they, too, have fallen. The strain on public finances weakens both safety nets and confidence in the future, while platforms and algorithms distort public debate. Ideological polarisation, more heated debate, hardened divisions and the rise of populist modes of power are increasingly visible in Finland as well.

Social media platforms and their algorithms shape public debate and fuel polarisation. Algorithmic publicity challenges the principles of democracy. While digital platforms have increased opportunities for free expression, they have not supported core democratic values such as respect and constructive dialogue. A major problem is the “emotion market” driven by algorithms, in which outrage, anger, mockery and division serve as commercial drivers. The question is whether this long-term trend can still be reversed.

Another key phenomenon is the spread of populist modes of power across the political spectrum – a development accelerated by the

platform-driven change in public debate. Populist power is characterised by simplification and messages aimed exclusively at one's own side. This weakens the ability to compromise and debate, which are core to a functioning democracy. Algorithm-fuelled debate and populist power accelerate a development that challenges ideas and norms such as administrative neutrality and the rule of law.

Affective polarisation has also gained a foothold in Finland. This refers to the growing tendency to view members of an opposing political group or its supporters negatively, including with distrust, contempt or hostility. Over time, this phenomenon may erode social discourse, intensify conflict and undermine the trust that sustains democratic institutions.

Addressing these developments ultimately comes down to the future of Western liberal democracy. Will states remain committed – in principle and practice – to a system grounded in the rule of law, human rights, freedom of expression, an independent press and a vibrant civil society? In practice, this means political decision-making that is transparent, lawful and respectful of citizens' participation – not merely the exercise of majority power.

Liberal democracies must now demonstrate that they can carry through significant reforms, make difficult decisions, generate sustainable growth and invest in security. Economic growth, in particular, is a crucial issue for the future of Western societies, as the distribution of opportunities and material well-being are central to today's social models. Economic uncertainty and growing inequality feed mistrust and open space for authoritarian approaches. In an era of slow growth, the relationship between democracy and the economy becomes critically important.

## OPPORTUNITIES

# Committing to renewing democracy

The rapid change in the world order and geopolitical tensions highlight the role of the European Union and NATO. Finland has an opportunity to be an active player in these communities. At the national level, the renewal of democracy becomes central. The means to achieving this include the strengthening of trust and inclusion through democratic innovations and the building of information environments that work better for both people and society. What is essential is a firm commitment to democracy and the cultivation of an active democratic culture.

## Strengthening the EU and NATO

From Finland's perspective, the European Union and NATO are the most important self-chosen external boundary conditions within which the country's future is also built. The transformation of the world order also opens up new opportunities for the EU, even though the public narrative often focuses on the Union's problems.

The EU is an extremely prosperous, free and flourishing alliance, and by virtue of its attractive societal model and its position as the world's largest single market, it can compete in the category of great powers. From time to time, the EU has also shown a capacity for creativity and solution seeking in crises.

In terms of the economy, the most urgent task is to harness the full potential of the EU's internal market to support sustainable growth. The deepening of the single market in the fields of energy, the digital economy and financial markets will be crucial, as will the funding and scaling of innovation. That requires more integrated capital markets and consumer markets, as well as the free movement of people, research and innovation.

In technology, the EU faces a choice: either it once again becomes a technological great power, or it remains dependent on external solutions.

However, right now, the EU has an opportunity to reach for the future: public support for the Union is currently high, and decision-makers are under pressure to act.

NATO is another critically important actor for Finland, and its future will also shape Finland's future. A key question looking ahead is how the internal political changes in different member states, and especially in the United States, will affect the alliance over the long term. In any case, Europeans will have to assume significantly greater responsibility for their own defence in the coming years. So far, NATO's future has been discussed relatively little in Finland. Given the alliance's central significance for Finland's future and security, the future of NATO would merit more attention.

## Resilient information environments and enhancing civic competence

Building resilient information environments is crucial to the vitality of democracy. Reliable, accessible and pluralistic information underpins trust and participation. In the future, for example, the transparency of algorithms, new platforms and methods for evaluating AI-generated data may become part of everyday life. A resilient information environment also requires a social dimension: community, a sense of belonging and critical media literacy. For young people in particular, local communities and educational institutions play an important role in supporting a balanced "information diet".

In today's world, democracy demands more: activity, critical thinking and a willingness to understand different perspectives. Opportunities to participate should be expanded, but at the same time, Finns' low perceived civic competence undermines their willingness to participate. Although

trust in society is high, many people feel they do not understand politics or cannot influence society. This makes society more vulnerable to populism. Civic competence is a key element of a functioning democracy and enhancing it is essential to safeguarding the vitality of democracy.

Civil society organisations could play a strong role in increasing civic competence and in teaching the skills of democratic citizenship. In Finland, civil society is heavily dependent on government funding. The efforts to balance public finances are therefore likely to impose significant change and renewal pressures on the operating conditions and practices of civil society organisations in the coming years. How civil society evolves through this transition will be a key question for the future of democracy and public life.

## **Democratic innovations and democratic culture**

Alongside existing structures, we also need new forms of participation and democratic innovation. Deliberative citizens' panels, participatory budgeting and digital engagement platforms are examples of methods that bring diverse citizen knowledge into decision-making and help build shared understanding. They do not replace representative democracy or solve problems on their own, but they strengthen both inclusion and democratic culture. New forms of participation can also amplify the voices of those who do not traditionally participate – provided that active efforts are made to involve such groups.

Democratic innovations are not only technical solutions; they require a cultural shift. Decision-makers must be willing to genuinely listen to and use the views of citizens. This can bring many benefits to decision-making: it helps leaders to

make difficult choices, increases citizens' commitment to change and allows conflicts to be prevented in advance.

In order for such innovations to become an integral part of decision-making, long-term work is required. Municipalities and wellbeing services counties have been pioneers in experimenting with new forms of participation, and this development deserves to be strengthened. The renewal of democracy must not rely solely on individual experiments, as it requires permanent structures that support participation in daily decision-making.

## **Building trust in times of weak economic growth**

Finland has traditionally been a high-trust society in which the structures of the welfare state, an active civil society and the deliberate building of national cohesion have reinforced the social fabric. Finland has also had a strong political culture in which opponents have been respected and channels of communication between different actors have remained open even in difficult times. This tradition of trust and dialogue has been a key part of the country's social stability and its building of the future. In times of weak economic growth, when trust in society is under strain, particular attention must be paid to maintaining trust and social cohesion.

There are no miracle cures for building and maintaining trust. The long-standing model of elite consensus has eroded, while societal interests and public debate have become more diverse and fragmented. Finland has been good at building consensus from the top down, but in a changing world, we must also learn to build consensus from the bottom up, locally and case by case. This shift is still very much unfinished in Finland.

## A KEY POINT TO WATCH

## Centres of power in flux

The world's power centres are in a state of flux: on the one hand, power is concentrating, as seen in the decline of global democracy and the return of geopolitics; on the other hand, it is dispersing into networks that are increasingly hard to grasp.

Technology is one of the key battlefields of concentrated and distributed power. Artificial intelligence, data and algorithms increasingly determine who gets to define operating models, public debate and even aspects of people's private lives. Cryptocurrencies, meme coins and other decentralised digital monetary systems are related to distributed power because they shift economic control away from centralised institutions such as governments and banks.

Outer space has also emerged as a new geopolitical frontier. Satellites underpin communications, navigation and military operations, and major

powers are investing heavily in space defence and satellite networks. Private actors such as SpaceX are changing the strategic dynamics of space. Finland, too, aims to be part of the space race: according to the national space strategy, Finland seeks to become the world's most advanced space environment by 2030, benefiting society as a whole and strengthening security of supply.

Physical geopolitical competition has made a strong comeback on the world map. The conflicts in Ukraine, the Middle East and Asia demonstrate that geography, natural resources, infrastructure and critical resources remain central to power politics. At the same time, physical power has become more complex. Modern conflicts are also fought through drone technologies, cyber operations and influence activities amplified with artificial intelligence.

# Wild cards

## WILD CARD

### **What if a large-scale global conflict breaks out?**

A global conflict and a large-scale military crisis affecting several nation-states would fundamentally transform the security and international political environment. Its impacts would extend not only to all aspects of human life but also to the economy, technology and the functioning of societies. New forms of warfare such as hybrid influence and cyber operations can undermine the functioning of societies without direct military aggression.

How would a large-scale global conflict manifest itself in Finland, and how would it differ from previous ones? What if, alongside preparing for conflict, we were to invest in peace research, conflict resolution and peacekeeping?

## WILD CARD

### **What if the UN were renewed as a powerful global actor?**

The UN will turn 100 in 2045. Global cooperation requires new operating models that are more just, inclusive and effective. The Sustainable Development Goals, climate action, and technological and intergenerational fairness will require close cooperation between states, businesses, civil society and international institutions. Although the UN has also been heavily criticised, it has endured as a key actor in a complex world. As a provider of emergency humanitarian aid and a guardian of nuclear safety, it remains unrivalled.

What if the UN succeeds in reforming itself and gains a stronger role as a global forum and cooperative actor? What kind of world order would emerge if the UN were truly at its centre?

# Data

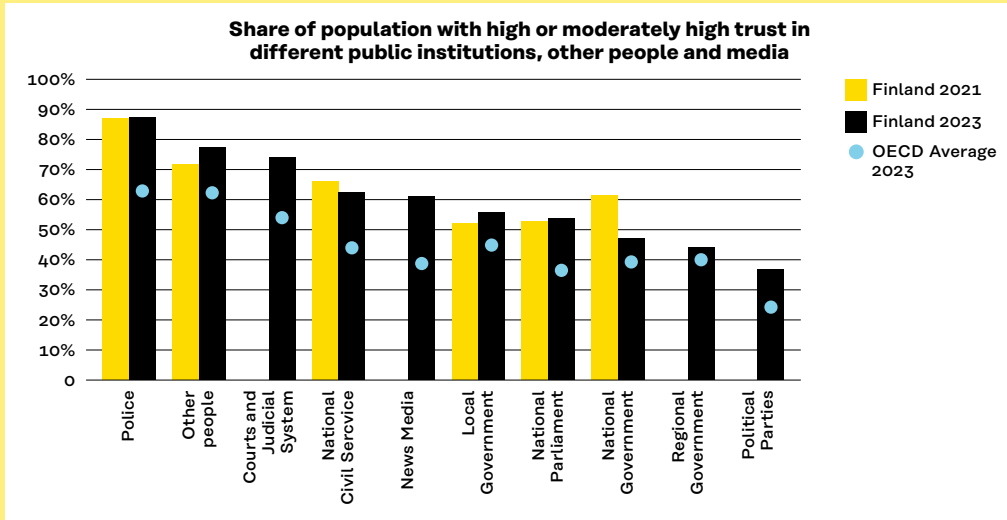


Figure 6. In Finland, trust in institutions remains high. Finns have most confidence in the police, each other and the rule of law, and least confidence in national and local decision-making and political parties. Source: [OECD 2024](#)

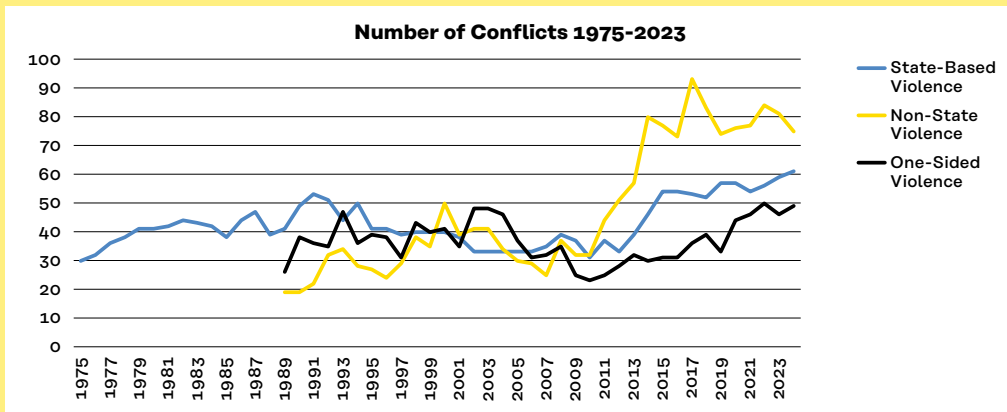


Figure 7. The number of armed conflicts in the world is the highest since records began in 1975. Source: [Uppsala University Conflict Data Program](#)

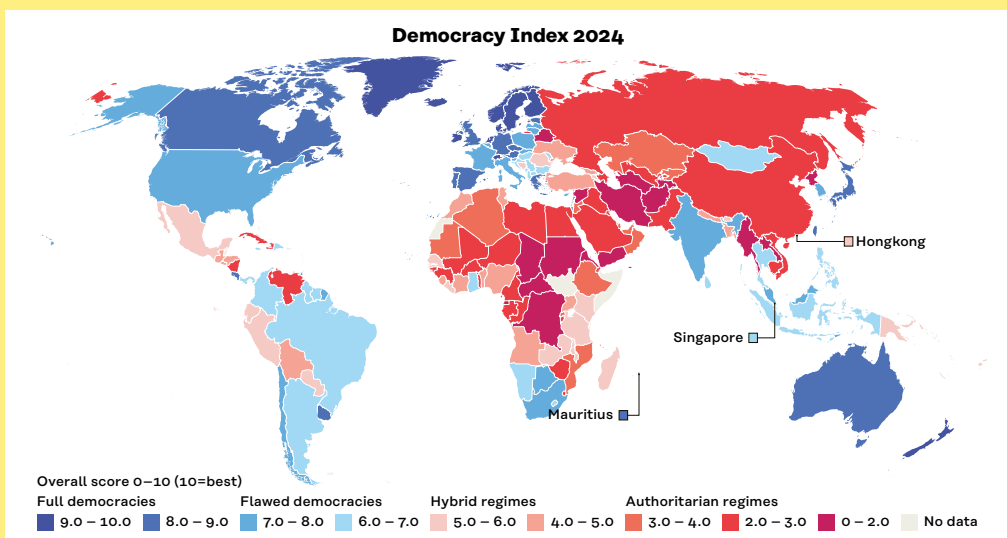


Figure 8. Full democracies are in the minority globally. Source: [The Economist Intelligence Unit Democracy Index 2024](#)

# Trends

## **THE ABILITY TO NAVIGATE THE INFORMATION ENVIRONMENT BECOMES MORE IMPORTANT**

The information environment is becoming more complex. Algorithms and artificial intelligence speed up the production and filtering of information, which may reinforce one's own views, create bubbles and spread misinformation even faster. Managing the information environment requires critical media literacy, regulation and, above all, a clear view of how AI should be used in a sustainable way for the benefit of society, businesses and people.

## **THE POPULIST USE OF POWER CHALLENGES DEMOCRACY**

Platform-driven, social-media-based and AI-fuelled political debate amplifies the personalisation of power. Individual politicians may become more significant than their parties. At the same time, capabilities that are crucial for successful politics, including the ability to compromise, may weaken. Commitment to traditional parties and civil society organisations is declining, and young people in particular are looking for quick and direct ways to make an impact. Yet democracy will continue to need deliberation, reflection, organising and compromise.

## **THE POLITICAL MAP IS CHANGING**

Uncertainty about the future and a sense of an increasingly complex world lead many to desire simple solutions. Right-wing populist parties appeal to voters by defending conservative values and national interests in the midst of crises and by promising solutions. In many countries, populist parties are seizing power, which, if realised more broadly, would significantly reshape the political map of the EU.

## **THE RULES-BASED INTERNATIONAL ORDER IS ERODING**

The dividing lines between states are deepening. The pursuit of national interests in politics is growing in an increasingly multipolar world, which weakens international cooperation. This tense situation increases uncertainty in international relations, markets and people's minds. The need for diplomacy and conflict prevention is becoming increasingly important. The building of resilience and a shared foundation of trust requires the ability to navigate this new operating environment.

## **DEMOCRACY WEAKENS AND AUTHORITARIANISM GAINS GROUND**

A clear majority of the world's population already lives in countries that cannot be considered democratic. Within democracies, too, views on the value of democracy are wavering. The future of democracy depends on its ability to deliver tangible benefits for people – better and faster than authoritarian alternatives. Do citizens believe it is the best way to safeguard rights, security and a shared future?

### **THE RACE FOR SPACE ACCELERATES**

Human activity in space is increasing and the competition for space is intensifying. The diversity of operators and the limited common rules heighten the risk of arming space and using it for military purposes. In this fiercely competitive situation, the amount of so-called space debris also increases, which can create challenges for satellite operations. Commercial space activities have been growing for years.

### **THE IMPORTANCE OF RELIGIONS AND IDEOLOGIES IN SOCIETY GROWS**

The role of religion in political decision-making has become more prominent, for example, in restrictions on abortion rights justified on religious grounds, or the electoral success of religious parties in different countries. In Finnish society as well, religion has been used as a tool for politics and influence, including during the reform of the Marriage Act. How will the political use of religion affect the equality of society, individual freedoms and the legitimacy of decision-making?

### **CRYPTO TECHNOLOGIES BECOME INSTRUMENTS OF POWER**

Digital wealth is a new type of asset, around which innovations and new business models are emerging. The EU, the US and China each seek to strengthen their position by developing digital central bank currencies. AI agents and smart contracts accelerate the need for virtual currencies and related technologies, but they also bring risks, cybersecurity challenges and environmental impacts.

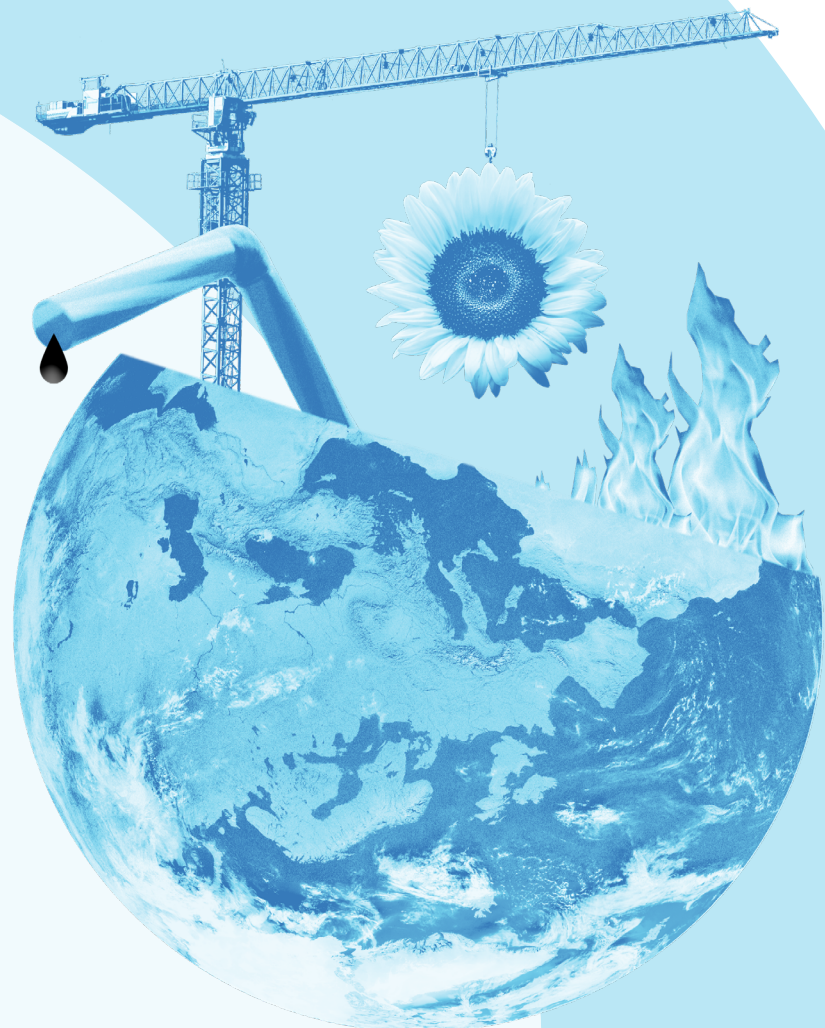
### **DATA MANAGEMENT BECOMES INTERTWINED WITH SECURITY**

The amount of data continues to grow rapidly. Increasing amounts of data are collected in different environments: in cities, industry, homes and from people via smart devices. In the current more tense security policy environment, the long-standing concentration of data collection, management and use is increasingly perceived as a security issue. For this reason, in the coming years, the EU will accelerate the development of European cloud services and other data infrastructure to reduce various dependences, including on US-based providers.

# NATURE

“The window for meaningful action is narrowing, and the consequences of delay are becoming more tangible. We are approaching tipping points — not only in ecosystems, but also in the social and economic systems that underpin our societies.”

**Leena Ylä-Mononen, Executive Director, European Environment Agency**



# The environmental crisis demands adaptation and renewal

The issues of exceeding nature's carrying capacity and resource sufficiency are increasingly defining the boundary conditions for humanity's future. Climate warming and biodiversity loss are no longer distant threats but concrete realities that already affect both Finland and the rest of the world. The coming years will be decisive: can we halt the deepening of the environmental crisis and create the foundations for a sustainable and thriving future, or will we continue overusing natural resources and limiting the conditions for well-being for future generations? Finland has both the capacity and the opportunity to prepare and to renew.

## BOUNDARY CONDITIONS

# Planetary boundaries and resource availability

Healthy nature is a fundamental condition for human life. The natural boundary conditions for building futures are the so-called planetary boundaries, which define a safe operating space for humanity. Most of these boundaries have already been exceeded, which means that we are currently driving the environment into a more unstable state and practically stealing from the well-being of future generations. We are depleting natural capital without restoring it. Even renewable resources become exhausted if we do not allow them to regenerate.

The next decade will be defined by how well we are able to move back within the planetary limits. Here time itself is a critical boundary condition: sustainability solutions cannot be postponed to “sometime later”, because later will be too late. We are already at the edge of many tipping points, and our options are narrower than they were ten years ago. The coming green transition will require resources, including energy and critical materials. For Finland and Europe, the availability of resources is a significant boundary condition, as it determines how well we can seize emerging opportunities.

## Planetary boundaries

In 2009, a group of researchers introduced the framework of planetary boundaries to describe the safe operating space of human activity. They identified nine boundaries: climate change, biosphere integrity, land-system changes, freshwater change, biochemical flows, ocean acidification, atmospheric aerosol loading, stratospheric ozone depletion and novel entities. Ten years ago, the attention focused mainly on climate change, but seven boundaries had already been assessed, and four of them exceeded. Today, all nine borders have been evaluated, and seven are considered breached. Only stratospheric ozone depletion and atmospheric aerosol loading remain within the safe zone.

Exceeding the limit means that the risks of ecosystem collapse and sudden and harmful changes in the state of the environment increase. This endangers our way of life: we are entirely dependent on ecosystem services such as clean water, breathable air, fertile soil and plant pollination. The increasing frequency of extreme weather events – floods, heatwaves, wildfires and storms – is the result of crossing planetary boundaries. The deterioration of nature’s services and extreme weather phenomena have growing implications for well-being and the economy.

Public debate continues to focus primarily on climate change, but biodiversity loss is now more clearly recognised. For the next ten years, it is essential to understand planetary boundaries as an interdependent whole. We cannot mitigate climate change at the expense of biodiversity, nor ignore land use or nitrogen and phosphorus cycles. At the same time, it is important to understand the developments related to each individual boundary.

## Climate change

The 2016 megatrend report already discussed record temperatures and extreme weather events. Record temperatures continue almost every year. Compared to pre-industrial times, the climate has already warmed by more than one degree, and in Finland by twice that amount. In 2024, the world exceeded the 1.5-degree threshold mentioned in the Paris Agreement for the first time, and Finland’s climate was 3.4 degrees warmer than in the pre-industrial era. Staying below the 1.5-degree limit has been considered critical to avoiding the worst impacts of climate change, but it now appears unlikely. Still, every tenth of a degree matters.

Even if emissions were cut to zero quickly, the current extreme weather and temperature patterns are here to stay. Humanity has already altered the climate; the question now is how much more we

will accelerate the warming. Under the current policy measures, the world is on track for roughly three degrees of warming. At that level, many regions become uninhabitable, food production collapses, and the rising sea levels resulting from melting glaciers threaten most coastal cities. Curbing global warming to below two degrees will require more ambitious action – but such action will also pay off economically.

In Finland, the effects of climate change appear as increased heavy rainfall, more frequent flooding and longer heatwaves. Naturally, the global disruptions also affect Finland through phenomena such as shifts in the availability of food and other goods.

Finland's goal is to be carbon neutral by 2035. Emissions have been reduced particularly in energy production, whereas the land-use sector has turned from a net carbon sink into a net source of emissions. Improved measurement methods and inventories reveal that increased harvesting, slowing forest growth and rising soil emissions have reduced Finland's forest carbon sink faster than previously expected. By 2036, Finland must both reduce emissions significantly and enhance carbon sinks through healthy, growing forests. Over the next decade, the boundary conditions include not only adapting to extreme weather conditions but also reaching net-zero emissions.

## Biodiversity loss

The 2016 megatrend report did not explicitly mention biodiversity loss – the term was only added to the Finnish dictionary (Kielitoimiston sanakirja) in 2022. Yet the trend of degrading biodiversity was already well underway. Species extinction is now occurring 100–1,000 times faster than the natural rate. Biodiversity loss already threatens the functioning of many ecosystems and, consequently, food production.

Nature is declining in Finland as well, both in terms of species and habitats. One in nine assessed species is threatened. As a heavily forested country, most of Finland's endangered species live in forests, making forestry a major driver of biodiversity loss.

Corrective actions are being taken through updated forest management recommendations, which are part of the National Forest Strategy 2035. Agriculture also exerts pressure on nature, and measures to improve biodiversity have also been introduced in this sector. Construction, pollution and climate change further degrade natural environments.

Finland is committed to the UN Convention on Biological Diversity and the EU Biodiversity Strategy, and over the coming ten years, efforts should be made to restore and enhance biodiversity. With substantial new measures, Finland could see improvement in the state of nature within 15 years. With the current actions, however, the state of nature will continue to deteriorate. It is also important to recognise that Finland's activities have a significant impact on the loss of biodiversity outside Finland: 98 per cent of the biodiversity impact of Finnish consumption occurs outside Finland's borders. We cannot focus solely on protecting "our own" nature but must also address the impact on global biodiversity loss arising from our consumption.

## Resource availability

The global demand for resources has grown and is expected to continue rising. Renewable energy, battery technology and many other sectors such as the defence industry and data centres require increasing amounts of critical minerals such as copper, lithium and nickel. The demand for certain materials is projected to nearly double over the next ten years. China holds a dominant position in the production and processing of many minerals, and this dominance is expected to increase.

Europe accounts for a few per cent of global mining production. The EU's Critical Raw Materials Act (CRMA) aims to increase mining production to 10%, processing to 40% and recycling to 25% of annual consumption by 2030. Currently, around 30% of copper and nickel, 10% of cobalt and 3% of lithium come from recycled sources. Finland's bedrock contains substantial deposits of critical minerals such as nickel and copper.

## CHANGE

# Tensions around the sustainability transition are growing

The environmental crisis should no longer come as a surprise to anyone. Yet its implications are often overlooked, and attention is focused on short-term challenges and costs. The environmental crisis is treated as something that still lies ahead. Ten years ago, it was perhaps still possible to imagine a relatively steady path towards a more sustainable world. Today, the planetary boundaries have been significantly exceeded, the climate has warmed, and the state of nature has deteriorated. Extreme weather events such as floods now cause growing costs year after year.

One might expect that under such conditions, solving the environmental crisis would be at the heart of economic and political decision-making. Instead, it has been relegated to the back seat as other crises have taken precedence. Environmental action has also been pushed into the background because the measures required are perceived to hinder short-term economic growth. The United States, in particular, has reversed its course and weakened institutions and structures designed to monitor and anticipate extreme weather phenomena linked to climate change.

## **Crisis awareness has increased, as has the need for adaptation and renewal**

Over the past decade, the impacts of climate change, biodiversity loss and other environmental challenges have been modelled and illustrated with increasing accuracy. Uncertainty has therefore decreased in some respects, but the increased certainty has not been particularly reassuring. We now know that staying within 1.5 degrees is unlikely, that coral reefs are likely to be lost, and that the expected costs of extreme weather are rising. Meanwhile, the crossing of environmental

tipping points brings new uncertainties: for example, changes in Atlantic ocean currents could dramatically cool Finland.

We therefore know more clearly than before that building a sustainable society “someday” is not enough. Instead, we must prepare for and adapt to what has already happened, and what is yet to come. At the same time, we must reshape the economy and society to be not only sustainable but regenerative. Alongside GDP and productive capital, we should be able to increase natural capital as well as social and human capital.

This requires long-term, determined action that respects the boundary conditions. What kind of future do we want to build within the limits set by the environment? How do we advance a fair sustainability transition? Carbon neutrality targets, the green transition and the circular economy are steps in the right direction. To achieve the climate goals, it appears increasingly likely that technological breakthroughs and technical carbon sinks will be needed sooner and at a larger scale. It may be that the time for small changes is over, and a deeper transformation in the economy and society is now required. The longer we delay, the greater the cost will be.

## **The green transition is under pressure from global populism**

As the environmental crisis has deepened and the need for urgent action has grown, the counterforces to the green transition and environmental measures have also grown stronger. The United States has withdrawn from the Paris Agreement and is expanding the use of fossil fuels. It is also in Russia's interests to preserve the fossil-based economy. China is building more coal power plants as balancing capacity but is also investing in renewable

energy many times more than any other country. These investments in renewables are visible: in 2025, emissions from China's energy production started to decline despite the continued growth in its energy consumption. With the aid of Chinese technology, electrification and renewable energy are advancing rapidly in other countries as well.

In the early 2020s, the green transition still lay at the heart of politics both in Finland and in the EU. Today it is a much more contentious issue than before. At the same time, similar goals are being pursued under different headings. For the EU, the sustainability transition is not only about responding to the environmental crisis but also about the costs of the impacts of climate change, security of supply, strategic autonomy and competitiveness.

Floods, droughts, heatwaves, storms and other extreme weather events have cost EU countries more than EUR 200 billion between 2021 and 2024, and the costs will continue to rise depending on how successful climate action is. On the other hand, the EU has managed to reduce emissions by more than a third from 1990 levels, double the amount of renewable energy in two decades and decouple itself relatively quickly from Russian energy, thereby strengthening security of supply.

In the circular economy, the EU is a market leader, and circular solutions are also a key part of securing the availability of strategic materials. The circular economy is becoming even more important on the EU agenda. For example, the Circular Economy Act, which will enter into force in 2026, aims to create a single market for recycled materials.

## **The environmental crisis is intertwined with security policy**

Extreme weather, ecosystem collapse, climate change and resource scarcity are identified in the World Economic Forum's surveys as some of the most significant risks for the next decade. Indeed, the environmental crisis is also one of the most important security risks.

For Finland, the environmental crisis brings direct, cascading and transitional impacts. Direct impacts arise, for example, through extreme weather events when floods or forest fires cause damage. Cascading impacts are indirect and emerge with other developments. Among other effects, the environmental crisis accelerates competition for scarce resources and thereby increases conflicts. The uncertainty in global food production and disruptions in supply chains will also be felt in Finland. Transitional impacts are linked to the consequences of responding and adapting to the environmental crisis, such as the variability in electricity production from renewable energy sources.

The faster and more effectively the world tackles the environmental crisis, the smaller the negative impacts will be. However, in the current global situation, it is also necessary to prepare for the possibility that global action will remain insufficient. Preparedness and renewal nonetheless go hand in hand. The shift away from fossil fuels and the overconsumption of resources towards a carbon-neutral circular economy, regenerative land use, and ultimately a regenerative economy, also strengthens the resilience of society.

## OPPORTUNITIES

# The circular economy and reinforcing natural capital

Finland is a stable country both in terms of its society and the environment. Although climate change brings more heatwaves and heavy rainfall, the impacts here are not as severe as in many other countries. To a large extent, we can address biodiversity loss through our own measures, including by restoring marshes and other habitats. As part of our comprehensive security model, we have prepared for a wide range of disruptions, and we have a relatively high level of trust in institutions and one another.

We are therefore well placed both to prepare for changes and to reform society so that it functions in harmony with nature. Nature provides us with security and the foundations of well-being. As first steps, we can advance the circular economy, accelerate the energy transition and use nature-based health services. In the longer term, we have the potential to build a regenerative society that enhances the vitality of both nature and communities.

## The circular economy, energy transition and nature-based health services

Finland has expertise in environmental technologies and the circular economy, as well as in areas of bioeconomy that support nature and enhance carbon sinks. The circular economy can help meet part of the growing demand for materials. Finland has been a pioneer in the circular economy and already published the world's first national circular economy roadmap ten years ago. Even so, there is still a great deal to do: Finland's circular material use rate has hovered around four per cent for the past decade, while the EU average is about 12 per cent. Both figures could be doubled over the next ten years. A scenario study based on modelling suggests that Finland could move to a carbon-neutral circular economy without increasing natural resource consumption or weakening the economy

– and at the same time increase biodiversity and cut emissions.

Despite the low circular material use rate, Finland has many businesses and services focused on the circular economy. There is also a lot of work to do from managing the full life cycle of new products to improving the utilisation of products already in circulation. The circular economy is also present in food production, which is developing to make better use of local nutrient and energy flows.

In addition to raw materials, we also need energy. In electricity production, Finland has reduced its dependence on imported electricity and multiplied the share of wind power over the past ten years. In 2024, 95 per cent of electricity production came from non-fossil sources. In total energy consumption, the share of fossil fuels has fallen to around one third, while renewables have grown to more than 40 per cent. The battery industry is creating new opportunities for the further expansion of renewable electricity production.

A diverse natural environment improves human well-being by providing protection from pollution, noise and heat, encouraging physical activity and rest, and offering exposure to beneficial microbes. The harnessing of the health benefits of nature could generate hundreds of millions of euros in savings for Finland. We have all the ingredients we need to support access to nearby nature and time spent outdoors. Nature restoration can also create natural physical barriers and thus support national defence.

## A regenerative economy and a regenerative society

There are many solutions available that we can adopt immediately. But sustainability is also about a deeper shift in our mindset. For the future, it is crucial that we move from exploiting the environment to strengthening the vitality and well-being of

nature and communities. Instead of extracting from nature, we should move towards cooperation and recognise humans as part of the wider natural world and fully dependent on its health. Nature-respecting collaboration – such as regenerative farming – can at its best enrich ecosystem services and natural capital.

This is the core of so-called regenerative thinking. It seeks to understand ecological interdependencies more deeply and find ways to operate in harmony with nature while enhancing it. This

highlights, for example, biomimetics – learning from nature when solving problems – local communities and material cycles, as well as continuous collaborative learning. Similarly, a regenerative economy aims to enhance the vitality of the natural and social systems on which the economy ultimately depends. In Finland, one in three companies has shifted from a focus on harm reduction towards a regenerative mindset, and some companies have started to integrate regenerative approaches into their business.

#### A KEY POINT TO WATCH

## Tipping points

Environmental tipping points are thresholds beyond which irreversible, unexpected and sudden changes occur, and the environment effectively flips into a different state. Once such a shift has begun, there is no guarantee that we can ever return to the previous state. Critical tipping points include the melting of the Greenland and West Antarctic glaciers, changes in North Atlantic ocean currents and the thawing of permafrost. These tipping points may already have been crossed, and if the climate warms by 1.5–2 degrees, crossing them seems quite likely. Coral reefs may already have been lost, which will have implications not only for biodiversity but also for the food supply of hundreds of millions of people. Tipping points are also interconnected, meaning that a change in the state of one system may trigger a change in another.

The crossing of tipping points and the transition to a new environmental state does not happen overnight, but over decades – and in the case of glaciers, over a much longer period of time. However, the effects are felt much sooner. Changes in

Atlantic ocean currents and the collapse of the Gulf Stream would bring colder conditions to Finland and the Nordic countries, reduce rainfall in Europe and generally worsen the conditions for food production. Iceland has already identified the possible weakening of ocean currents as a national security threat. Permafrost thawing would release methane and other greenhouse gases, accelerating global warming. Permafrost may also harbour pathogens that could be reactivated.

The risks associated with tipping points have not been sufficiently addressed in climate change mitigation, preparedness or strategies. While our knowledge of them has improved, they remain highly uncertain. The surest way to avoid crossing tipping points is the rapid reduction of emissions and an increase in biodiversity. It may also be useful to identify and reinforce “positive tipping points”, which are changes in human activity that have beneficial effects. Examples include the spread and falling costs of renewable energy, the electrification of transport, the development of battery technology and changes in food habits.

# Wild cards

## WILD CARD

### **What if climate engineering becomes more common?**

The impacts of climate change and insufficient emissions reductions have prompted many countries to explore more radical measures to curb warming. These include the release of aerosols into the upper atmosphere to reflect some of the sunlight back into space. The hope is that these technologies could buy time for emissions reductions and help avoid crossing tipping points.

The risk is that they cause irreversible damage or become an excuse for delaying emissions reductions.

What if countries were to engage in large-scale climate engineering regardless of the risks? How would the extra time be used, and how would the impacts and costs be distributed?

## WILD CARD

### **What if harmful substances poison nature and health?**

One of the planetary boundaries already exceeded concerns chemical pollution, meaning the release of new synthetic chemicals into the environment without adequate safety testing. There are currently hundreds of thousands of chemicals in use, and for many of them, the long-term impacts on the environment and humans are unknown. Large-scale and uncontrolled chemical contamination and exposure may harm nature and human health.

What if harmful substances were to spread across a wide area? What if the harmfulness of a particular substance was only discovered with a delay, once it was already widespread? How would this affect food production, healthcare or relations between countries?

# Data

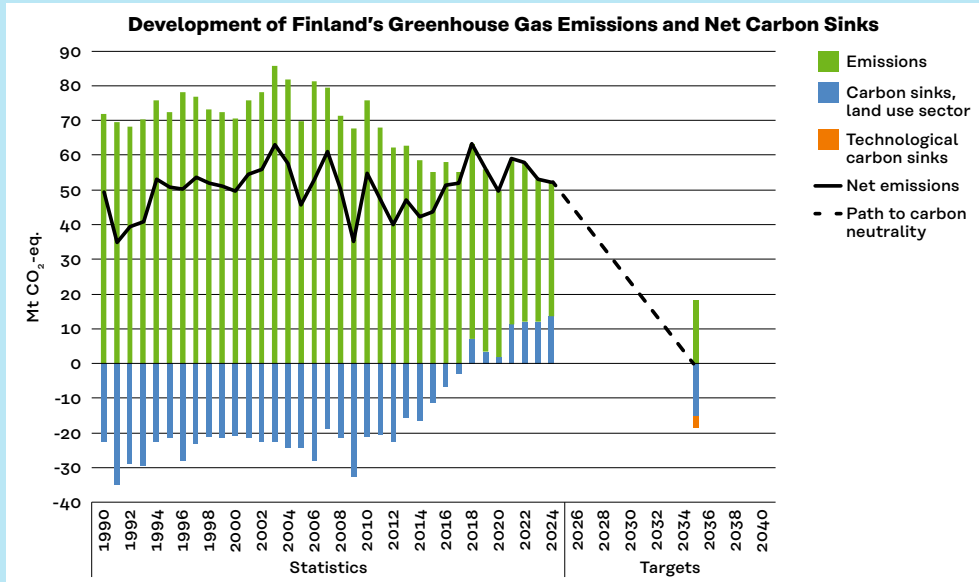


Figure 9. Finland's carbon neutrality target requires the rapid reduction of emissions and the increase of the net carbon sink. Source: [Finnish Climate Change Panel 2025](#).

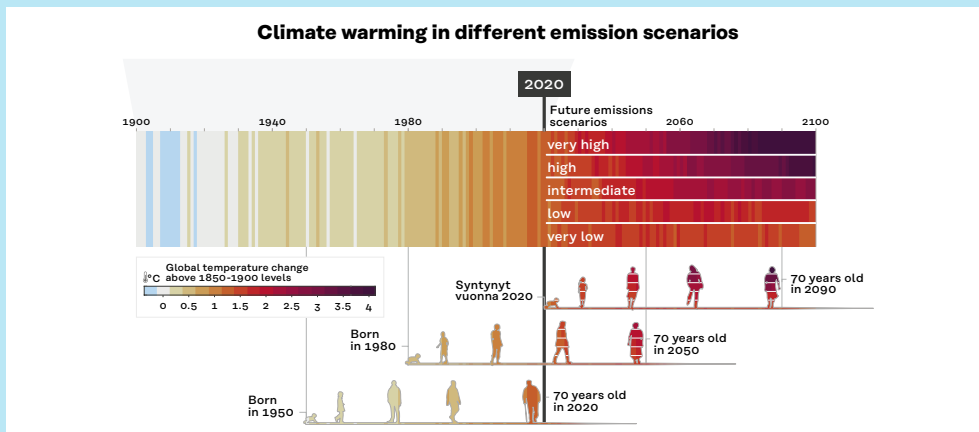


Figure 10. The climate has already warmed by more than one degree, and the living conditions of current and future generations depend on climate action. Source: [IPCC 2023](#).

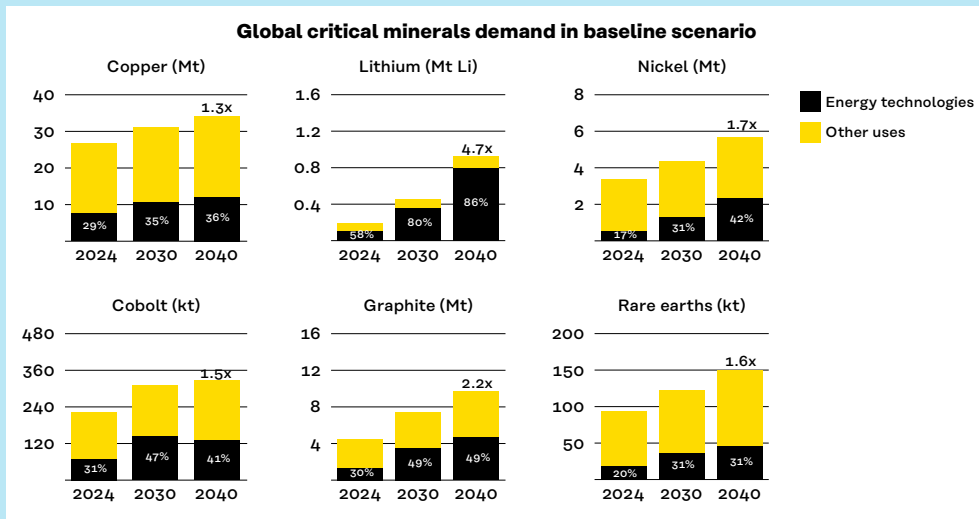


Figure 11. The need for critical minerals will multiply. Source: [IEA 2025](#).

# Trends

## **THE CLIMATE IS WARMING AND EXTREME WEATHER IS BECOMING MORE FREQUENT**

Globally, the climate has already warmed by more than one degree, and in Finland by twice that amount. The more the climate heats up, the more likely it is that we will exceed environmental tipping points, resulting in irreversible changes. In Finland, heavy rains, floods and longer heatwaves are becoming more common. Globally, the impacts are more severe, and some areas may become uninhabitable. Variable weather conditions challenge food production and infrastructure. The importance of preparedness and adaptation in societies is becoming more pronounced.

## **BIODIVERSITY IS DECLINING**

A human-driven mass extinction of species is underway. Species extinction is now occurring 100–1,000 times faster than the natural rate. Nature's condition has also deteriorated in Finland, and one ninth of assessed species are threatened. Globally, the loss of biodiversity threatens food production and the well-being of hundreds of millions of people while also causing annual economic losses of hundreds of billions of euros. Biodiversity loss can be slowed down by reducing the pressures on nature and by managing, restoring and protecting habitats.

## **ACCESS TO NATURAL RESOURCES IS BECOMING INCREASINGLY UNCERTAIN**

The consumption of natural resources such as fossil fuels, biomass, metals and minerals has grown significantly, accelerating climate change, biodiversity loss and environmental degradation. Investments in the defence industry, artificial intelligence and data centres, as well as in renewable energy and battery technology, are increasing the need for critical minerals. The uncertainty related to resources can be mitigated by developing substitute materials and by enhancing the recycling and reuse of materials.

## **SOILS ARE DEGRADING**

Soil degradation affects food security and ecosystem services. Globally, 1.7 billion people live in areas where crop yields are declining as a result of soil degradation. In Europe, more than 60 per cent of soils are in poor condition. Climate change exacerbates the situation as extreme weather conditions become more common. The EU Soil Mission aims to improve soil health through measures such as preventing erosion, improving soil structure and increasing the amount of organic carbon stored in soils.

## **THE STATE OF OCEANS IS WORSENING**

Over the past two decades, the pace of ocean warming has doubled. In addition to climate change, the poor state of oceans is exacerbated by acidification, eutrophication, increased plastic pollution and deep-sea mining. Coral reefs have probably already been lost, ocean currents may stall, and glaciers are melting faster than before. Ocean degradation directly threatens the livelihoods and food security of hundreds of millions of people, weakens the oceans' ability to absorb carbon and accelerates biodiversity loss. Climate action, ocean protection and the reduction of nutrient runoff through improved soil health can influence the state of the oceans.

### **CHINA IS DRIVING THE RISE OF THE “ELECTROSTATE”**

China has become the world’s first “electrostate”, where the economy and society increasingly rely on renewable energy instead of fossil fuels. In 2024, China produced 65 per cent of the world’s new solar and wind power. China aims to produce more than half of its electricity from renewables by 2030 and 75 per cent by 2040. This would strengthen China’s position as a global leader in clean technology and reshape the global energy economy as a whole.

### **THE IMPORTANCE OF CIRCULAR ECONOMY IS GROWING**

The need for a transition to a circular economy is increasing as the environmental crisis worsens and the demand for natural resources grows. Circular economy is important also for self-sufficiency, security of supply and sustainable food system. In a circular economy existing assets are used as efficiently as possible by keeping products and materials in effective use for as long as possible. The circular economy does not only encompass recycling but also other new operating models and services in the economy, including sharing, renting, repairing and reuse.

### **THE DEBATE ABOUT THE ECONOMY’S NEW DIRECTION IS INTENSIFYING AND BECOMING MORE POLARISED**

There is growing support for renewing the structures and underlying mindsets of the economy, but there are differing views on the extent of the renewal required. Some companies actively seek ways to increase the positive impacts (handprint) of their operations in addition to minimising harm (footprint), and forerunners are adopting regenerative business models that enhance the vitality of nature and communities. At the same time, economic debates still tend to emphasise the short-term horizon, the preservation of the status quo, productivity and economic growth, while new initiatives are given less attention.

### **UNDERSTANDING OF THE ECONOMY’S VARIOUS FORMS OF CAPITAL IS EXPANDING**

Alongside resource and income flows, increasing attention is being paid to the natural capital that is vital for economic activity, such as natural resources and environmental quality, as well as to human and social capital, including skills and societal trust. Interest is also growing in alternative economic indicators such as ecosystem accounts, the Genuine Progress Indicator and the Happy Planet Index.

### **THE TRANSFORMATION OF THE ENERGY SYSTEM IS ACCELERATING INNOVATION**

The energy sector is undergoing a transformation as technological innovations respond to the challenges of climate change and rising demand. The share of solar and wind power in electricity grids continues to grow. Artificial intelligence and smart converters optimise electricity grid operations, forecast consumption and manage energy sources. Decentralised energy systems and community-owned energy solutions are becoming more common. Innovations can lower the cost of carbon capture and influence the demand for critical minerals needed in batteries and in solar and wind power plants.

# TECHNO- LOGY

“Even though most attention in technological development is currently focused on artificial intelligence, our gaze should be firmly on the horizon. AI is only one stop in the fast-moving development of technology, and technological disruptions will only accelerate in the coming years. In particular, the interdependences between technologies should be given more thought in EU policies.”

**Laura Halenius, Leading Specialist, Sitra**



# Artificial intelligence is transforming the foundations of society

Technological development is transforming society and the economy, and the growing use of artificial intelligence lies at the heart of the current transition. Access to technology and the global economy frame future development. Artificial intelligence is changing the production, processing and distribution of knowledge and has a significant impact on the media environment, education, research, working life and decision-making. The potential of artificial intelligence is vast, but its realisation requires active and responsible implementation – one that enhances productivity, democracy and people's agency, and stays within the limits of nature's carrying capacity.

## BOUNDARY CONDITIONS

# Geoeconomics, technological development and economic prospects

Technology offers a wealth of opportunities, and the direction of the future is determined by how they are seized, and who has the capacity to do so. The global power struggle is increasingly intertwined with the economy and technology. Digital services are dominated by US and Chinese companies. Technology continues to evolve rapidly, and the limiting factor is less the pace of development than who has access to skilled labour and a functioning infrastructure. Finland's economic growth has been weak, but the conditions for renewal – investments in high-productivity applications and services – still exist. By strengthening technological and societal capabilities and combining them, it is possible to create a competitive advantage.

## Globalisation and geoeconomics

The dynamics of the global economy set the boundary conditions for Finland's operations. Finland is a small and open market economy, which makes the smooth functioning of foreign trade crucial. Sitra's Megatrends 2016 report discussed the rise of geoeconomics, that is, how geopolitical power politics becomes intertwined with the economy: "the language is trade, but the logic is war". In the present moment, geoeconomics is an even more relevant lens than globalisation, and industrial policy is experiencing a resurgence as states strengthen their role in the economy. For example, tariffs, access to critical materials, technological infrastructure and patents are gaining importance as geopolitical instruments. It is therefore increasingly essential to understand who is in control of the conditions for economic growth and technological development.

The United States is the world's largest economy, and it has continued to grow steadily over the past ten years. In 2011, EU and US GDP were at the same

level, but the EU has since fallen behind. Among non-EU countries, the US is Finland's largest import and export partner. However, the tariffs imposed by the Trump administration, its trade war with China, and the high level of public debt in relation to GDP have increased uncertainty about the US role in the global economy in the long term.

Alongside the United States, China is another major actor in the global economy and geopolitics. Among other things, it is the world's largest manufacturer of products, the second largest economy after the US as measured by GDP (and on par with the EU), and a leader in digital innovation and green-technology products. Over the next ten years, the central tension will be between the US and China: which of them takes the lead in areas such as AI and new digital services, and how the EU fares in this competition.

AI and the data economy carry high expectations and represent a significant, cross-cutting economic transition. However, digital services require their own infrastructure. At present, Europe is highly dependent on the United States for its digital and satellite infrastructure: for example, the cloud services used by Europeans are almost entirely owned by US companies. In practice, this gives substantial power not only to the US but also to the companies themselves.

The EU must decide whether it seeks to become a technology leader again, or whether it remains dependent on innovations from the US and China. The EU's technological sovereignty requires strong industrial and technological investment, targeted investments in critical sectors such as AI, semiconductors, 6G, quantum technology and high-performance computing, as well as a well-functioning digital single market and forward-looking regulation. Technology, platform services and algorithms reflect the values embedded in them, and they are also a form of power. In China, development is

driven by control; in the US, by the market and freedom of speech; and in Europe, privacy, equality and human dignity are emphasised. If the EU does not act quickly, Europe and European companies will lose the opportunity to build technology that reflects their own societal values.

## Technological development and availability

Sitra's 2016 megatrend report stated that technology is developing rapidly and listed digitalisation and artificial intelligence among key technologies. Similarly, a 2018 report on Finland's one hundred new opportunities for 2018–2037 highlighted deep learning and AI as the technologies with the greatest societal impact. Still, it would have been hard to imagine today's uses of AI ten years ago – let alone the speed of vaccine development.

In this sense, technological development may feel less like a boundary condition and more like a source of surprises. Yet every breakthrough rests on long-term research and the building of the necessary infrastructure. Technology is also becoming increasingly intertwined with global power competition, and factors such as the location of data centres, microchip production or quantum computers matter more than before. Here, too, the struggle is primarily between the US and China, while the EU seeks to strengthen its position in between.

Technologies currently considered to be in the scaling phase – that is broad deployment and commercialisation – include AI, synthetic biology and new communications technologies such as 6G and satellites. Agent-based AI, quantum technology and advanced robotics are still emerging. Key emerging disruptive technologies are examined in more detail in a dedicated section below.

The deployment of technology is also constrained by resource availability and energy use. For example, AI requires data centres, which account for 1.5 per cent of the world's total electricity consumption. Their consumption has grown more than four times faster than total electricity consumption and is expected to double to nearly 1,000 terawatt hours by 2030.

## Finland's economic prospects

Over the past 15-plus years, Finland's economic growth has been weak, GDP per capita has remained nearly unchanged, and public debt has increased. The weak economic growth is not primarily due to the public sector, poor cost competitiveness or export demand, but sluggish productivity development. The development of the Finnish economy therefore sets boundary conditions, but it is also something Finland has the capacity to influence.

Finland has lagged behind the other Nordic countries in terms of economic growth. In the future, growth will come from high-productivity services, making their development a critical factor for success. Finland performs well in innovation rankings both globally and within the EU. Similarly, Finland is close behind the leading group in competitiveness, but the long-term challenges include the amount of public debt, the availability of skilled labour, and the need to strengthen resilience and the capacity for renewal.

Finland needs companies that have the appetite for growth, willingness to take risks and to make future-oriented investments that improve Finland's growth prospects. Compared to neighbouring countries, Finland falls behind in the investment rate particularly in knowledge-intensive services and intangible investments. One major goal in this area is to increase research and development investments to four per cent of GDP.

When successful, R & D investments generate innovations that, after a delay, improve the productivity of companies, which in turn accelerates growth, and, at its best, leads to new growth investments and leaps in growth. If Finland succeeds in meeting the R & D target, and the investments bear fruit, it will improve Finland's growth prospects in the coming decades. However, first there must be opportunities to invest, a willingness to invest, access to financing and the capacity for effective implementation.

The growth of companies alone is unlikely to solve the problems of public finances and the funding gap in welfare services. In addition, productivity in the public sector must increase. Rapid technological development and the use of data and

AI can renew operating models, save working time and improve the effectiveness of public services.

The use of technology and improved productivity free employees' time for more demanding tasks.

This can safeguard and improve the quality of services the public sector provides to citizens and businesses, as well as support the growth and competitiveness of businesses.

## CHANGE

# Artificial intelligence is reshaping individual agency, knowledge production and economic structures

The development and adoption of technology have always changed the structures of the economy and society. A key driver of the ongoing transition is the increasing use of AI. Large language models, AI agents and generative AI are already challenging how we conduct research, educate, work, make decisions and communicate. Both the opportunities and the risks are significant. How we manage this transition driven by AI and other technologies will have a major impact on Finland's future.

The discussion around AI is full of both hype and dystopian visions. Artificial general intelligence (AGI), said to be smarter than humans, is portrayed as bringing either an age of abundance or the destruction of humanity. These narratives often overlook human action, which is more essential than the technological development of AI. Do we treat AI as an end in itself or as a versatile tool? And who has the power to influence the development and deployment of AI? At the moment, there are far more questions than answers, but it is essential to understand AI's impacts on knowledge, work and decision-making.

## AI continues to transform the media environment

Digitalisation and social media have already changed the media environment profoundly. The channels for accessing information have become more diverse and fragmented, and the power of

traditional gatekeepers has diminished. AI has been part of this shift in the form of recommendation algorithms. Today, generative AI also makes content creation easier than ever – whether it is text, speech, images, music or video. It has also become easier to create and spread disinformation, and to imitate and copy original content.

Finns typically read their first news of the morning on their phones. The internet is the most common news source, and particularly among younger people, the role of social media as a news channel has increased over the past ten years. Finns spend several hours a day in front of screens. For that reason, it matters what kinds of rules guide the development of digital services and the use of AI in them. Currently, platforms are dominated by US and Chinese tech giants, and by adopting their services, we also adopt their values, logic and ways of making sense of the world as part of our daily media diet.

For many children and young people, social media and influencers shape thinking and civic development more than school or parents. This not only relates to conveying information, but more broadly about agency and participation in society. How does AI change our agency – not only cognitively, but also emotionally? How do we learn to be human, and to be with other humans, in a society permeated by AI? How do we connect to society and other communities?

The questions related to the development of media and AI revolve around both challenges and

opportunities: AI enables faster reporting, stronger content personalisation, and new forms of storytelling and audiovisual production, which may highlight new kinds of interactive experiences and storytelling. At the same time, concerns about privacy, disinformation, algorithmic bias and AI's broader impact on the diversity and truthfulness of content may involve dramatic effects that are difficult to anticipate. The media's growing dependence on automation may also weaken journalistic responsibility.

## **AI is changing the nature of work**

AI is expected both to eliminate tasks and to create new ones. However, with AI, the change is so rapid that society's capacity to adapt may be tested on an entirely different scale than in previous technological shifts. At present, many knowledge work tasks can be automated, especially those that are repetitive and supported by large amounts of data. The changes brought about by AI adoption will not be evenly distributed across different sectors but will be concentrated in knowledge-intensive work. When combined with the development and deployment of humanoid robots, the impacts could be far greater. In that case, we will need to rethink issues such as the mechanisms of income distribution, taxation, workplace culture, technological dependence and the role of trust. At worst, we may face a dramatic change in the relationship between wage income and capital income.

Another crucial question is related to the kinds of cooperation models we establish between society and technology companies. Do we remain in the driver's seat, or do we hand over our power? AI is rapidly being increasingly integrated into services, information processing, decision-making and guidance. It is used to optimise delivery routes, analyse data, create content and map out options. What kinds of dependences are we creating on AI service providers, and what new vulnerabilities are we introducing to our society?

At the individual level, the effects are related to our capacity to think and our agency. Do we continue to use and develop our thinking skills, or do they become unnecessary? In the best-case scenario, we learn to use AI as support for thinking

and as a means of expanding agency. In the worst case, we outsource thinking to an algorithm and weaken our own capabilities. It is also possible that society will become highly polarised in terms of thinking and problem-solving skills.

## **Decision-making is being handed over to algorithms**

More and more decision-making power is being delegated to AI – whether in preparing decisions, drafting recommendations, or through autonomous AI agents. At best, this will increase efficiency and make use of a broader knowledge base, but the challenges are reduced transparency in decision-making processes and growing technological dependence.

Essentially, this is about trust. We can trust or distrust a decision-maker or an expert because they can be held accountable for their decisions and opinions. An AI algorithm has no comparable capacity for responsibility, and in this context, “trust” is largely an assessment of accuracy. An algorithm learns to identify phenomena, structures and connections based on the data it is given. That is why the selection, processing and ethical evaluation of data are central to the development and use of AI. AI models are not static, either; data and models must be updated and monitored so that algorithms remain up to date and reliable. Responsibility therefore lies with the user, although in practice, AI is often treated as an objective expert.

Additional challenges arise from the production and dissemination of disinformation, which erodes the knowledge base for decision-making. Rapid changes in work tasks may increase unemployment and worsen skills mismatches: new jobs may exist, but there may not be enough skilled workers for them. As a result, trust in public administration may weaken, and social unrest may increase.

On the other hand, problems also arise if we fail to harness the opportunities AI offers. This is why we now need to support the responsible use of AI, legislation that guides development and active consultation with citizens. For example, the EU AI Act aims to ensure that AI systems are safe, transparent, ethical and respectful of people's fundamental human rights.

## OPPORTUNITIES

# Responsible use of applied AI

We are at an exceptionally interesting phase in the development of AI. Its promises of opportunities are enormous from the perspective of individuals, companies and society alike. However, the big question is whether these promises will materialise, and if they do, what follows from that? Can we adopt AI in a way that not only improves productivity but also strengthens people's agency, democracy and trust while staying within the limits of nature's carrying capacity? The ongoing AI transition offers opportunities for proactive action, vision creation and an inspiring future. Societies should not waste this opportunity.

## Productivity and competitive advantage with applied AI

At the individual level, it is quite possible that within the next ten years, many of the dull everyday chores and errands will be handled by AI agents. Personal AI agents could take care of grocery shopping, appointments and travel arrangements, for example. They learn a user's preferences, monitor household needs and place orders automatically. As these solutions become more common, AI will not only respond to needs but also anticipate them and act on the user's behalf.

The next phase of AI development will bring new specialised models and applications that support the renewal of industry and different sectors. The application of sector-specific AI can significantly improve productivity. In his book *Miksi Suomi pysähtyi?* (Why did Finland stall?), Risto Murto cites a forecast by the consulting company McKinsey suggesting that generative AI could increase Finland's productivity by as much as 3.6 percentage points per year. Boston Consulting Group's estimate is even higher, 4.2 per cent of GDP. Yet adoption in companies has progressed slowly. According to Statistics Finland, only one in four Finnish companies used AI in 2024.

While general-purpose AI solutions such as ChatGPT can boost productivity, they do not

provide a lasting competitive advantage because they are available to everyone. However, Europe has an opportunity to become a frontrunner, particularly in applied AI. This requires investments in sector-specific, "vertical" AI models that create unique added value, as well as AI applications and agents that automate tasks and enable interaction between systems. Particularly promising application areas include industry, healthcare and public-sector solutions such as legislative automation. AI can offer the public sector solutions for addressing the challenges of productivity and resource scarcity, increasing transparency and strengthening people's trust and opportunities to participate.

## Focusing on learning and increasing agency

With AI, it is possible to generate, at the push of a button, an essay response for a school assignment or a scientific article on any chosen topic. It is also increasingly difficult to distinguish AI-generated material from human-produced content. Many current structures in education from assessable written assignments to the peer review of scientific articles are not prepared for this change. Even if major investments were made in identifying AI-generated outputs, there are no winners in such a cat-and-mouse game. What is needed is a deeper change in the structures of learning and knowledge creation.

Instead of efficiency, it is essential to focus on agency. The adoption of AI often increases efficiency and productivity because it automates many tasks. However, learning cannot be automated; it is fundamentally about increasing agency. Agency does not improve by completing courses or publishing articles but by developing a deeper understanding. A useful concept when reflecting on the use of AI is the cognitive debt it accumulates, that is, how much the work of building understanding is postponed to later.

## Responsibility in adopting AI

Whatever one's views on AI, it is very likely that it will play a significant role in the development of Finnish society over the next ten years. It is therefore worth investing in its adoption while avoiding the accumulation of cognitive debt, democracy debt and nature debt. In other words, AI should not be used to postpone the development of understanding but rather as a tool for expanding agency. Its use should be as transparent as possible, and

responsibility should not be outsourced to AI. In addition, we should monitor and strive to minimise the energy and raw materials required by AI.

It is also necessary to ensure the ethical and transparent use of AI with regard to the data on which it has been trained. For example, AI-based assessment systems may favour certain groups if their training data is biased. As AI use expands, individuals' need to understand source criticism, copyright and privacy protection also increases.

### A KEY POINT TO WATCH

## Emerging technologies

In technology foresight, AI, data and digitalisation have been the most prominent themes for some time. The developments in these areas include AI agents that can perform ever more complex tasks, and more advanced robotics, which gives AI a physical dimension. Digitalisation is also linked to high-performance computing, cybersecurity and advances in communications technology. These are worth following, but what other technological developments should we be aware of?

The development of **quantum technology** does not only mean a leap in computing power; it also enables the computation of problems previously considered too complex, secure communications and more precise measurement. Quantum computers can also break many encryption methods currently in use, but they simultaneously offer new forms of encryption.

**Biotechnology**, particularly **synthetic biology**, may transform the production of chemicals, materials, medicines and food. Genetically modified microbes and other organisms can be used to produce medicines directly inside the human body, for example. In food production, new varieties can be developed that cope in regions shaped by extreme weather. At the same time, the modification of organisms also raises resistance and concern.

The importance of **space technology** will grow as space becomes an increasingly significant global arena. Space weather forecasting, Earth

observation, telecommunications and many other services based on space infrastructure are becoming increasingly important.

**Nature** also offers many technological solutions, even though we do not immediately think of them as such. Nature-based solutions can provide a more sustainable and cost-effective solution to many challenges compared to technical solutions – for example, wetlands can be a better solution than water treatment plants. Biomimetics – imitating nature – also offers inspiration for innovation.

Finland's strengths include semiconductor technologies, high-performance computing, AI, quantum technology, telecommunications technology, space technology and cybersecurity. In addition to individual technologies, it is essential to understand how they can be combined. For example, AI can help extract more benefit from satellite data. Such linking of technologies to create innovations is a strategic opportunity for Finland.

Of course, the use of technology is not without problems. In adopting it, we must consider what new vulnerabilities it creates for society, how sustainable its use is, what impacts it has on people's well-being and equality, and what its dual-use potential is. The OECD recommends that technology regulation should consider values, anticipate developments, engage stakeholders, foster international cooperation and remain flexible in legislation.

# Wild cards

## WILD CARD

### **What if the misuse of technology results in a catastrophe?**

Technology can be used for good or for harm. In its report, the [UN Office for Disaster Risk Reduction \(UNDRR\)](#) highlights the misuse of biotechnology and AI.

The falling costs of genetic engineering have made it easier to create new pathogens. Meanwhile, AI can be used to undermine trust and blur what is actually happening, which may exacerbate conflicts or lead to rash actions.

What if new technology were used to incite large-scale destruction? What if the deployment of technology led to a major disaster? What if technology development and deployment paid more attention to potential misuse?

## WILD CARD

### **What if energy were available in nearly unlimited quantities?**

The demand for energy has risen continuously and is expected to keep rising in the future. At the same time, we must move away from fossil fuels. Yet the development of battery technology, the increase in renewable energy, small modular nuclear reactors, fusion power and new ways of producing energy could together lead to a situation in which abundant energy is available, and its price falls significantly.

What if energy were practically free and easily available everywhere? What kinds of changes would that bring to the economy and society?

# Data

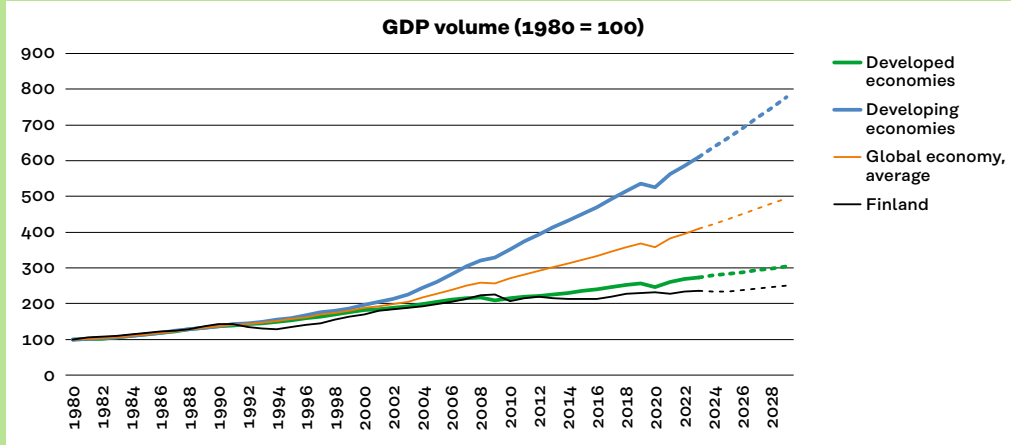


Figure 12. Developed countries have fallen behind developing countries in economic growth. Source: [IMF 2024](#)

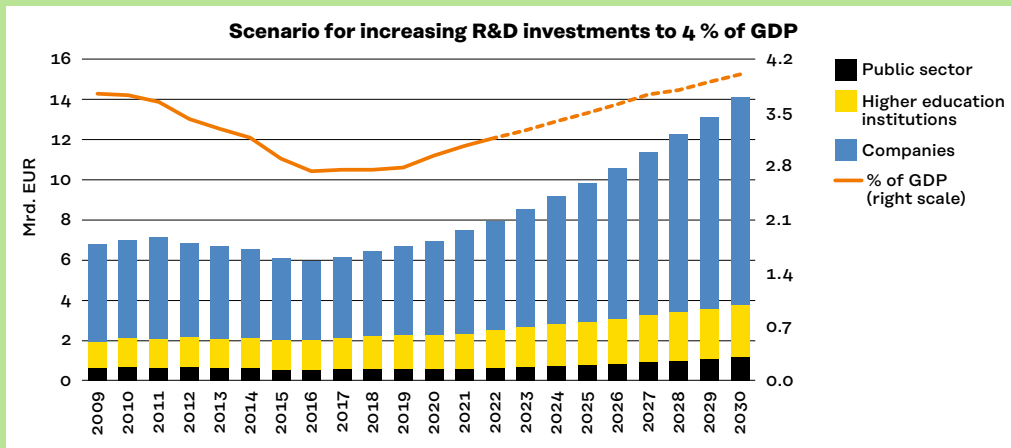


Figure 13. In Finland, efforts are being made to increase the share of companies in research and development activities. Source: [Business Finland 2024](#)

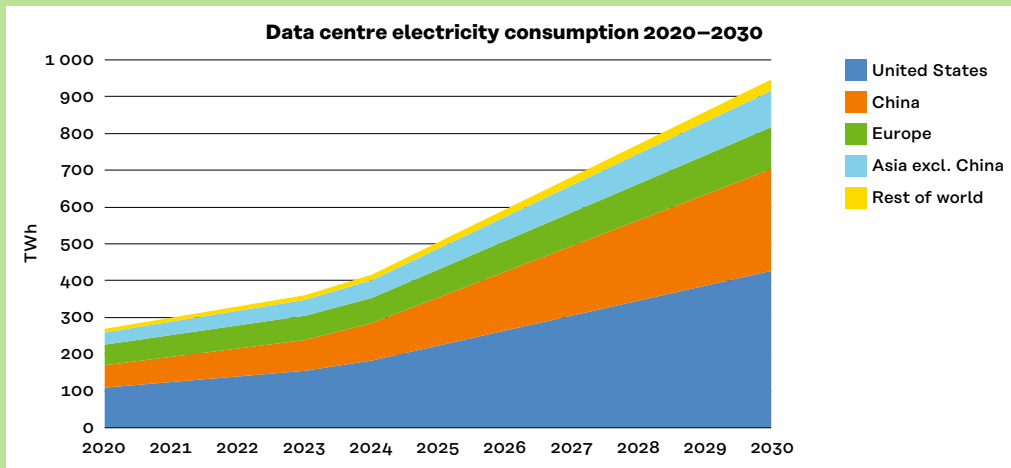


Figure 14. AI will increase the demand for electricity significantly by 2030. Source: [IEA 2025](#)

# Trends

## **THE IMPACTS OF DISRUPTIVE TECHNOLOGIES ON DAILY LIFE AND THE ECONOMY ARE INTENSIFYING**

Technological development is reshaping society as a whole at an ever-increasing pace. Processes are increasingly automated, production and operations become more decentralised, and human interaction takes place remotely or in virtual environments. The impact of so-called disruptive technologies such as AI, quantum technology and telecommunications technology extends to markets, the value chains in the production of goods and services, institutions and regulation. Foresight supports timely innovation policy, regulation and investment.

## **AI IS BECOMING EMBEDDED IN NEARLY EVERYTHING**

AI is becoming a general-purpose technology, akin to electricity. More decision-making power is delegated to algorithms, highlighting issues of data collection, transparency and accountability. At the same time, the importance of AI literacy becomes increasingly important: for example, we must be able to understand the biases in AI training data and how algorithms operate, as well as be able to identify AI-generated images, audio and text.

## **TECHNOLOGY IS CHANGING OUR RELATIONSHIP WITH KNOWLEDGE AND LEARNING**

While AI applications can support information seeking and learning in many ways, we should also monitor and assess how the use of AI is changing our relationship with knowledge and our understanding of learning. Does faster information acquisition and production also lead to a deeper understanding? Are the AI applications we use transparent, and do we understand how they work and potentially affect our perceptions of the world?

## **TECHNOLOGY MEDIATION IS RESHAPING THE MEDIA LANDSCAPE**

We increasingly watch and listen to media content based on algorithmic recommendations. As media use becomes increasingly digital and AI continues to advance, media consumption will become even more strongly mediated by technology. Various AI-based interfaces will provide us with ever more customised content that combines images, sound and text in new, more immersive ways. At the same time, there is a risk that we will have fewer opportunities to understand how and why our personal media realities are constructed.

## **SPECIALISED AI MODELS INCREASE PRODUCTIVITY**

The next phase of AI development will bring new specialised models and applications to support the renewal of industry and various sectors. The application of sector-specific AI may have substantial effects on improving productivity. Europe has an opportunity to become a frontrunner, especially in applied AI. Particularly promising areas include industry, healthcare and public-sector solutions such as legislative automation.

## **THE COMBINED USE OF TECHNOLOGIES CREATES NEW OPPORTUNITIES**

In the global technology race, Finland's strengths include semiconductors, high-performance computing, AI, quantum technologies, telecommunications technologies, space technologies and cybersecurity. In addition to individual technologies, it is essential to understand how they can be combined. For example, AI can help extract more benefit from satellite data.

## **NEURODATA BECOMES MORE COMMONPLACE**

Combining AI with neurodata, which refers to data monitored from the brain and nervous system, will broaden the use of such neurodata. In addition to the treatment of diseases, it could be used to monitor well-being at work, but also to influence people. Neurodata could be used for marketing or political influence, which threatens democracy and privacy and has created the need to protect mental privacy. UNESCO has adopted the first international recommendation on the ethics of neurotechnology. It aims to ensure that neurotechnology promotes human well-being without jeopardising human rights.

## **VIRTUAL WORLDS MAY BECOME MORE FULLY IMMERSIVE**

In the future, more and more people may spend a growing share of their waking hours in various virtual environments. This can have positive effects, for example by enabling more effective and vivid forms of learning, but it may also have negative consequences if virtual realities lead people to withdrawing from the real world and human interaction. There is a need to discuss the "rules of the game" for example identity verification, the enforcement of age limits and cybersecurity.

## **THE FUSION OF BIOLOGY AND DIGITALISATION COULD SHAKE THE FOUNDATIONS OF THE ECONOMY**

Synthetic biology refers to biological systems, cells, cell components or organisms that are designed and built by humans and are not found in nature. Genetic codes are designed on a computer, chemically synthesised into corresponding DNA, and introduced into a cell. Thanks to the advances in various technologies, a breakthrough in synthetic biology now appears to be close. Its effects could be transformative in areas such as food production, healthcare, medicine and vaccine development, industrial manufacturing, and construction.

# A new social contract: Building the Finland of the future now

A social contract is the idea of the conditions under which people live together and share power, responsibility and rights in society. It is a kind of invisible agreement between individuals and the community, forming the foundation on which public authority, laws and citizens' rights are built. From a practical perspective, the social contract also means a political and social understanding of how decision-making, costs, benefits and responsibility for shared well-being are distributed among different actors.

The social contract can also be thought of as a promise about the future. How do we respond together to ongoing and future changes? How do we build a better future? A credible and inspiring answer to these questions is vital for sustaining confidence in the future.

Finland's current social contract can be traced back to post-Second World War European, and particularly Nordic, thinking, which emphasised a strong welfare state, social consensus and negotiated cooperation between employees and employers. Its aim has been to combine economic growth, social stability and equality in society.

Today, the relevance of the social contract has once again become acute – indeed, urgent – in Finland. In 2026, Finland finds itself in a difficult position: the economy is not growing, and the public finance crisis challenges both the funding of the welfare state and its ability to deliver promised services. At the same time, an increasing share of public expenditure will be directed to defence. The

debate on immigration remains at a standstill. The climate crisis and geopolitical uncertainty are testing people's confidence in a stable future. We are moving towards a society of longevity characterised by rapid technological development, an unstable global operating environment and the challenge of the limits of ecological carrying capacity.

The megatrends discussed in this report have brought Finland to a moment in which renewal is necessary. They prompt us to ask:

- How do we move towards a diverse society of long life courses, which requires us to rethink both the organisation of the welfare state and our approach to immigration?
- How committed are we to defending and reforming democracy, if we want it to continue to earn citizens' trust?
- How do we reform society so that it enhances the vitality of nature, ensuring a good future for coming generations as well?
- How do we learn to use AI and technology in ways that benefit society as a whole while boosting economic growth?

Renewal does not only concern individual sectors of government, society or business. Rather, we are facing a broader and deeper moment in which society's collective will and capacity to build a shared and desirable future are being tested. The institutions built after the Second World War require a thorough reassessment of their core

purpose, and of how that purpose can best be fulfilled in today's context, rather than merely patching existing shortcomings. A new social contract could be built on foundations such as a vibrant democratic culture, the enhancing of nature's vitality, the bold and sustainable use of technology, a renewed welfare state, and the collaboration of a diverse and longer-living population.

## **A society of longevity: The welfare state and immigration on the path to renewal**

At the heart of the social contract lies the question of what the welfare state should look like in a society of longevity, in which the population and tax base are significantly smaller. The welfare state can hardly mean that we do more things with the old structures. Instead, the focus should be on how the core principles of the welfare state such as equality, education and high-quality basic security can be successfully translated into new conditions and into a society of long life courses.

This requires the courage to prioritise, reform and, if necessary, abandon structures and operating models that no longer correspond to demographic, technological and economic realities. The future of the welfare state will not be built on quantity but on quality: what we do must be more effective, smarter and economically sustainable.

A vast amount of low value-added work, including the processing of benefits or administrative record-keeping, can be automated by updating the Administrative Procedure Act to align with today's needs. Finland is well placed to seize the opportunities offered by technology such as the use of AI to automate routine work. At the same time, greater investments can be made in high value-added work such as education, care and human interaction. It is possible to reform different spheres of the public sector and the welfare state towards both human-centred encounters and systemic efficiency, but it requires visionary and capable leadership. This also calls for foresight and a much stronger integration of future-oriented knowledge into decision-making.

## **Finland needs a forward- looking model for immigration**

Finland should develop a forward-looking approach to managing immigration that pays attention to the needs of the economy and society, as well as people's concerns. These issues require a genuine, balanced and broad public debate. The current system does not sufficiently respond to the challenges of a changing labour market, demographic structure and international competition. Immigration also evokes fears and polarisation, and it is essential to address these topics honestly and openly through constructive dialogue. The Ministry of Economic Affairs and Employment is currently conducting a study on the models of labour-based immigration.

Canada's model, for example, has shown that systems based on point scoring or similar transparency principles can support both economic growth and social stability. Such a model would enable a proactive and strategic approach to attracting talent. Finland's model should respond to the specific characteristics of Nordic society. This requires a clear view on the role of English in working life, as well as realistic requirements for Finnish or Swedish language skills. Linguistic integration is an important part of social inclusion, but it must be implemented flexibly.

Humanitarian immigration can be clearly separated from this model, allowing discussions to take place based on appropriate and distinct premises. International recruitment for technology companies or healthcare, for example, is fundamentally different from assisting people in distress due to war. At present, these discussions are too often conflated, even though the mechanisms themselves are separate.

Healthy population relations are a key part of sustainable social development, making improved management of the issue and a clearer consensus on the future necessary. This requires a long-term commitment that extends beyond government terms, with citizens also being broadly involved in the debate. Immigration is one of the most politically disruptive issues in Western societies. For this very reason, open discussion and the development of immigration mechanisms and solutions for two-way integration are essential, and the difficulty of the task must not be an excuse for avoiding it.

## **Commitment to democracy: A living democracy provides security in a turbulent world**

In Finland, democratic structures remain in good condition, and democratic innovations that enhance participation can be introduced with relatively low thresholds in municipalities and wellbeing services counties, for example. However, alongside reinforcing democratic structures and innovations, we must also cultivate democratic culture and, above all, enhance democracy's capacity for implementation. The vitality of democracy depends not only on institutions or elections but also on its ability to deliver tangible benefits to people. Democracies must be able to solve problems, improve everyday life and demonstrate that they can act faster and more consistently than authoritarian alternatives.

In today's world, democracy demands more: activity, critical thinking and a willingness to understand different perspectives. As the population ages, the contribution of citizens becomes increasingly important in reinforcing and renewing democracy at both local and national levels – whether through political parties, civil society organisations, sports clubs or other operators working for the common good. In Finland, during the era of large age cohorts and the golden age of representative democracy, it was possible to delegate the practice of democracy to a small elite. As age cohorts shrink and democracy's space narrows, it is crucial that citizens are broadly willing to participate and to take responsibility for democratic life and its renewal in our time.

A vibrant and healthy democracy also requires a sustainable, diverse and healthy information environment to support it. The building of sustainable information environments calls for media innovations, alternatives to dominant platforms, and genuine social encounters and dialogue between people. Supporting democracy through a sustainable information environment is as much a social challenge as it is a technological one. The development of such environments lies at the core of the [EU's Democracy Shield](#) thinking, but it should also be pursued as an ambitious objective in Finland.

## **Enhancing the vitality of nature: An ecologically sustainable society and economy as the foundation for the future**

Finland has committed to ambitious climate goals and strong environmental legislation, thereby laying the foundation for a new social contract in relation to our environment. The direction is clear, but the implementation still requires significant efforts. In the circular economy, the energy transition and the use of nature's well-being benefits, Finland is already a frontrunner in many areas – yet the potential is far greater. We can raise our circular material use rate and seek sustainable growth from companies and services focused on the circular economy. We can increase renewable energy and fully phase out fossil fuels in energy production. The adaptation to climate change is also a matter of security of supply. Particularly in food production, attention must be given to measures that strengthen sustainability and competitiveness in the long term.

A sustainable future also requires a deeper change of mindset: a shift from exploiting nature towards supporting well-being. Humans are part of nature and dependent on its well-being. Regenerative thinking emphasises the importance of understanding nature's interdependences and operating in harmony with nature while enhancing it. For example, a regenerative economy supports the vitality of the natural and social systems on which the economy ultimately depends. Regenerative farming and forestry are part of a regenerative society in which the bioeconomy does not deplete natural capital but renews it. This creates a sustainable foundation for livelihoods, food security and the well-being of society. Biodiverse nature also supports people's well-being, and incorporating the benefits of nature's health into preventive healthcare can yield significant savings.

Finland has already taken the first steps towards an ecologically sustainable society, but the journey is unfinished. The implementation of a new social contract requires participation from society as a whole. At the same time, Finland participates as an active member of a larger entity – the European Union – advancing a sustainability transition that ultimately depends on global action.

## **Sustainable use of AI and technology: Growth comes from future-oriented companies and world-class innovation**

Finland's future growth will come from companies that produce internationally sought-after and valuable products and services. This creates well-paid jobs, reinforces the tax base and increases confidence in the future, particularly among young people. Growth requires a strong willingness to invest, both in companies and in society. It demands ambition, concrete action and a readiness to allow creative destruction; ownership and leadership must therefore be bold and oriented towards being a global frontrunner.

In AI development, Finland must be proactive while taking special care to ensure that the outcomes of the AI revolution contribute to a better future rather than allowing gains to be concentrated among the few and imposing harms on the broader population. A good life can be supported by automating low-productivity work and increasingly directing human effort to high-productivity work and meaningful interaction.

Research, development and innovation (RDI) is a key instrument in reforming the economy. The target of raising RDI expenditure to four per cent of GDP by 2030 provides a strong basis for technological development. The decision to increase RDI investment is historic and enables the long-term development of the regional and national innovation system. Alongside technological innovation, social innovation is needed, including new forms of cooperation, operating models and incentives that renew the innovation system.

Finland has a strong competitive advantage in emerging technologies such as quantum technology, AI and telecommunications technology, as well as in combining technologies. This is based on long-term research, high-quality education and cooperation between the public and private sectors. The scaling and internationalisation of high-competence firms is essential for national economic growth, but it requires new financing instruments, investments in areas such as AI infrastructure, and a strong ecosystem in which universities, research

organisations, companies and the public sector work seamlessly together. Finland also needs a clear model for attracting international talent: smooth permit processes, competitive working conditions and a strong innovation brand all help in this. The training of quantum and AI experts is a key factor in competitiveness.

The EU will invest EUR 800 billion in defence over the next five to ten years, and Finland's defence industry is expected to grow significantly. At the same time, defence spending accelerates technological development, especially in fields with broad civilian potential such as cybersecurity, AI, sensor technologies and autonomous systems. Many companies in the sector serve both the defence and civilian markets, and the investments also generate innovations with civilian applications. To capture the full benefit, an agile innovation model is needed – one that connects defence administration, research institutes and companies. This will enhance rapid development and export opportunities.

## **Everyone is needed – and Finland knows how to make it happen**

A new social contract for Finland will not be created by the command or wish of a single leader or government. Instead, ambitious action towards a new direction can be pursued across society. In addition to political parties, could energetic movements arise from civil society, trade unions and companies to shape, challenge and envision what a new Finland could look like, thereby accelerating renewal from the outside?

The welfare state has been a project that emerged from ambitious goals combined with practical, hands-on change making. This is also possible in the 2020s. In Denmark and Sweden, for example, renewal has been easier because it has been underpinned by centuries of prosperous history, which have created layers of society built on confidence rooted in past success. For Finland, that moment of building history and continuity has arrived only now.

The changes we pursue should genuinely respond to today's operating environment and, at

the same time, to future opportunities – whether in municipalities, regional vitality, the conditions for business, healthcare or education. Long lifespans, technological change, the challenges of democracy and the questions of ecological carrying capacity are already realities. How we respond to the push created by megatrends is in our hands.

Finland has traditionally been able to act under pressure and has often turned unfavourable conditions into innovative solutions admired around the world. At the core of these solutions has repeatedly been the ability to address societal fragmentation through social innovation. These innovations have brought different operators together, developed ways to participate and share benefits, and built a culture in which compromise is seen as a strength. Through these mechanisms, Finland has also created belonging and cohesion, which have been seen as essential for a small country.

Examples of such innovations include the introduction of universal and equal suffrage for women and men in 1906 – the first in the world; the ability

to build shared political practices between opposing sides after the Civil War; the “January Engagement” of 1940, which laid the foundation for Finland’s labour market system; and the comprehensive school reform of the 1960s. When deep disagreement has been resolved, space has opened for a better future to become a reality. Such bridges and visions across societal divides are needed once again.

Finland has every opportunity to succeed in its pursuit of a flourishing future if we truly commit to the effort. There is money, if it is used wisely. Care, education and well-being can continue to be created in the future. Debt accumulation can be slowed down if structures are reformed sufficiently. Democracy can continue to flourish if we use and innovate the decision-making structures on which the foundation of Finland’s free society is built. We can have constructive debates about immigration. There are many ways to act within the limits of nature’s carrying capacity. Companies can succeed if we dare to invest in the future.

It is time to roll up our sleeves.

# Conclusion

In this study, we have sought to outline the big picture of societal change through megatrends, and above all from the perspective of interpretations that are meaningful for Finland. We hope that the megatrends and the interpretations offered here provide perspectives and opportunities for engaging in interesting discussions across society. We also hope they encourage action to build a desired future, despite the turbulent times.

What matters most to people in Finland, and how are megatrends experienced in different parts of the country? In September 2025, Finnsight, a major foresight event, explored the future of Finland and practical ways to build a better future at regional, national and international levels. Participants in the workshops (one hundred workshops in 30 locations) highlighted people's well-being as being particularly important. Concerns were raised about both young people and older people. Mental health, social exclusion and loneliness were emphasised. Many ongoing changes were viewed through the lens of growing inequality: how to ensure everyone can keep up with technological development, the transformation of work and regional change. Among the boundary conditions, the issue raised most often was the scarcity of resources: how to ensure adequate funding, and where to source workforce for different regions.

The workshop reflections suggest that the current situation is relatively well understood, and that efforts are underway to address how to ensure the availability and accessibility of services amid tightening conditions. The state of nature also caused concern, but it was often also seen as a source of well-being and vitality – part of the solution. Of course, the Finnsight workshops are not a representative sample, but similar findings also appear in broader surveys. In Sitra's Future

Barometer 2025, the most important issues over a ten-year horizon included the availability of jobs, improving the well-being of children and young people, preserving the welfare state, and ensuring national security. Almost as important were equal access to well-being services and balancing public finances by curbing debt.

In Yle's 2024 survey concerning Finns' fears and dreams, the most important issues were health, peace, a safe local environment, family and children, and the freedom to be oneself. The greatest concerns were work and livelihoods, health, as well as war and the fragile international situation. The future of the Finnish welfare state worried almost everyone.

There is therefore a clear desire for a new social contract and for renewing Finland. People in Finland wish to influence the future and are hungry for inspiring visions that create hope. Foresight is a tool for such long-term decision-making and future building that extends beyond government and electoral terms. Megatrends, their interpretation, and the exploration of different possibilities provide a foundation for effective and impactful foresight. To support the use of this study, we offer a set of workshop templates to facilitate future-oriented discussions. The trends mentioned in the report are also available as a deck of cards and in digital form. All materials can be ordered and downloaded free of charge from Sitra's website.

The period of unrest is unlikely to recede in the coming years. Examining and interpreting megatrends helps us to grasp the overall picture, the boundary conditions for action and the opportunities to be seized. In this way, they support long-term action that reaches towards the future. The kind of future we build is in our hands. It is a future we create together.

# Glossary

**Geopolitics** refers to power relations and competition between states in which geographical factors such as location and natural resources shape international politics and the security environment.

**Geoeconomics** refers to the interplay of economic and geographical factors in which the economy is used as a strategic instrument in geopolitical competition. Geoeconomics combines power relations related to the economy, security and international politics.

**Ecological reconstruction** refers to society's move away from the widespread use of fossil fuels, which requires changes in both the physical infrastructure and the structures of the welfare state. In addition to transforming the energy system, changes are needed in areas such as mobility, construction, food production, care services, education and public administration.

**Human capital** includes the knowledge, skills, education and capabilities of individuals and groups. Human capital is part of intangible capital, i.e. resources with no physical form that, when invested in, can help advance goals considered important for a national economy or a company.

A **tipping point** describes a shift of the environment into a different state. A tipping point is a threshold beyond which irreversible, unexpected and sudden changes occur. Critical tipping points include the melting of the Greenland and West Antarctic glaciers, changes in North Atlantic ocean currents and the thawing of permafrost.

**Biodiversity loss** refers to the human-driven collapse of biodiversity occurring across the planet. Nature is being lost at a rate one hundred – or even one thousand – times faster than at any time in human history. The Earth is undergoing its sixth mass extinction event.

The **transformation of the world order** describes a change in which the rules-based international system is eroding, and multilateral institutions are losing their capacity to function. Global power relations change, and geopolitical tensions intensify as states increasingly pursue their own interests. At the same time, the rise of authoritarianism challenges the principles of liberal democracy.

A **megatrend** is a direction of development consisting of several phenomena, that describe a broad arc of change such as the ecological sustainability crisis. Megatrends are often understood as happening at a global level, and their trajectories are often assumed to continue in the same direction.

The **age of polycrisis** describes a situation in which fast-moving and slow-burning crises intertwine and reinforce one another. It is therefore increasingly difficult to grasp the current situation, let alone chart a clear path forward.

**Disruptive technologies** such as quantum technology, synthetic biology and space technology, open up extraordinary opportunities for development, but they also introduce new risks and ethical challenges that are difficult to resolve.

**Planetary boundaries** define the safe operating space for humanity. Nine boundaries have been identified, seven of which have already been exceeded. Only stratospheric ozone and atmospheric aerosols remain within the safe zone.

**Postnormal times** describe a period in which the world is experienced as increasingly complex, contradictory and even chaotic. Surprises, discontinuities and tensions become more common, and the concept of “normal” loses its usefulness.

A **regenerative economy** restores and revitalises the vitality of ecological and social systems, on which it ultimately depends. While the prevailing economic model is often understood as degrading nature (degenerative), a regenerative economy focuses on restoration and renewal.

**Boundary conditions** describe the limits within which the future is built: not everything is possible. The boundary conditions help specify possible and desirable futures while also excluding impossible alternatives.

A **stochastic population projection** is based on models for fertility, mortality and net immigration. It includes a large number of alternative population trajectories.

A **trend** is a trajectory of change – a direction of change currently visible.

**Futures thinking** includes identifying and challenging assumptions about change and the future, imagining alternative futures, and reflecting on how these futures relate to choices made in the present.

The **power to define futures** refers to the ability to define what is considered possible or desirable in the future.

**Wild cards** describe developments that are more surprising than megatrends. They are relatively fast events that significantly alter the current situation. The exploration of wild cards helps us remember that while we can know and infer a great deal about the future based on the present and the past, we cannot be certain about what will happen.

A **social contract** is the idea of the conditions under which people live together and share power, responsibility and rights in society. It is a kind of invisible agreement between individuals and the community, forming the foundation on which public authority, laws and citizens' rights are built. The social contract can also be thought of as a promise about the future. How do we respond together to ongoing and future changes? How do we build a better future?

**Intergenerational decision-making** means that we have a responsibility to consider the long-term impacts of decisions made and not made today, and their effects on those who cannot represent themselves at the time of decision-making: children, young people and generations yet unborn.

# About the authors

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# Appendix:

## How this report was produced

No one can know the future with certainty, but it is still possible to express well-grounded views about it. What matters is to make explicit the assumptions and the process behind forming these views. In this appendix, we describe how this report was produced: the theoretical foundations and data it draws on, and how the work proceeded.

### **What is a megatrend?**

The concept of megatrends was popularised by John Naisbitt in his 1982 book *Megatrends: Ten New Directions Transforming Our Lives*. Encouraged by the book's success, he went on to publish an entire series of books about megatrends and inspired many others to produce their own megatrend reports. In Naisbitt's original definition, megatrends are broad social, economic, political and technological changes that form slowly, and once established, influence us for some time – around seven to ten years or longer.

Today, the term is used to describe a wide range of changes, and there are numerous definitions.

A [literature review by CSIRO researchers](#) examines the evolution of the definition from 1982 to the present, and five questions are identified to help assess whether a phenomenon qualifies as a megatrend:

- Does it affect multiple sectors?
- Are cause-effect relationships observable?
- Does it have potentially significant impacts?
- Is it long-term?
- Does it tell us something about the future?

If the answer to all five questions is yes, the phenomenon can be considered a megatrend. In Sitra's foresight work, we therefore define a megatrend as a general trend and a broad trajectory of change encompassing multiple phenomena that is often seen as happening at a global level and is assumed to continue in the same direction.

Because megatrends describe changes at a global level, they must be interpreted in context. This is why this report focuses on what megatrends mean for Finnish society.

### **Interpretative framework**

When interpreting megatrends and changes, it is necessary to distinguish longer-term shifts from the surrounding noise. This is increasingly difficult in today's postnormal era of surprises, where many things once considered fairly permanent are in a state of flux. In addition, our aim is not merely to drift with currents of change but to actively build a better future. In this report, we have sought to address these challenges by identifying boundary conditions, the key dynamics of change, and opportunities to influence the direction of change.

## Boundary conditions

By boundary conditions, we refer to the limits within which the future should be built – or conversely, the room for manoeuvre available for action. In his doctoral dissertation, Pauli Komonen describes consumers' future-oriented thinking, and how both social structures and technological and material conditions limit the possibilities for action.

We apply this thinking more broadly at the societal level. Boundary conditions arise from the physical environment, societal structures and values. The physical environment includes geographical realities and environmental boundaries. Material resources are limited, and geography is inescapable, making these constraints more absolute than others. At the same time, the social, technological and economic structures of a society affect what is possible within the limits set by the physical environment. As boundary conditions, these are easier to change. Finally, values determine what we strive for, and what we wish to foster. They therefore set goal-oriented, guiding boundary conditions for action.

Another way to approach boundary conditions is to consider what is relatively certain about the future. Future-oriented work often focuses on uncertainties and changes, but it is also important to understand what is known about the future, or what can be assumed with reasonable confidence. Cynthia Selin identifies five categories of certainties:

1. Material and physical: e.g. the built environment, raw materials, supply chains.
2. Epistemic: e.g. scientific consensus, standards and measurement practices.
3. Temporal: e.g. time lags related to demographic change, technological development, regulation and today's choices.
4. Political and economic: e.g. political and legislative commitments, market structures, power structures.
5. Cultural and normative: e.g. values, norms and mindsets that shape what is seen as possible and desirable.

A boundary condition is therefore something we understand reasonably well and cannot ignore

when thinking about the future. However, it is not set in stone and can change. Such change often goes unnoticed because it is slow, or because we quickly adapt to a new situation. To better understand the long arcs of change associated with megatrends, it is therefore necessary to look not only forward but also backward and examine, in particular, how boundary conditions have evolved over time. The examination of boundary conditions through the lens of past and present change may also help identify phenomena and assumptions that are treated as fixed, even though they are not.

## Dynamics and tensions of change

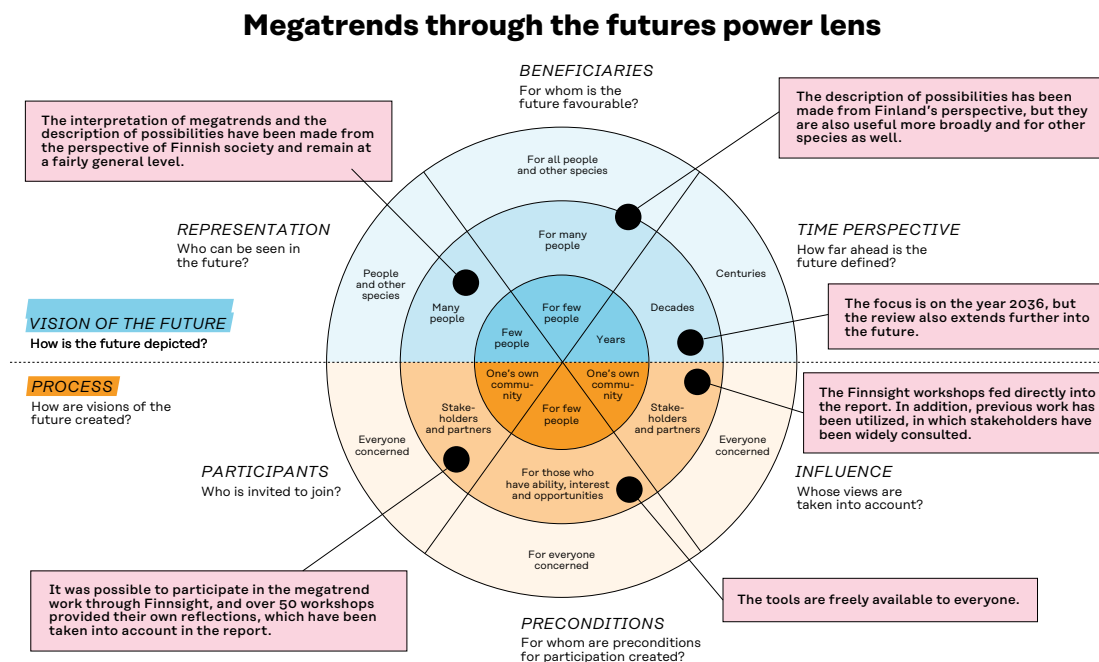
As stated, boundary conditions define the limits and room for manoeuvre for change. The examination of changes is at the core of trend analysis. Often, the focus is on listing trends, that is, the directions of change. However, beyond listing, it is essential to analyse how changes relate to one another, and what kinds of interactions and tensions exist between them. Understanding such tensions and the broader dynamics of change helps identify key points of choice.

In this report, our understanding of the dynamics of change is informed by future-oriented dialectics. In this approach, change is analysed as tensions, sometimes even oppositions, and the aim is to identify key “fields of tension”, in other words areas, in which the future is open, and several development paths are possible. Such areas show up both as major uncertainties and as points of choice. The established meanings surrounding the issue have eroded, and a renegotiation of interpretation is underway. The future is uncertain and depends on decisions made now. In part, this is also a struggle over power: whose future will prevail over others?

## Opportunities and perspectives

In describing opportunities, a guiding idea has been intergenerational fairness. Broadly, this refers to safeguarding the future for coming generations,

Figure 15. Examination of the content and process of the report through the lens of the power to define futures.



that is, taking responsibility in the present and making long-term decisions. In September 2024, the UN adopted the Declaration of Future Generations, and the topic has also been discussed in the second part of the Finnish Government's Report on the Future (2023). The decisions made today should have lasting impact, reinforcing what people value most, including nature, health, security and other foundations of a good life.

Of course, we cannot know with certainty what future generations will desire. Even today, there are different views on what is desirable or even possible. In this report, we have sought to make these differences visible. This relates to the concept of the power to define futures: the ability to influence what is considered possible or desirable in the future. We have examined the megatrend work – both its content and its process – through this lens.

In terms of content, the key question is who is visible in the futures described, and who benefits from them. However, the descriptions of opportunities and futures in this report are relatively general, which makes representation difficult to assess. Our aim was to describe change, opportunities and

impacts from the perspective of Finnish society. The opportunities described are also favourable primarily for Finland in the long term, although in many cases such as in relation to nature, they are also relevant beyond Finland. We used a ten-year time horizon both forward and backward, but in practice, the horizon extended even further.

The process is described in more detail below. In terms of the power to define futures, a broader group than before participated in the megatrend work directly or indirectly. Approximately one hundred workshops across Finland registered for the national Finnsight foresight event, and more than 50 submitted their results to Sitra. These inputs are reflected in the report and summarised in the conclusion. The work also drew on Sitra's foresight reviews, which have engaged stakeholders widely through interviews and workshops.

In connection with the publication, we encourage organisations to run futures workshops, supported by templates and other materials we provide. These templates, and the popular megatrend cards, are freely available to everyone, helping to foster the conditions for futures thinking.

## Process

The preparation of this report, and of the megatrend work more broadly, began in January 2025. During the spring, we focused on planning, framing and building the interpretative framework. We also reviewed recent foresight reports and Sitra's earlier megatrend reports. The preparation was supported by Sitra's foresight reviews, particularly those related to [security](#), [the economy](#) and [the future of the EU](#).

The main drafting phase began in August 2025, when we produced the first outline of the overall picture and the report's contents. This was developed through internal workshops and discussions at Sitra. We also interviewed Sitra's senior advisors and collected inputs from all Sitra staff via a purpose-built chatbot.

On 25 September 2025, Sitra hosted the annual Finnsight event on national foresight, themed "What next, Finland?". Workshops were organised all around Finland, and more than 50 workshops reported their results on the Howspace platform. The workshop discussions were based on Sitra's earlier megatrend reports. The workshops were instructed to select two to three megatrends they considered most important. The guiding questions were:

- Which phenomena in your region are important and interesting in relation to the 2–3 megatrends you selected?
- How are these changes experienced and interpreted in your region?
- What opportunities do you identify from the perspective of the megatrends you discussed in your region/organisation and its operating environment?
- What existing or emerging solutions do you recognise in your region?

We also experimented with the continuous monitoring of an operating environment in relation to the report's themes using the Konsensus.me platform. The aim was to identify whether any key issues changed significantly, and to ensure that the report reflected the most recent developments.

The writing of the report began in September 2025, and the first draft was ready for internal

comments at Sitra in October. Alongside finalising the report, we produced workshop templates, megatrend cards and videos. The final version went to layout in December 2025.

## Use of artificial intelligence in producing this report

AI was used to support the collection of data, structuring and writing. In all these areas, AI served as a support tool rather than a primary source of information or analysis. The work was therefore [human-led](#).

To support the collection of data within Sitra, we used a chatbot integrated into the Teams environment. Through conversation, it collected inputs on the most important topics for the next ten years, issues expected to remain stable, and wild cards, referring to more surprising developments. The chatbot asked follow-up questions and confirmed its summary of the conversation before the input was added to the database. A chatbot was also used to assist in processing the results.

The knowledge base was built primarily through a traditional literature review, which was then validated and refined using the Konsensus.me platform. The platform compares the news streams it monitors against claims about the current situation and highlights significant deviations and the most recent relevant sources.

In a few cases, AI was also used to summarise and structure information. The differences between earlier megatrend reports and the evolution of the themes they covered were outlined with the support of Copilot. The content of the reports was already familiar, but AI helped produce a concise description of how megatrend framing and boundaries have evolved. Copilot was also used to summarise the Finnsight workshop responses, although we still read each response individually.

To support writing, AI was used primarily to refine phrasing and word choice. However, the ideation, analysis and final decisions were made by the authors. AI did not produce the actual content of the report but served as a tool to improve the fluency and quality of writing.

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