A Bishops' Letter About the Climate

THE BISHOPS OF THE CHURCH OF SWEDEN 2020

Revision of bishops' letter from 2014

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POSTAL ADDRESS: SE-751 70 Uppsala
VISITING ADDRESS: Sysslomansgatan 4
TELEPHONE: +46(0)18-16 95 00
WEBB: svenskakyrkan.se/biskopsbrev

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The back cover is decorated with the cote of arms of the Archbishop of Uppsala.
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Contents

Foreword

"I AM PERSONALLY NOT a believer, but am fascinated by how this nevertheless profoundly moves me. The text discusses the issue of climate change in an unprecedented way and with a precision and approach that are impressive," wrote a 37-year-old IT entrepreneur and father of young children after reading a draft of this bishops' letter.

The approach is obviously theological. God loves the world and wants it to be saved (the Gospel of John 3:16–17). In this project of love, we as humans play a special part that we can take on with Jesus as our role model and the Holy Spirit as our source of strength.

A great deal has occurred regarding the climate issue in just over 10 years. An international, interfaith climate summit was held in Uppsala in 2008. This resulted in the *Uppsala Interfaith Climate Manifesto*. In 2014 the Bishops of the Church of Sweden wrote *A Bishops' Letter about the Climate*, which prompted dialogue in many parts of the Church, but also in Swedish media and international contexts, such as the UN.

Five years ago, it was still mostly called "the climate issue" or "the climate challenge". But even back then the bishops wrote that the climate demands more of humanity than technical, political and economic solutions. It involves meaning, courage and hope that liberates people, giving them the strength to take action. We wrote

about climate anxiety and asked, "Are we doing a runner, leaving today's and tomorrow's children to foot the bill?" Today, the spiritual and existential nature of the climate crisis is crystal clear. The threat is real. The consequences of climate change are tangible. Worry and anxiety, but also guilt and shame in relation to the climate are universal topics of conversation. Around the world, children and young adults, who we are leaving to foot the bill, are displaying ever increasing initiative. No self-respecting media channel can continue to dismiss serious climate work as irrelevant.

Since the first version of the bishops' letter about the climate was published, a global climate agreement has been signed: the Paris Agreement. Several actors in society within politics, business and civil society are getting involved and expanding their work to slow down climate change. Extreme weather shows how fragile the foundation for life and survival can become from one moment to the next. Time is scarce. A comprehensive approach and engagement based on the best knowledge available are required. That's why we are now publishing a revised version of *A Bishops' Letter about the Climate*.

Let us focus on what has true value, so that care for this can give us the courage to make positive and necessary changes. Literally for life's sake!

Uppsala, summer 2019
Antje Jackelén, Archbishop

Prayer for the climate

Eternal God, the whole world is full of your glory.
We bear forth the anguish of creation in the time of the climate crisis to you.
In your grace, grant us the opportunity to do good, as your created co-creators.

Jesus Christ, you have walked the earth and live in our midst.
Make us sensitive to the suffering of humankind and the entire creation.
Strengthen us in our endeavours to create a life of dignity, in justice and solidarity with those who live and will live.

Holy Spirit, power of courage and self-control, you speak to our consciences.
Comfort us when we suffer and are plagued by anxiety.
Make us worry when we are numb in the calmness of complacency.
Re-create us to become what we are: one humanity under the same sky.

Introduction

Sharing in the gift of life is a source of constant awe and wonder. It does us good to feel the wondrousness of the fact that we exist and that the world we live in supports our life day and night, through every breath we take and through millions of years of development. Our bodies are made of stardust, and a handful of soil contains nearly as many living organisms as there are people on earth. Wonder is the mother of insight!

Wonder is also the right starting point to spark engagement in the issue of climate change. Today we know that people's way of life threatens the many processes in nature that we all depend on. The limits for the planet's possibilities of feeding and supporting human life and other species are being overstepped. This is largely due to the global population – mainly in the richest parts of the world – using resources unsustainably.

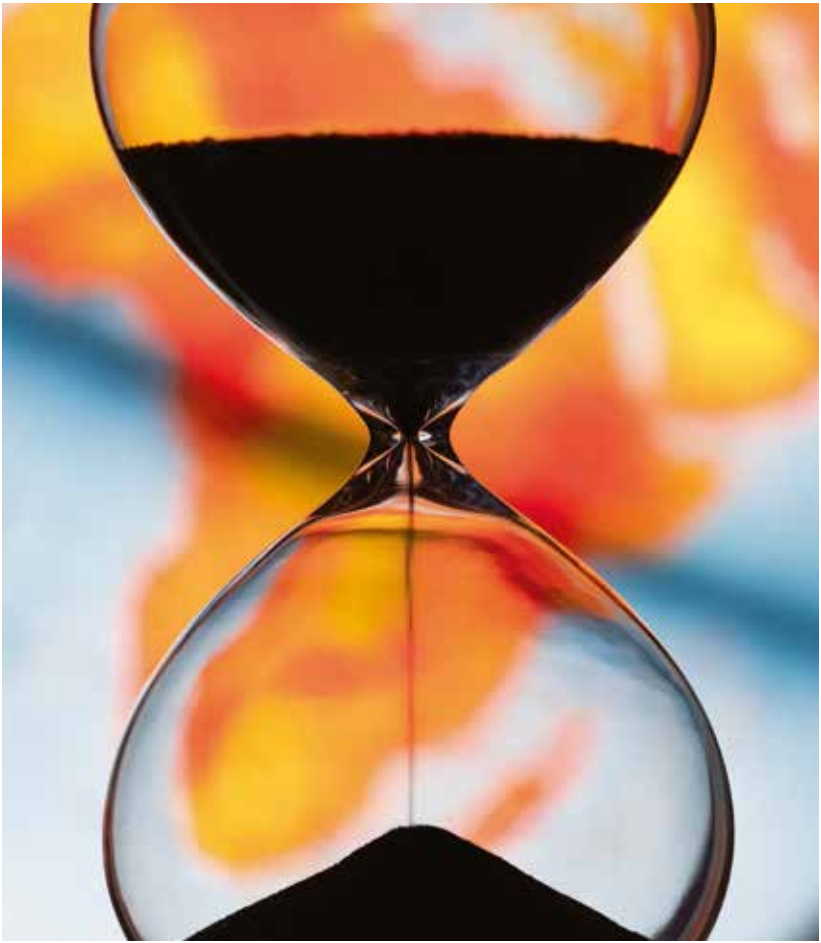
We have lived with reports and forecasts of climate change since the 1980s. The climate is the result of interaction between complex systems, often with long distances between cause and effect in both space and time. Ambiguities and uncertainties exist. But the knowledge we now possess does not allow us to postpone until tomorrow what needs to be done today. Our human climate impact must radically decrease for the sake of the planet and humanity.

The mandate of bishops includes "… strengthening the people of

God in their calling to interpret the signs of the times and bear witness to God's tremendous works for everything that has been created".[1] These words are the motivation behind this bishops' letter. Together with countless other people, we are fascinated by and feel profound gratitude for the subtleties of creation and the beauty of the earth. We want to reflect on the best knowledge available of creation in the light of faith in God as the Creator, Redeemer and Giver of Life. In discussions on climate change, we hear Jesus' words calling out to us: "You hypocrites! You know how to interpret the appearance of earth and sky, but why do you not know how to interpret the present time?" (Luke 12:56).

The letter starts by summarising current knowledge. At the time of writing, the world has not succeeded in reversing the trend for global greenhouse gas emissions. Living conditions for flora and fauna are changing rapidly. We hear about serious threats to biodiversity. International solidarity between peoples and states is being sorely tested. Those who have contributed the least to the critical situation are in several ways hit the hardest. Climate issues raise justice issues.

How did we end up like this? The approaches to nature and the world during different periods throughout the ages have affected development in science, technology and economics. This history plays a part in how we handle growth and consumption and think about ecology today. Our sympathy and ability to organise communities in a socially, ecologically, economically and spiritually sustainable way have not kept up with other developments.



It is high time for science, politics, business, culture and religion – everything that is an expression of human dignity – to work together. The climate crisis is existential and spiritual, because it concerns the fundamental conditions for human life in the profoundest sense: What is the role of humans in creation? What responsibility do we have for people far away? What can we do about our worry? What can we hope for? The child perspective is especially important: we who are adults today are seriously worsening living conditions for our children and grandchildren.

We need a hope that releases power to act. This hope can start in songs of praise for nature's beauty and the Creator's love. In the kingdom of God everything is a gift before it becomes a task. Humans are an inextricable part of the tapestry of life in creation while at the same time having a unique task. We live in the tension between smallness and greatness, limitation and boundlessness, sin and forgiveness. Conversion is our opportunity.

Faith liberates our will to do good. It imparts courage to change, even in uncertain situations. Ways forward will require both individual and joint responsibility. The transition needed is demanding, but can also entail positive changes and improved quality of life, and it must be supported by a clear justice perspective.

The bishops' letter leads to making appeals to the Church of Sweden, its parishes, dioceses and national bodies, all our fellow humans, decision makers and government agencies, companies and organisations, UN member states, international decision makers and organisations, as well as church leaders worldwide. We

dare to formulate these challenges, not because we are closer to the goal than others – we are also fighting against the inertia that prevents words uniting with actions; we also share the experience that a good intention does not automatically turn into a positive reality. But we are driven by love of God and God's creation and the knowledge that God's grace is greater than our best achievements and our biggest failures.

The climate crisis is probably the largest joint challenge that humanity has ever faced. It affects all of us who live under the same sky, on the same earth. The work to tackle this crisis must make a breakthrough in several policy areas and all sectors of society. We must all reassess our way of thinking about lifestyle, welfare, sustainability and justice: for the sake of creation, for the sake of life, and for the sake of our grandchildren and their grandchildren.

I What do we know?

The situation from a scientific perspective

We are standing on the threshold to a time of drastic changes in the climate. For the first time in human history, we are impacting the environment to such an extent that the fundamental conditions for life are changing. The climate is constantly changing, but current changes are taking place very quickly and putting great strain on flora, fauna and human communities.

During the four-and-a half billion-year history of the planet, the climate has always fluctuated between periods of rain, drought, heat and cold. In the past three to five million years the earth has undergone more than 30 glacial periods. *The Holocene* is the interglacial period with a milder and relatively stable climate that has constituted a key condition for the development of humanity in the past 12,000 years.

The average global temperature has nonetheless varied a great deal. For example, in about the 10th century it was relatively high; in our part of the world it was one degree Celsius higher than it is today. A much colder period commenced in and around the 14th century. Periods of altered climate in history have often coincided with dramatic and violent events in human history. The climate changes we are seeing today are caused by humans and are of such an extent that several researchers are talking about a new geological epoch: *the Anthropocene*.[2]

Since the world's climate researchers started cooperating on the UN's IPCC (Intergovernmental Panel on Climate Change) in 1988, they have been presenting us with a consistent picture. The IPCC is a unique institution that regularly summarises the research situation in a series of reports. The sub-reports that are part of the IPCC's Fifth Assessment Report (AR5) were presented in 2013 and 2014.[3] The Climate Panel's Special Report on Global Warming of 1.5°C was presented in 2018.[4] The reports convey precise knowledge about the climate changes, their impact on ecosystems and human welfare as well as possible action strategies. The picture of the climate as perhaps the biggest challenge of all in our day and age is reinforced (see the fact box).

FACTS FROM THE IPCC*

- With 95-percent certainty, human activities cause the majority of observable climate change.
- The average global temperature rose by about 1 degree between the preindustrial era and 2017.
- Without further measures to reduce greenhouse gas emissions besides existing measures, the climate panel estimates that the result in 2100 would be a temperature increase of 2.5 to 7.8 degrees.
- The sea level is currently rising by more than 0.3 cm per year. It is estimated to rise between 30 and 80 cm during this century and subsequently to continue to rise.
- Many ecosystems on land and in the oceans and the ecosystem services that they provide, have already changed as a consequence of global warming.

*The figures are from the Synthesis Report of the IPCC's Fifth Assessment Report [3] sections SPM 1.2, SPM 3.4, 1.1.4 and table 2.1, as well as the IPCC's Special Report on Global Warming of 1.5°C [4] Summary for Policymakers, sections A.1 and A.3.

So far, global climate changes have mostly given rise to relatively linear and predictable alterations in the environment. But when a system passes a certain point, a previously calm and often linear change process can suddenly turn much more dramatic. This phenomenon is called the tipping point, and means that something switches from one state to another, which can lead to the collapse of entire ecosystems. One of several possible tipping points[5] in the changing climate could be that large volumes of methane are emitted when the tundra in the Arctic melts, which may in turn lead to an accelerated rise in temperature.[6]

Emissions must substantially decrease

Climate change is caused by emissions of greenhouse gases, mainly carbon dioxide from energy production, transport systems, food production and industry. About a quarter of humans' climate impact consists of emissions from agriculture as well as deforestation and other changes in land use.[7] The main strategy in the work to stop climate change is therefore first and foremost to reduce society's direct emissions. Deforestation must also be stopped. This has been clear to the international community at least since the early 1990s when the United Nations Framework Convention on Climate Change was adopted.

Renewable energy sources must replace fossil fuels for the climate to be stabilised. Greenhouse gas emissions must decrease substantially and then cease entirely in the middle of the century. Action must be taken rapidly: the later the emissions start to decrease, the

more difficult, more expensive and riskier it will be to reach the target of zero in time.

Carbon dioxide emissions added to the atmosphere stay there for a very long time. Towards the end of the century, carbon dioxide emissions will probably need to be negative, in other words more carbon dioxide will need to be captured from the atmosphere and stored for the long term than the amount emitted. At the time of writing, the emission curve has not started to turn downwards. After staying constant for three consecutive years, global greenhouse gas emissions increased again in 2017, to a new record level.[8] The IPCC estimates that the national contributions to emissions limitation that countries have put forward within the framework of the Paris Agreement will result in global emissions that lead to a rise in temperature of about 3°C in 2100. According to the IPCC's 2018 Special Report on Global Warming of 1.5°C, the countries' promised emission limitations need to be tripled to create a realistic possibility of limiting the warming to 2°C. To avoid exceeding 1.5°C, the emission limitations need to be five times higher.[9]

The IPCC[10] emphasises that we need rapid and far-reaching transitions in land use, energy systems, industry, the construction/building sector, transport and cities to attain necessary emission reductions. In addition, carbon dioxide needs to be removed from the atmosphere. This involves various methods of capturing carbon dioxide that is already in the air and then either storing it in biomass, in the ground or converting it through a chemical process. In addition to carbon dioxide storage in living biomass and

in soil, a number of technologies are in development to sequester and store carbon dioxide. So far, there is only limited knowledge about how suitable the various alternatives are for large-scale use, how much they can reduce emissions or what adverse effects they may cause, in both environmental and social terms.

The planet's boundaries

Environmental researchers have identified nine "planetary boundaries", i.e. limits for humans' impact on the environment that must not be overstepped if humanity is to be able to continue developing on the planet in the long term.[11] Climate change is one of these boundaries. The depletion of the ozone layer, chemical pollutants, acidification of the oceans, global freshwater use and the loss of biodiversity are some of the others. Researchers judge that several of the boundaries have already been exceeded (see Figure 1).[12] It is acutely necessary to stop global warming, but this does not reduce the significance of tackling other serious environmental problems. There are both synergies and conflicts of aims: for example, decreased greenhouse gas emissions lead to cleaner air, while increased logging, to replace fossil raw materials with renewable forest raw materials, may reduce biodiversity. The key is therefore to harness synergies and deal with conflicts of aims responsibly. All planetary boundaries must be safeguarded and respected for sustainable development to be achievable.

Consequences of the current situation

Climate change is genuinely global, but also very local. Many local causes – human activities and biophysical mechanisms – work together and lead to countless effects in complex networks of chains of events. This makes it difficult to gain an overview of climate issues. The difficulty in tackling climate issues is exacerbated by the distance between cause and effect, which is substantial in both space and time. Emissions of long-lived greenhouse gases that enter the atmosphere today will contribute to increased warming for many hundreds of years after the emissions have decreased and ceased.

While the issues may seem complex, the remedy is unequivocal: greenhouse gas emissions must decrease drastically so that society becomes climate-neutral as soon as possible. The longer we wait, the higher the risks will be to the planet and humanity, and the more dependent we will become on untested techniques to remove carbon dioxide from the atmosphere.

Climate change will affect the conditions for all life on earth. The United Nations Framework Convention on Climate Change aims to prevent a "dangerous anthropogenic interference with the climate system". Through the Paris Agreement, the world's countries agreed to the long-term target of keeping the global temperature increase below 2 degrees and striving to limit it to 1.5 degrees. We now know that even a 1.5-degree rise in temperature can have very serious consequences, such as a 70–90 percent reduction in coral reefs. The difference between 1.5 and 2 degrees may seem small,

but when translated into forecasts for poverty, water shortages and extreme weather events, the difference is considerable. According to the IPCC, several hundred million more people would be affected by increased poverty, heatwaves and water shortages if the temperature rises by 2 instead of 1.5 degrees. By 2100 the sea level rise would be 10 cm higher – a significant difference for many island nations, for example.[13]

If current emission trends are not radically altered, a limitation even to 2 degrees seems decreasingly realistic.

In many places today we are already seeing weather phenomena and climate changes that can be linked to global warming, such as the increased occurrence of extremely high temperatures and extreme precipitation. The occurrence of low temperature extremes has decreased.[14] In general, precipitation is expected to increase in areas that already receive a great deal of rain and decrease in dry areas. The occurrence of extreme weather events is expected to rise. The consequences include an increased occurrence of flooding and drought, and thereby a higher risk of the spread of diseases, a lack of clean water and harvest loss. This heightens the risk of acute humanitarian disasters.

Access to clean water will dramatically decrease in many regions when precipitation patterns change, glaciers melt and saltwater penetrates wells and farming land. The number of people affected by water stress and insecure water supply will probably increase. Waterborne diseases will be spread more easily. More heatwaves and reduced access to clean water will adversely affect health in

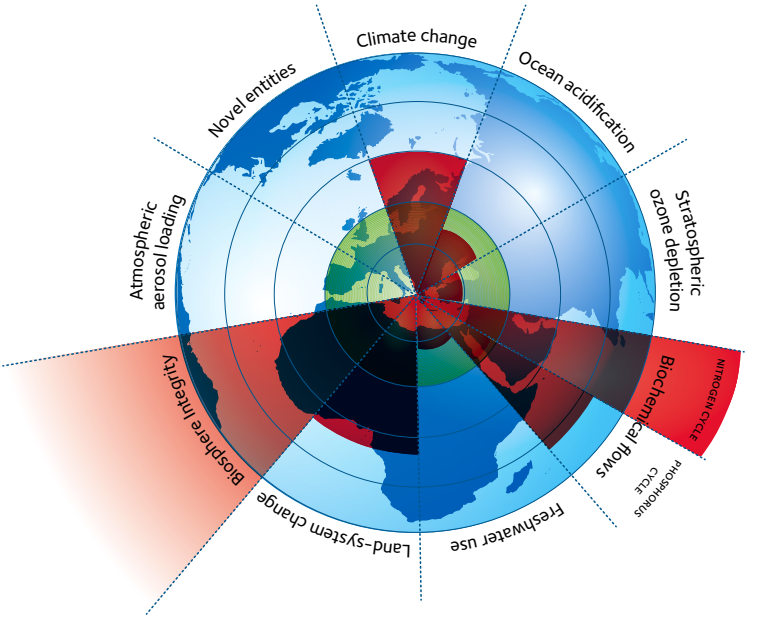


FIGURE 1. PLANETARY BOUNDARIES: Life-supporting processes that must be managed sustainably. The researchers who conducted the study into planetary boundaries state that the "safe zone" (green area) has been exceeded for several of the processes.

SOURCE: Stockholm Resilience Center

ILLUSTRATION: Azote Images/Stockholm Resilience Centre

many regions. A large proportion of humanity lives in lowland and coastal areas – precisely those areas that are hit hardest when sea levels rise.[15]

The living conditions for flora and fauna alter due to rising temperatures. Many species cannot find new habitats in time. When the oceans absorb more carbon dioxide they become more acidic, which adversely affects coral reefs and other calcium-dependent organisms. The number of species is already in rapid decline. This development will accelerate.[16]

Climate change has the worst impact on those who are already vulnerable, but Sweden is also negatively affected. Torrential, heavy rain is expected to increase in intensity, which may lead to more flooding. Rising sea levels may cause flooding in lowland coastal areas of southern Sweden. Global warming is expected to entail consequences for farming, forestry and natural ecosystems. Forestry and farming will benefit from longer growing seasons, but will also be affected more by flooding and drought, which in turn increases the risk of fires as well as fungal and pest infestations. In mountainous areas the tree line is expected to move higher up in the terrain. Hydropower production will increase, but reindeer herding will suffer due to the unstable snow climate with rapid fluctuations between cold and thaw periods. Additional flooding will increase damage to residential and other properties, roads and railways. The risk of landslides will increase in certain areas of Sweden.[17]

In contrast with most developing countries, Sweden has capacity to plan for expected changes to a certain extent. Nonetheless,

economic and social crises in other parts of the world will unavoidably have repercussions in Sweden.

Is it certain that this is what will happen?

Knowledge about the climate's future change comes with a number of uncertainties, both regarding how greenhouse gas emissions will change and climate sensitivity, which is how much the planet is heated by a certain volume of greenhouse gas emissions. The reason why climate sensitivity is uncertain is partly because no one knows exactly how cloud formation is affected by warming, the concentrations of particles in the air, greater amounts of water vapour, the oceans' and biosphere's continued absorption of carbon dioxide and a weakened albedo effect, i.e. that white snow and ice melt and are replaced by darker land surfaces that absorb more heat. No one can therefore say in advance exactly how the climate will develop, but we must nevertheless take action now. An alarmingly large rise in temperature will not be possible to observe with certainty before it is too late to avoid it. The uncertainty about how the climate system will react to emissions cannot therefore be an excuse for postponing impactful measures while we wait for more reliable information.

The only reasonable approach to the climate challenge is to apply a precautionary principle. In the same way that people in their private lives avoid and insure themselves against risks, the international community needs to do everything to avoid serious climate change.

It's about people

As a church we are part of a global network. Witness accounts of climate changes from our partner dioceses and parishes in other parts of the world are growing in number. We hear from the Philippines and Tuvalu, from South Sudan and Tanzania, from Brazil and Costa Rica, from Canada and the Arctic. These accounts are of drought and flooding, but also of what happens when you can no longer trust the rains to arrive when they usually do, when diseases spread or saltwater penetrates wells and pollutes the groundwater, and when harvests are destroyed by seawater penetrating irrigation canals in coastal areas. This is taking place in Bangladesh and Vietnam, for example, where the most fertile farming land is in the delta areas that are now becoming submerged below sea level.[18] These are accounts of how everyday life is already being affected by a changed climate.

It is difficult to definitively establish the difference between climate changes and natural variations, but many of the extreme weather events that people around the world are currently experiencing tally well with researchers' predictions for how climate changes will manifest themselves. They may in future reinforce many of the inequalities that have prevailed for a long time between countries and regions – between groups of people within the same country – and they will also affect interpersonal relationships on a large and small scale.

There are also clear links between climate change and migration. Large population groups may be forced to move, within or between

countries. Heightened competition for water resources may exacerbate conflicts, but also lead to greater cooperation. International solidarity will truly be put to the test.[19]

The global population continues to grow. However, humanity is in the midst of a demographic transition, with rapidly dwindling birth rates and an increased average lifespan. The number of people is expected to stabilise at around 10 billion towards the end of this century. This development is a consequence of major advances: more people than ever now have access to education, medical care and basic material welfare. As the amount of resources a person requires to lead a satisfactory life varies widely, the actual number of people is not the criterion that determines whether the planet can support all its inhabitants. The total "footprint" of all human lives must be within the safe zone that is stated by the planetary boundaries, and the earth's resources must be distributed so that everyone's basic needs and rights are met.[20]

The researchers who conducted an extensive study[21] of the link between food, environment and health recommend a diet in which a third of the calories come from wholegrain foodstuffs and root vegetables and mainly vegetarian sources of protein. If the earth's population adopted such a diet at the same time that food waste was cut by half, we would be able to support the earth's population sustainably while gaining major health benefits. According to the study, the consumption of red meat should be limited to on average 100 grams per week. With these conditions, the earth is estimated to be able to feed the expected future population.

It has perhaps never been as clear as it is now that all humanity is dependent on one and the same creation with its natural resources and ecosystems. Nevertheless we are affected in different ways depending on circumstances that none of us have sole control over. People who live in poverty have contributed least to creating climate change, but are affected first and worst. They also risk being deprived of the right to development because industrialised countries have already exhausted the atmosphere's ability to absorb emissions.

According to the organisation Oxfam, the 10 percent richest people in the world cause nearly half of climate emissions, whereas the poorest half of the earth's population cause 10 percent of all emissions.[22] The lack of gender equality is also significant in this context. Women affect the climate less than men do, but usually live closer to the consequences of climate change.[23] In particular women's opportunities for education and participation in society may be an important key to change.

Discussions of *climate justice* often emphasise that countries such as Sweden not only have a responsibility for the emissions that its inhabitants are causing today, but also a historical responsibility for the emissions that have been made over a long period of time and have contributed to today's rising temperatures.[24] The strongest argument that Sweden should take major global responsibility in the climate issue is nonetheless perhaps that our emissions per person are still completely unsustainable and that we have resources and good conditions for contributing to solutions. If everyone

around the world lived like we do in Sweden, a biological space equivalent to more than four world globes would be necessary.[25]

It's not too late

The physical and biological functions that a person's life depends on are under serious threat. By extension this entails substantial risks to many fundamental community functions and to cohesion within and between communities of people.

However, we know that humans' creativity and adaptability to changes is astoundingly large. This is demonstrated not least by the rapid development in the areas of solar cells and electric vehicles, two technologies that the International Energy Agency deems to be displaying development trends in line with what is required to limit global warming to well below 2 degrees.[26]

Paradoxically, it is comforting that so far only a small proportion of humanity's creativity and resources are focused on preventing and tackling the problems created by climate change. Humanity could do so much more.

The perhaps most important conclusion of all is that the climate crisis is so acute and far-reaching that we can no longer believe that it can be solved "later", when other challenges and crises have been solved. We must deal with the climate crisis now, and we must do so in a way that simultaneously contributes to solutions for other serious problems in society, so that the conditions increase for all people on the planet to be able to live a good life.

II How did we end up like this?

To be able to find ways forward, it is important to clearly understand the background. What perceptions and processes have led us to today's situation? What views of nature, the world and the earth's resources in the past shaped the perception that we hold today?

A pre-modern comprehensive approach

Throughout the ages we humans have tried to understand and obtain a view of the world. The view we live with today is called the modern world view. It took shape following the Scientific Revolution, i.e. from the early 16th century onwards. Prior to that, the pre-modern western world view prevailed. It was based on various streams in Greek philosophy – mainly Plato and Aristotle – as well as the Jewish and Christian traditions. What was heavenly and earthly were perceived as two evident points of reference. There was a self-evident purpose and goal for the entire cosmos. Revelation was viewed as a trusted source of knowledge, and humanity was perceived to be at the centre of the universe. Reality seemed like an organic entity.

The development of modern science was not entirely frictionless

in relation to the figures of authority in the church at that time. Nonetheless, theology actually created good conditions for the development of science by combining Greek philosophy – which had been rediscovered during the Renaissance – with the Christian theology of creation. Many of the pioneers of science were priests. They tended to regard their research as a worship service, a way to build the realm of knowledge as a reflection of God's glory.

God could be experienced in nature, as the regularity of nature was thought to convey something significant about the Creator. Exploring nature was like reading about God in the book of nature. This book of nature did not contradict the Bible, but instead provided illustrations of the biblical texts about God's wisdom and glory. The God conveyed was the God of the eternal order of things.

Science as a separate domain

In the pre-modern view of the world, the relationship between the book of nature and the Bible was regarded as symmetrical: they were deemed to complement each other. This approach shifted in the 17th century when philosopher René Descartes divided up reality into two radically separate domains: on the one hand mind, spirit and idea, and on the other hand the body, matter. With this division, matter was consigned in its entirety to science, while the mind was reserved for philosophy and theology.

This distribution proved to have both advantages and disadvantages. It enabled a view of the world where nature was no longer regarded as an organism and instead mainly as a machine. The

universe was compared to a gigantic mechanical clock and God to a clockmaker. This mechanistic view was a condition for the exploitation of nature. There are theological ways of thinking that have contributed to legitimising overexploitation of nature and have alienated humans from creation.

There was also an element of sexism in the thinking of that time that led to the same result. The programme description of the Royal Society – founded in 1660 and long regarded as the foremost of the world's academies of science – states: "Nature is the *woman* that the *man* of science shall conquer. He shall methodically and systematically unveil Mother Nature, expose her secrets, penetrate her womb and therefore force her to complete submission."[27] Or more poetically: "The Beautiful Bosom of *Nature* will be Expos'd to our view: we shall enter into its *Garden*, and taste of its *Fruits*, and satisfy our selves with its *plenty*."[28]

Somewhat more simply: God moved into the emotional side of things, while the material world became the prerequisite for the development of technology and industrialisation. The book of nature and the Bible were still being read, but now separately, without reciprocal dialogue. This period led to a substantial upswing in many areas. A comprehensive view was simultaneously made more difficult, however. The world view fell apart: on the one hand nature profaned (desecrated) as an object for science and technology, on the other hand religiosity that was reduced to something subjective or private and that was perceived as less relevant to the survival issues we now face.

A growing insight into complex contexts

When the theory of evolution, the theories of relativity and quantum physics made their breakthrough, our world view and perception of nature changed yet again. Now the world is no longer seen as something that *has* a history, but that it is history. Nature is undergoing constant development. Previously, there was an emphasis on nature's strict adherence to laws – an approach called deterministic. Now determinism, as a supreme principle of order, has been joined by other ways of describing the interaction between order and chaos. Figuratively, the difference can be understood as follows: During the emergence of industrialisation we believed that the world is like a car that we can prop up while we tinker with and fix it according to the rules of mechanics. We are now learning that the car cannot be propped up; we have to work with it according to all the rules of physics and art while it is being driven.

Electricity, penicillin, the combustion engine, the transistor, the discovery of DNA and the development of genetics, information technology and a lot more besides are the result of meticulous reading of "the book of nature". The same reading has also given us weapons that can destroy the earth, created substances that threaten many life forms, and enabled humans to change the entire climate system and thereby saw off the branch we are sitting on. The level of knowledge has risen, the health effects are clear, and our opportunities for living a richer life have multiplied in just a few generations. Meanwhile, a significant proportion of the global population still cannot even eat their fill. Humans' empathy and ability to organise our shared world

in a socially, ecologically, economically and spiritually sustainable way have not kept pace with scientific knowledge.

The 16th century's threshold to the modern world view was once crowned by the motto "knowledge is power". In our times, we would probably rather say that "knowledge is opportunity", and both expressions are possible translations of the Latin phrase *scientia potestas est*. The window of opportunity regarding the climate crisis is still open, but it is shrinking. Effective utilisation of this window requires a unification of what was separated after Descartes. We need a world view that keeps what is tangible and intangible together, the inner and the outer, science, the humanities and theology.

Oikos and economy – the shared household

We live in one and the same household – in the same *oikos*. This Greek word means house, household or family. It has given us the words ecology – the teaching about interaction in the house – and economy – the knowledge of how we economise with/husband resources. We can also look at the related word ecumenism, which in the world of the church means worldwide cooperation. *Oikos* links ecology as a precondition for economy and ecumenism in the widest sense: how we in a global household act together for the good of all humanity.

People were already affecting the climate of the earth back when forests and wetlands started to be turned into farming land, but a whole new level of impact was reached when the use of fossil fuels picked up speed during the industrial revolution. So far, increased

emissions of greenhouse gases have been closely linked to the increased material welfare and economic growth that are a central part of the development in recent centuries. The availability of easily accessible fossil energy in combination with technical and organisational innovations have formed the heart of the economic development.

History has seen civilisations perish due to environmental impact and humans' inability to adapt to radical changes. But there are also examples of communities that, through norms, laws and rules, taxes and fees, have managed to make their inhabitants change their actions, thus enabling the environmental problems to be rectified or avoided.

Economic growth itself is not what determines a community's environmental impact, but the content of the growth, i.e. what concrete form the growth takes. The growth can, for example, be driven by material or non-material increases in consumption. Houses can be built and renovated in a way that contributes more or less to greater sustainability. When people spend more of their higher income on food, this can either contribute to increasing or decreasing sustainability in food production. Tax systems can be designed so that they give companies reasons to make their use of nature's resources more efficient than their use of labour, and business policy can stimulate innovation and development of sustainable techniques.

Growth, satisfaction and happiness

Growth has proved to be important for society from at least two key perspectives: one, that it seems difficult to team high employment with low growth using today's economic systems, and two, that growth is an as yet unsurpassed way of managing distribution conflicts. It is easier to re-distribute a growing "cake" than to give some to certain people while leaving others wanting. Difficulties in agreeing about redistribution of resources demonstrate how hard we humans find it to share.

Increased material welfare unavoidably leads to economic growth. For the large proportion of the world's population who still live in material poverty, this is a key motive why growth is desirable.

But the climate crisis also requires a critical discussion about growth. Is further economic growth an obvious goal, or should we use welfare indicators that can measure satisfaction with life in terms other than economic ones? For many years this discussion has been in the margins of social debate and has rarely engaged economists in the mainstream. In recent years, however, it has gained new attention.[29]

The fact that consumption is increasing is both a prerequisite for and a consequence of growth. From a climate perspective this is the fundamental problem with growth. "The American lifestyle is non-negotiable," said US President George Bush at the UN's major summit on the environment and development in 1992. This statement has often been pointed out as an example of the unwillingness of the US to reduce its large ecological footprint. But the question

can equally be put to us in Sweden and to the inhabitants of other countries where the clear majority have a high standard of living: are we prepared to change our lifestyle?

Increased consumption is presumed to lead to greater prosperity and wellbeing. In Christian tradition, this assumption has been regarded with scepticism as it has been seen how ramped-up consumption and wealth can become an obstacle to life in fellowship with people and with God. "For what will it profit them to gain the whole world and forfeit their life?" (Mark 8:36).

Research has also confirmed that from a certain point, increased consumption and wellbeing go their separate ways. When a community or an individual has reached a certain fundamental level of consumption, a further increase in consumption leads to the feeling of satisfaction stagnating or falling.[30] There are also people who claim that the increased mental ill-health, especially among young people, is linked to a fast intensified pace in society and consumption patterns that are associated with growth.[31]

In what is known as happiness research, studies have been conducted of how people perceive activities that are linked to varying amounts of greenhouse gas emissions. The result is encouraging: the activities that people perceive to be the most satisfying, like socialising, praying, meditating, making pilgrimage walks and participating in cultural activities, have little climate impact. Less satisfying activities, such as commuting for work, generate larger emissions. This indicates that a different consumption pattern is not only possible, but can also lead to improved quality of life. By placing

greater emphasis on education, health, culture and spirituality, not only can we create a sustainable society, but also a good life.[32]

In principle, continued growth can be combined with reduced emissions. The major question is whether patterns of both production and consumption will change at the rate required by the goals of the Paris Agreement. In Sweden we see signs of this, but no clear evidence that it is possible. Between 1990 and 2016 Sweden's domestic emissions decreased by 26 percent[33] at the same time that the economy grew by 74 percent.[34] However, the emissions that Sweden, via consumption, causes in other countries remain at a high level. This is partly due to the fact that energy use in other countries is significantly more fossil-dependent than in Sweden.[35] It is positive that several Swedish industries are preparing to transition to completely fossil-free operations.[36] This will involve leaps in technology, such as steelmaking through entirely new chemical processes. When such technologies spread internationally, global emissions will be affected on a large scale.

The necessity of changing our lifestyle is sometimes perceived as a threat or backward-looking. But lifestyle changes take place all the time, depending on how technology, values and ideals alter. This becomes readily obvious if we compare our personal everyday life today with how it was a few decades ago. The heightened awareness of the environmental and climate crisis in recent years has started to affect what we eat and how we travel. Four in ten Swedes stated that they reduced or refrained from meat consumption in 2018. The fact that *flygskam* (flight shame) was one of the Language Council of

Sweden's new words that same year can be seen as an expression of the conversation that arises when more people change their consumption and lifestyle.

It is a step in the right direction that Sweden's GNP measured since 2017 also encompasses 15 measures of prosperity that highlight economic, environmental and social aspects of quality of life. The aim is to measure the country's development more effectively and avoid defining development in economic terms only.[37]

III Pragmatism, threat and hope

We are in a concrete climate crisis for us and future generations. If we are to manage this situation wisely, we need to make a lot of space for pragmatic discussion. But more is needed. We are currently between threat and hope. We see clear signs that climate change is happening and constitutes a challenge of literally global proportions. The proactivity of humanity is not yet in proportion to the enormous challenge. Both our longing and our anger need to be awakened; a longing for a sustainable future and anger that a beloved creation is threatened. We need to reach hope that releases power to act.

After failing in Copenhagen in 2009, the countries of the world successfully reached a consensus on a new global climate agreement, the Paris Agreement, at the end of 2015. Tears of joy and spontaneous embraces filled the conference centre when the agreement had been approved – the world's countries had finally taken a big step forward in the work to jointly tackle the climate crisis. The Paris Agreement establishes that the global temperature increase must be kept well below 2 degrees, and that the aim should be to limit it to 1.5 degrees. While the earlier Kyoto Protocol meant that only rich countries made commitments on emission

limitations, the Paris Agreement is based on everyone having to take responsibility, even though the principle of "Common but Differentiated Responsibilities" remains. The Agreement means that countries must gradually step up their commitments, and renew or update them every five years.Additionally, support is promised to developing countries' work on emission limitations and climate adaptation. The importance of avoiding and dealing with the damage and losses that climate changes give rise to is acknowledged.

In 2015, world leaders also adopted the 2030 Agenda including 17 Sustainable Development Goals that span environmental, social and economic issues. All these goals have a connection to a greater or lesser extent with Christian faith and the work that the Church of Sweden performs with many other faith-based organisations around the world. A few of the central goals and commitments to attain by 2030 are to eliminate hunger and extreme poverty, reduce inequality and ensure that no groups are left behind. Climate issues are specifically represented in two goals (goal 7 about access to sustainable energy and goal 13 about climate change), but all the goals are mutually dependent on each other. If the climate goals are not attained, we will not attain the other goals either.

The Paris Agreement is based on voluntary pledges. Each country decides how much it will reduce its emissions. The Agreement cannot therefore force countries to reduce their emissions. It can, however, stimulate a race to the top, in which countries surpass each other in far-reaching measures. The Agreement also sends a

clear signal that influences the business community. It probably contributed to the significantly higher investments made in renewable energy in recent years. However, there is a large gap between, on the one hand what scientific research states must take place to avoid dangerous climate change, and on the other hand what the countries commit themselves to do. The current commitments are calculated to lead to a temperature increase of between 2.7 and 3 degrees, which is far from the goal of limiting the warming to well below 2 or preferably 1.5 degrees.

The ambitions of the world's countries must therefore be raised significantly. Short terms of office do not always make it easy to muster strength and courage to make such changes – the climate's century-long "terms of office" require a long-term approach that our more short-sighted political and economic systems do not match. The nationalist and populist forces that have gained more influence in many countries in recent years are an additional source of concern. These politicians do not prioritise international cooperation and do not tend to take the climate issue seriously.

After the Paris Agreement, Sweden made its climate goals more stringent, adopted a law on climate, and set up a climate policy council that is to follow up whether the political measures suffice to attain the goals. The Government has also stated that Sweden will be the world's first fossil-free welfare state by not having any net emissions of greenhouse gases by 2045 at the latest. Sweden will therefore become a role model that can show how the climate transition can be teamed with economic development and social justice,

and thereby be able to inspire other countries in the "race to the top", which is necessary for emissions to decrease sufficiently quickly.

Today we see ever-increasing numbers of stakeholders who take action, exceed their government's climate ambitions and call for more powerful climate policy. These include companies and investors, regions and cities, civil society actors and social commentators who have previously regarded the climate as an "environmental issue" that does not affect everyone. They also include the children and young people who around the world are demanding that their parents' generation take action quickly and powerfully. Some analysts believe that we are approaching a tipping point that will radically change the political conditions. It is still too early to tell whether this will occur, but there is a great deal to indicate that the climate issue has seriously come to stay high up on the political agenda. That's where it needs to be – the climate crisis can only be managed as a shared concern and it requires political decisions.

Obstacles on the path towards climate transition

It is both technically and economically possible to drastically reduce climate impact. Many of the key steps are also economically profitable, even in the short term, and research shows that it is more costly to postpone necessary measures than to act now. This is supported by a number of studies. The report by the British economist Nicolas Stern is perhaps the first and best-known example.[38] More recent studies not only confirm Stern's conclusions, but also demonstrate that climate measures have a positive impact on the economy.[39]

Why is progress nevertheless so slow? What powers – in society and within ourselves – are holding back the climate transition? What is blocking the ability to take action?

Humans' shortsightedness and short-termism in all planning are sources of inertia. Few processes are as global and long-term as climate changes; our political and everyday choices create climate effects far into the future or tens of thousands of kilometres from where we are. It is a dilemma that as a rule we humans find it difficult to handle long distances between cause and effect, in terms of both time and space.

When accidents happen in which people close to us suffer, it strongly affects us emotionally. But if we see how people suffer the effects of flooding in a different part of the world, it is easier to distance ourselves from our thoughts about them. And if we find out that a forest is being devastated in Indonesia, it is easy to think that this doesn't concern us, that it is not our responsibility to do something about it, even though our own consumption contributes to destroying that forest. That's why the international work performed by the Church of Sweden is important to us. Through Act Church of Sweden, what is distant gains a human face, and we act together to help. If we learn unknown people's names and listen to their life stories, we find it easier to identify ourselves with them. And climate effects that concern our own health and wellbeing – such as an increase in the number of ticks (the insect) or shorter skiing seasons – can open up ways into a deeper understanding of the climate's significance.[40]

The climate system is one of several shared global assets called global commons, which can only be preserved and developed through international cooperation.[41] Although international cooperation has developed substantially in the past decade, there is still a lack of effective models for tackling common challenges. At the same time, the international cooperation is counteracted by increasing nationalist streams in several places around the world. To face the threat of nationalist shortsightedness and short-termism, we need to cultivate our imagination, knowledge and empathy together. The distant or future consequences of our actions need to affect us with such a sense of reality that they affect our choices in the here and now.

Conflicts of interest and distribution effects are another reason for political inertia. Even changes that together lead to major improvements for everyone, may be detrimental to individual groups and companies. For as long as the profitability of certain companies depends on fossil fuels, there will be strong counter-forces[42] to change, and for as long as employees in fossil-based industries do not see that jobs are available in other industries, there will be a risk that trade unions slow down rather than spur on the transition. One specifically Swedish challenge consists of reconciling the needs of the climate transition to expand railways and wind power with the right of the Sami people to use land for reindeer grazing. A more general example concerns people in rural areas who depend on using cars and are adversely affected if car transport becomes more expensive – an issue that gave rise to the violent protests of the

"yellow vest" movement against the French government's decision to increase petrol tax, for example.

Consideration for the group that loses out on a change should not be allowed to block the entire change. In such cases, measures are instead required that reconcile the climate goal with the other interests or – when justifiable from a distribution perspective – quite simply compensate those who are negatively affected by the change. This requires cooperation across several policy areas, such as environmental, labour market, education and rural area policies. The fact that churches and many civil society organisations highlight the need for a just transition that does not place certain groups in a vulnerable situation, has contributed to giving more prominence to the distribution policy aspects related to the climate issue.

A third reason for the inertia may exist in a general *opposition to change*, which in turn stems from a fear of the unknown and a lack of willingness to face changes that are perceived as forced. Humans are in themselves inquisitive by nature, and innovation is a word of honour in a modern country such as Sweden. We warmly welcome changes that we perceive as voluntary. However, we instinctively tend to oppose changes that are perceived as forced, even if they actually improve our situation. But if the change is nonetheless implemented and entails a sizeable improvement, we usually adapt and accept the situation quite quickly. For example, few people long for the time when it used to be legal to smoke in restaurants. We need to reflect together on what changes we have experience of and what changes we want to contribute to.

Existential angst

In several surveys of what people in Sweden worry about most, the environment and climate issues have topped the list for several years.[43] Young people, especially young women, are most worried about how climate change will affect their and the world's future.[44] Statistics on people's worries encompass various aspects, such as unease about the effects of climate change in the form of flooding and drought, excessive migration due to climate change, threats to their own lifestyle, and worry that far too little is being done to halt climate change.

Irrespective of how worry and anxiety are expressed, the climate issue touches our innermost emotions and values. That's why it is also existential and spiritual. "Climate anxiety" has become an accepted term. It can involve catastrophic thoughts, panic disorders, depression and a feeling of powerlessness. What makes the climate issue existentially difficult to manage is that it is simultaneously diffuse and concrete. Our individual responsibility easily becomes swamped in collective responsibility and the long period of time between action and consequence can make it difficult to feel personal engagement. However, the questions that children and grandchildren ask about the future make the responsibility very concrete. When this tension between what is diffuse and what is concrete remains unaddressed, a combination of passivity and resignation may readily arise – a sort of climate depression that creates obstacles to the proactivity required today.

We are afraid that this worry and anxiety are reinforced when essential political decisions are not made. It is not always the awareness of actual risks that causes anxiety, but the feeling that far too little is being done and that we have no control over developments ourselves. Worry about the climate affects our mental health in a wide variety of ways. A study of Swedish young people's worry about the environment shows that those who perceive an existential meaning in their lives, who are convinced that environmental problems are solvable and who are involved themselves, have the highest level of wellbeing. They have hope, which sparks creativity and an ability to see new possibilities.[45]

Countering powerlessness and breaking through passivity by striving for political changes and supporting small and large scale initiatives for a more sustainable lifestyle benefits both individuals and society. Worry that is silenced or explained away is, however, damaging to individuals and society.

How do we deal with our worry?

Pastoral care providers, alongside healthcare staff and psychologists, have substantial experience of meeting people in acute crisis and grief. The climate crisis is not the sort of acute and personal crisis that follows a sudden, unexpected event. Instead, we have gradually grasped more of its scale and more of our co-responsibility through our way of life. Nonetheless, we can try to borrow some of the terms developed from experiences of meeting people in crisis and use them to describe how the current climate crisis is being handled

personally and by society. These terms are denial, flight (in the sense of fleeing), anger, depression, idealisation and bargaining.[46]

Denial – refusal to absorb difficult information – is a common defence mechanism. We all have a greater or lesser tendency to repress the information that we can't cope with. To move forward, we can cultivate our ability to, for a while, face and process difficult information, without letting it paralyse us as it does when it is constantly on our radar. Instead, awareness of reality can then constitute key background knowledge. We are reminded of the saying "When you learn how to die, you learn how to live."

Another defence mechanism is to flee from your own responsibility by looking for other answers to explain why something has happened. It is easy to blame China, because from an overall perspective they account for the largest emissions, or the USA, as their emissions are very high per person. The responsibility is placed on oil companies, politicians, companies or consumers. There is truth in all of this, but it risks leading to us not seeing our own responsibility. And putting one reduction in emissions against another solves nothing, because all emissions must decrease rapidly. To move forward, we need to see our responsibility and possibilities, as well as looking for ways in which everyone, based on their own conditions, can contribute to solutions.

Anger is an important and often healthy reaction to the climate crisis. Anger generates energy! If that energy is not used constructively, it exhausts us, so it is important to find contexts in which the anger can be converted into momentum that is sustainable in the

long term. We need a "rage" that is driven by love for life and all living things.[47]

Depression is a common reaction in a crisis. A person who is depressed looks on life through negative glasses, seeing problems but no possibilities. You can react similarly to the climate crisis by giving up in advance and taking the alarming reports on board, but not the positive signals about what is actually possible to do and what is being done. The difficulties involved in converting society – reducing emissions, changing consumption patterns and investing in new energy and transport systems – are often exaggerated. Perhaps we think that life in a sustainable society will become limited, meagre in material terms and considerably more boring than today? But it doesn't have to be that way at all. We can help each other highlight the positive possibilities and paint a picture of future scenarios that are both attractive and sustainable. We can remind ourselves of occasions throughout history when people have together solved difficult problems, such as abolishing slavery, ending apartheid and protecting the ozone layer. We need to help each other release the desire to get involved in doing good. When people in crisis start to act, and act together with others, their paralysing anxiety often falls away.

Idealisation of the past is also a common reaction to a crisis. The past was rarely as rosy as we want to remember it. Similarly, there is a tendency to idealise our current society when we understand that things cannot continue as before. If the present is idealised, all change will be a change for the worse. We will find it more

difficult to discover the positive opportunities that changes also encompass. To move forward, we need to try to look rationally at what we have, let go of preconceived ideas and have the courage to reassess old truths.

Through *bargaining* (also with God), helped by a kind of magical thinking, people can try to regain control over life, e.g. "If I never do this again, I will get well." Some of the solutions to the climate issue that are currently under discussion may be bogus solutions that are more about negotiating the threat away than achieving an actual change. For example, it is important that various forms of climate compensation become steps on the path to real solutions and not attempts to "buy your way out". And we need to assure ourselves that the solutions to the climate crisis that we are working for lead to actual reductions in emissions and are not only measures that ease our conscience.

The processing required to move forward from defence mechanisms to new orientation and constructive action is best performed in cooperation and dialogue. We need to hold conversations, in which thoughts, experiences and perspectives are tested against each other, conversations at many different levels in society that everyone can contribute to.

To be able to take part in such conversations and face people's worry, the church and individual pastoral care providers must seriously process these issues themselves. Talking about it is the first step on the road to release from action paralysis, both individually and collectively. A different world is possible! We need

positive visions about a sustainable future in terms of possibilities, joy and what is realistic.

On the way to such a world, the church has an indispensable role as a place where all important issues have a home.

Responsibility

We play a part in what has happened, what is currently happening and what the future will be like. This implies both a shared and an individual responsibility. As individuals we sometimes find it difficult to see what we can control and what is out of our hands. It is difficult to take responsibility for China's expansion of coal power, but as individuals we can change our lifestyle and use our democratic right to influence political decisions. As a fellowship in the church and society we share responsibility for how joint assets and funding are used.

Anyone wanting to do the right thing must first identify what is wrong. Destructive behaviours and structures must become visible in order to be changed. As regards individual actions, it is often not very difficult to see what needs changing: use less fossil fuels, travel in a climate-smart way, eat more vegetarian food, do not waste food and so on. It can be harder to see and influence shared responsibility. But a society that builds infrastructure on fossil fuels, neglects to implement effective policy instruments to reduce climate emissions and breaks promises of support for the climate work of developing countries – that society is on the wrong path. The limitations in our knowledge of exactly what is best, must not prevent us from making long-term necessary decisions.

One of the prayers of confession that we use in the Church of Sweden includes the phrase, "I am complicit in the world turning its back on God". This phrase is apt in connection with the climate issue. It affirms individual responsibility without denying the role of the collective, and it takes the collective dimension seriously without disempowering the individual. Sin can be described as "missing the goal" of life or as broken relationships with God and creation. Both expressions are also relevant in the climate issue. We miss the goal of reducing harmful impact, we damage our relationship with God, our fellow humans and nature, and we contribute to unfair distribution. A conversion is needed, a re-orientation.

Feelings of guilt, insight into our own responsibility, can signal something important, but do not constitute good long-term impetus for change. Guilt that is not recognised and lifted off our shoulders weighs us down and risks leading to feelings of powerlessness, passivity and low self-respect. Similarly, the prayer of confession in a church service is not an end in itself or an end point; instead it leads to forgiveness and redemption by God – enabling us to face the challenges of life and the world honestly and with our heads held high. We need forgiveness, redemption and liberation many times. Not admitting what we have done wrong or giving up because we have missed the goal is not an option.

Responsibility is different for different people; those with higher incomes are usually responsible for more climate impact than those with lower incomes, and men usually have a larger impact on the climate than women do. Someone who has not walked in someone


Vegan FOR
CLIMATE
FINDET NEMO
We have forgotton how to walk lightly on earth as its other creatures
CLIMA
Klimastreik

else's shoes should be cautious about stating their opinions regarding the other person's life choices, but we should nevertheless discuss the expectations that can be placed on everyone in society. Norms change, just like our own experiences of what is attractive and enjoyable. As the climate issue grows in significance, the view of what is considered socially acceptable behaviour changes. A hundred years ago it was acceptable to spit on the floor. Which of today's behaviours will future generations shake their heads at?

"Will things turn out alright, mum?"

When we relate climate change to the future of our children and grandchildren, the future perspective becomes longer, but not inconceivable. In talking about children we put ourselves in a position of responsibility. At present we are consuming the resources that future generations would have had to live on. If we do not act in time, we will leave today's and tomorrow's children to foot the bill. The child perspective is therefore inescapable in the climate issue.

But how do we talk to children about the climate? Or perhaps more preferably: how do we listen to children? What do a child's dreams, hope and aspirations mean in the perspective of the climate crisis?

The worry of children and young people about the future of the world is even greater than that of adults. How do we meet that worry? How can we talk about it without creating despondency, yet not withhold facts or make light of the problems? The answer is

precisely as simple and as difficult as for other existential issues that we talk about with children. It largely involves being honest and having the courage to wrestle with these issues ourselves. And just like when we try to deal with our own worry: seize the possibilities, find strategies to dip in and out of difficult subjects.[48]

Do we transfer worry to our children if we get involved in climate issues? Or are children whose parents get involved in the climate crisis not only better informed than other children about the existing threats, but also able to see possibilities more easily?

An important aspect of the child perspective on the climate crisis is that adults must never transfer the responsibility onto children. There are good reasons for educating children about environmental issues at a young age and encouraging them to get involved in the climate issue, but today's generation of adults are the people who must stop climate change. It would be a betrayal to pass on that responsibility to children and young people.

Hope and belief in the future

Hope is one of the strongest forces for change. And hope is more than optimism. Hope wants to go hand in hand with pragmatism; it strives for a true analysis of reality and a realistic view of the situation. It is interested in forecasts and assumptions about the future, but in contrast to the forecasts – which are based on knowledge of what has already happened – hope is based on what is still possible.

The heart of hope beats in faith and love. "Now faith is the assurance of things hoped for, the conviction of things not seen"

(Hebrews 11:1). Faith gives us an objective that is realistic and challenging enough to get us involved. For Christians, in its profoundest sense hope is based on belief in the resurrection, that life is stronger than death, and it obtains its strength from transcendence, the reality – God – that encompasses everything and reaches beyond the realms of what we already know. That's why hope can boldly and defiantly challenge the present day in the belief that a different way of life in our world is possible here and now.

Contributing to a positive change, being part of the solution to the climate crisis through our words and actions, can impart strength and meaning to life – irrespective of whether we can see actual results of our efforts or not, and irrespective of whether we will live to experience the fruits of our labour. When we strive for a long-term perspective of ourselves and our own role in a greater whole, it becomes easier for us to trust in what we can do and that it is good, even though we cannot be sure about the outcome. Part of the strength of the Christian faith is that it gives us hope and strength to, driven by love, leave powerlessness behind in order to change and innovate. The climate crisis is more than a question of optimism or pessimism. It is a question of taking action based on a hope that liberates us to act – and a question of action that in turn evokes, boosts and spreads hope.

The need for good narratives

Humans are storytellers. Today we also need cohesive stories about the present, narratives in which we can comprehend the seriousness

of the crisis as well as see what a better and more sustainable society could look like. Such narratives can give courage, trust and hope and thereby release power and energy to act. Words change reality. The Bible says "In the beginning was the Word" (John 1:1). Everything is made through the word of creation, and with the words of forgiveness and reconciliation what is broken can heal and new things can be created.

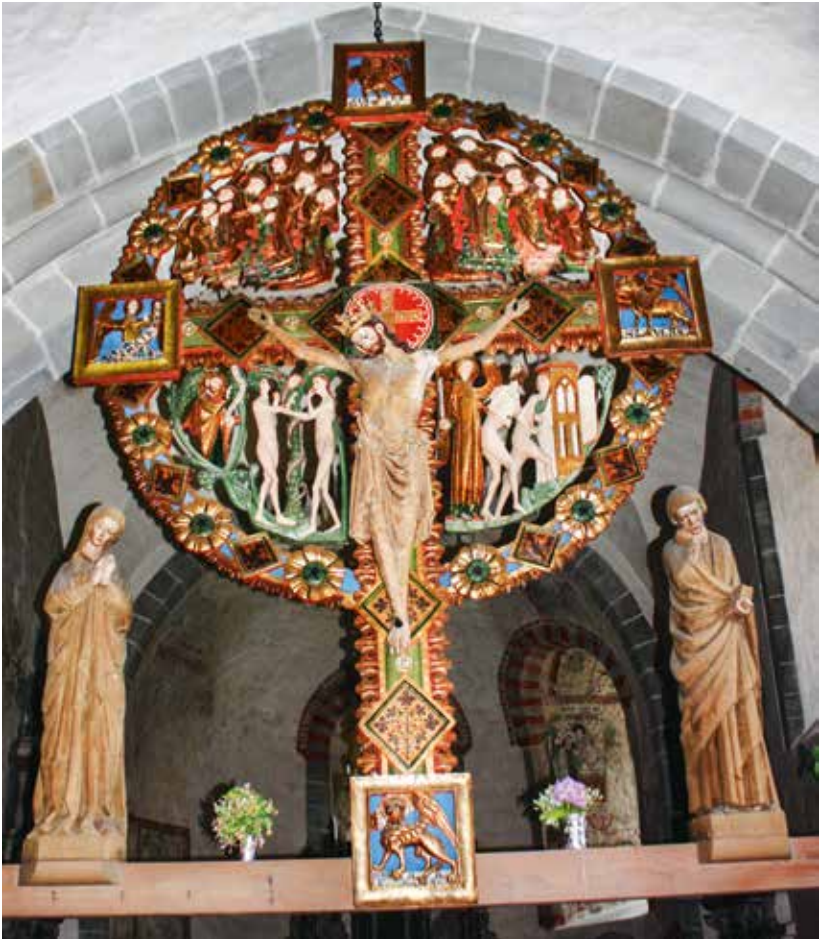
The need for narratives also reminds us of Jesus the narrator and his parables that move, challenge and embolden us. For example, who is the good Samaritan for ecosystems that have fallen into the hands of robbers (Luke 10:25–37)?

How do you persuade humans to take action for change? In its services of worship the church applies a tried and tested method: we gather together, receive tools with which to face life and its challenges and are sent out into the world with a meaningful mission as followers of Jesus. Words become actions, just like the Word once became flesh in Jesus Christ. In the fellowship of Holy Communion, we are united with him and made part of his mission. From church services we take the courage, trust and hope that we have the mission of communicating to the world.

The ability to create strong narratives that paint positive pictures of the future has always been important to people's way of coping with challenges. The struggle against apartheid was based on the belief in a future in which every human being is of equal worth. Martin Luther King did not say, "I have a nightmare" in his famous speech in 1963, even though he had reason to feel a great deal of

worry. He said, "I have a dream!" This was not a way of denying the deeply worrying situation. It was a way of expressing the hope that a different world was possible.

The hope and the dream of a sustainable, fair and just world is in each piece of bread that we share. In Holy Communion, every time that we break the bread and share the wine with each other, we taste the future that we hope for, while also being reminded that we belong together. Each celebration of Holy Communion also involves us jointly holding a sign aloft that challenges powerlessness and hopelessness (as described in the lyrics of Swedish hymn 398 in the hymnal *Den svenska psalmboken*). This act is communal, not individual. The Eucharist expresses the relationship between us and God through Jesus Christ, our relationship to the entire creation, in time and space. In a beloved prayer we pray: *"Uppenbara för oss ditt bords hemlighet – ett enda bröd och en enda mänsklighet"* (Reveal the secret of your table to us – one single bread and one single humanity).[49]



IV The earth, hope and the future – how can we believe?

"The earth is the Lord's and all that is in it, the world, and those who live in it" rejoices the psalmist (Psalm 24). The psalmist has an intuitive perception of the vastness of the world and the universe. That God's unique creative power relativises each human claim of ownership shines through as clearly as the sun. When the earth belongs to the Lord, all human ownership is extremely temporary. However, that does not make it unimportant. The psalmist very accurately captures the constant tug-of-war between people's dizzying greatness and crushing smallness.

"When I look at your heavens… what are human beings that you are mindful of them?" (Psalm 8). Why should God care about the little speck of dust that a human being constitutes in the universe? And yet, the psalmist continues, God made human beings almost god-like, and let them reign over God's creation, over cattle and wild animals, the birds in the skies and all the living creatures in the oceans.

Climate issues shine a strong spotlight onto our human power to achieve both good and evil and onto our smallness in facing the risk of radically changed living conditions on our planet.

So, what are human beings and what is their task?

Humans are part of creation

In Christianity, regarding the world as God's creation is a self-evident insight, a prerequisite for everything else. Everything that has been created is related to God.

The Bible starts with two creation narratives. The first reflects living conditions close to the ocean and on fertile ground (Genesis 1:1–2:4a). There, a wind from God – the Spirit – sweeps over the chaotic waters, from which God creates a cosmos encompassing various forms of life. God creates humans in God's own image, male and female, and tasks them with ruling over the animals – which has often been used as an excuse for reckless exploitation of creation. Then God looks at creation and sees that everything is "very good", but this is not the end of the story. A day of rest ensues, which God makes a holy day. That rest, the Sabbath, becomes a holy part of creation.

The second creation narrative takes place in a desert landscape (Genesis 2:4b–25). Here, the great miracle of creation is of course not that the water is tamed, but that a flow of water emerges out of the earth. Now things can germinate and grow! God forms humans from the dust on the ground and breathes the breath of life into their nostrils. And God plants the Garden of Eden and assigns us to be its gardeners, to "till it and keep it". Here we become most human when growing and cultivating the land.

At one with creation, yet also with a special task and responsibility; this is how we humans meet ourselves on the first few pages of the Bible. We are made of the same building blocks as everything

else in the universe. It is poetic, but also scientifically correct, to say that we are all formed from stardust. We are part of a cohesive tapestry of life.

Creation is characterised by mutual dependence between everything that has been created and by shared dependency on God, who, with divine creative power, constantly maintains creation. In this, the psalmist recognises the work of the Holy Spirit of God: "When you send forth your spirit, they are created; and you renew the face of the ground" (Psalm 104:30).

Based on the creation narratives, the role of humans can be described as that of stewardship. As a rule, stewards have a long-term assignment. They may have far-reaching powers and considerable responsibility, but must never forget that they do not own what they are looking after. A day will come when the result of the stewardship will need to be reported.

The role of steward may be important to highlight in our search for a sound way of approaching the climate crisis. However, the description of the role of steward is not entirely unequivocal, and throughout history people have made what we now realise were mistakes. The notion of stewardship has legitimised social structures characterised by subordination and oppression instead of community and cooperation. It has been used to defend colonial and hierarchical structures that have denied those at the lower end of the scale their full value: women, children, fauna, flora and minerals. In other words, the notion of stewardship is a good way of underlining that we humans are part of creation and have

special responsibility, but it cannot serve as the sole model with which to interpret that responsibility.

Humans are created co-creators

The prayer of committal during a funeral includes the words "Earth to earth", conveying that we come from the earth and return back to the earth; this emphasises our inescapable earthliness. But the funeral service doesn't stop there, it continues with the words, "Jesus Christ is the resurrection and the life" or "Jesus Christ, our Saviour, will raise you up on the last day".

The heart of Christianity is that God has chosen to become human in Jesus Christ. The Bible describes Jesus as our brother and role model, as the reconciler, the victor over death and the "image of the invisible God, the firstborn of all creation" (Colossians 1:15). That God becomes human gives an even more intensive affinity between the Creator and creation: in Jesus, God becomes our fellow human being in the world.

More recent theology refers to humans as "created co-creators".[50] In a ground-breaking way, this term captures our human duality, our tragedy and our power. We are created, dependent, limited, perishable, small. And we are creative, both in our creative activities and in our destructive activities, inventive in our constant attempts to stretch our limits and, driven by our inherent curiosity, to cross the line between what can be perceived as present in reality (immanent) and what lies beyond (transcendent). In that way we are incurably religious.

Referring to humans as created co-creators is a radicalisation of the idea of stewardship that is not entirely uncontroversial. The Bible has a word for "create" that is only used when describing God creating, because God's creative activities are completely different to when humans use or care for nature. Theology has for a long time therefore settled on referring to humans as God's fellow workers. This idea of being fellow workers is not, however, as effective in expressing the crucial tension between our smallness and our greatness, our limitation and our boundlessness, our failures and our successes.

Since the mid-20th century, we know that human inventiveness has given us the possibility of devastating creation on our planet using nuclear weapons. We do not yet know whether human inventiveness and power to act now give us the opportunity to safeguard creation by stopping climate change. But the view of ourselves as created co-creators is in any case an incentive to mobilise the best resources we have, without denying our radical dependency and our limits.

With these thoughts about humans and creation, we have moved away from *an anthropocentric outlook on life* that denies humans' dependence on the Creator and the rest of creation and that regards non-human creation as a means of maximising human benefit. Traditionally, anthropocentrism has been especially strong in western theology, which has contributed to the lack of a balanced view of nature and creation. Creation theology has readily either romanticised nature or justified its exploitation. It became

necessary to instead work *towards a creation-oriented outlook on life* that emphasises the mutuality in the relationships within creation and between God and creation, at the same time that it safeguards humans' special mandate and responsibility. A creation-oriented outlook on life is an alternative to both unrealistic romanticising and ruthless exploitation. It enables a realistic view of nature that reveals and respects biodiversity and the complex processes in ecosystems. The next time that we quote the Great Commandment and talk about loving our neighbour, we should bear in mind that creation is also our neighbour, although we have long been blind to this.

This way of thinking is today widely established in Christian churches. The document *Tillsammans för livet: Mission och evangelisation i en värld i förändring (Together towards Life: Mission and Evangelism in Changing Landscapes)*, which was written for the Assembly of the World Council of Churches in South Korea in 2013, speaks of mission and the flourishing creation.[51]

> Mission is the overflow of the infinite love of the Triune God. God's mission begins with the act of creation. Creation's life and God's life are entwined. The mission of God's Spirit encompasses us all in an ever-giving act of grace. We are therefore called to move beyond a narrowly human-centred approach and to embrace forms of mission which express our reconciled relationship with all created life. We hear the cry of the earth as we listen to the cries of the poor and we know

> that from its beginning the earth has cried out to God over humanity's injustice. (Genesis 4:10)

People of hope

How should we then live our lives to protect the life of creation? In the Gospel of Matthew (16:2) Jesus says something that seems to turn the normal order upside down, "For those who want to save their life will lose it, and those who lose their life for my sake will find it." What does this mean in the face of the climate crisis? Perhaps this: Those who receive their value from being at the top of a hierarchy must always defend themselves and have everything to lose. This is what happens if we humans lay claim to being masters of creation. If we instead give up our *position* in favour of a *relationship*, then we have something to gain. If we see our relationship to the rest of creation and to God, we lose our position as the centre and measure of everything, but gain a fellowship that offers trust, hope and life.

Jesus continues in the next verse (Matthew 16:26), "For what will it profit them if they gain the whole world but forfeit their life? Or what will they give in return for their life?" Consumption as the meaning of life has never gone together with Christian life.

Several things need to be re-evaluated in order to counteract the obstacles we have identified: shortsightedness, short-termism, nationalism, conflicts of interest and resistance to change, and in order to enable a decisive hope regarding the global and long-term challenges faced by humanity. We can gain new life by giving up and losing old life.

Sometimes we are tempted to search for answers by mainly looking in the rear view mirror. In a difficult situation it is easy to think that perhaps things were better in the past and that we should revert to "old" values. As Christians we are bearers of a tradition that demands that in every era we seek to understand the present and look to the future. Christ has risen from the dead and shattered the limits of time. We are a people of hope. God is a living God.

In the Bible the word *kairos* often refers to the right moment, the moment that challenges us to step up and respond to God's calling. There are moments that are decisive and require action. The Gospel of Mark states that Jesus proclaimed the message of God with the words: "The time is fulfilled, and the kingdom of God has come near; repent, and believe in the good news" (Mark 1:14–15). The words saying that "the time, *kairos*, has come" are about not missing the opportunity for change: *now* is the right time. In terms of the climate crisis, it is definitely *kairos* to take responsibility for our task of protecting and caring for creation in accordance with both of the Biblical creation narratives.

The future is not a prediction – it is the possibility of possibilities. It is more than what we can deduce from our history and our present day. The future is what is coming towards us and carries the taste of God's promise to perfect creation. In the Bible, the Book of Revelation tells us how God will dwell among the people and wipe all tears from their eyes, "Death will be no more; mourning and crying and pain will be no more, for the first things have passed away" (Revelation 21:3–4).

The vision of the kingdom of God

We know two things: we will never be able to realise the perfect world, the kingdom of God. However, through Jesus, we have a vision of the kingdom of God that gives us all reason to build a world that realises as much of this vision as possible. In church we pray and work for the restoration of creation. This means never less than showing gratitude for creation and humility for our role and task in life, and never less than striving for justice, solidarity, peace and reconciliation! Whatever the subject, Christianity must incorporate the perspective of vulnerable people and act accordingly. "Listening to voices that often come from the margins, let us all share lessons of hope and perseverance," as expressed in the message of the World Council of Churches from its Assembly in Busan (2013).

The vision of the Kingdom of God is not supported by a longing back to paradise. The Book of Revelation does not paint a picture of a resurrected Eden, but a society in which nature and culture unite in the holy city that is full of God's glory. It is a place where there is enough water and where the tree of life stands in "the middle of the street of the city", a tree that bears fruit every month and has leaves that serve as an actual pharmacy, namely "for the healing of the nations". Here, not only does everyone receive the bread they need. Here, there is healing for everyone. Nothing accursed will be found there any more. (Revelation 22:2–3).

Against this vision stand our and the world's reality. The deep ambiguity that we find in everything human gives us experiences of

failure, powerlessness, disappointment and evil. Nature's course confronts us with questions about meaning and with a history of evolution that has come with immeasurable suffering and death. Seen from that perspective, the history of creation presents itself as a Passion narrative of cosmic proportions. Christian faith lives off the conviction that this cosmic Passion narrative is crisscrossed and enlightened by an even more intense passion: God's love for the world.

A Lenten hymn (number 438 in the Swedish hymnal *Den svenska psalmboken*) that highlights the cosmic significance of the cross "in the midst of everything" can provide inspiration in the time of climate crisis:

> You, who in the midst of everything have raised the cross
> where you give yourself, have given us this time of Lent for
> healing, light and life.

The hymn does not shirk our responsibility or our part in the world turning its back on God and on the vision of the Kingdom of God:

> Our sin is great. We reproach ourselves and walk in anxiety.
> But you who bear all sins are vastly greater than our heart.

The freedom to start anew is the lifeblood of Christian faith. The possibility of forgiveness and reconciliation means that we do not

need to explain away our guilt and can instead acknowledge it and, in the power of forgiveness, deal with its consequences, dare to move on and try new steps – despite knowing that we will also make mistakes in the future. The hymn continues:

> Oh Jesus, with your words release the bound-up power that dwells in us, that we serve you, that we see you in those around us.

Set free to act

As created co-creators we can have a realistic perception of our ability and lack of ability. Our Lutheran tradition never tires of reminding us that we are both righteous and sinners at the same time, justified by grace through faith. We know that we ultimately live more on what we receive than on what we do. We live by grace. It is a gift from God to us that our worth in the eyes of God does not depend on our achievements but on God's love for us.

We therefore dare to believe that the inherent bound-up power that resides in us and all of humanity can be set free for the good of creation. We confess that, through our part in adverse climate impact, we are complicit in the world turning its back on God, while we also know that as forgiven sinners we can achieve change, despite lacking full knowledge and perfect willingness. We can have a realistic view of everything that opposes goodness in and around us and in the entire creation, and still cultivate the desire and willingness to protect and work for what is good.

Our trust and confidence may shift, and get bruised by life's challenges, but the promise and mission that God gives us always remain. Baptism permanently marks us with the life-giving water of creation and the promise of God's faithfulness. On this foundation, it is possible to turn away from destructive ways of life and to rethink our lifestyle. The "daily repentance" that Martin Luther talked about is another way of expressing the daily act of adjusting our compass to point in the direction of grace, freedom and love.

The basic tenor in the life of faith is always the freedom that we have received and the courage that it gives us. What we do out of love for God, creation, each other and ourselves is a response to the divine love that flows in and through creation and thereby also in and through us. This love is most clearly expressed in the self-giving love of Jesus Christ for the world. In a Christian perspective, everything is a gift before it becomes a task.

What can we hope for regarding the future of the world?

The questions about the future of the earth and humanity bring at least two different lines in Christian thinking to the fore. In theological terminology they are called apocalypticism and eschatology.

Apocalypticism is a genre that is very recognisable from the world of film. Apocalyptic films are about disasters and depictions of the end of the world. Like books of the Bible such as the Book of Revelation (in Greek, *Apokalypsis*) they paint a dramatic picture of what is assumed will happen at the end of time.

Apocalypticism seems to constitute an irresistible temptation for our human imagination. And with reason, as disasters are part of cosmic history. Research into the emergence and development of complex systems has observed that disasters are key moments in such a development. Disasters matter in creation. Theological reflection cannot ignore that.

In the sphere of churches, apocalyptic thoughts about the end of the world and of time are linked to conceptions of the return of Christ, which is fundamentally something to long for and look forward to. In certain Christian contexts, based on this kind of apocalyptic approach, there is opposition to all involvement in environmental work and engagement for the integrity of creation, as it is thought that this would delay the longed-for day of Christ's return. Business as usual is advocated: heaven and earth are going to perish anyway; they will all wear out like a garment (Psalm 102:26). Then Christ will come and look after his own. The rest doesn't matter.

However, such an interpretation is in conflict with broader motifs in the Book of Revelation. There is a great deal to indicate that this book is a searing criticism of the imperialist power of that time: Rome. Rome's glorification of military power is contrasted with the power of the lamb, with Jesus, crucified and resurrected, who is victorious through non-violence. The message is that victory over evil is not won by a roaring lion, but by a slaughtered lamb.[52]

Then, the apocalypse, the revelation, is not primarily about disaster and violence but instead about Jesus leading us into a world

of joy and healing. We are drawn into a movement that will continue until the full completion of creation.

The message for believers is: Do not be afraid: there is a limit to evil. That's why there is every reason to courageously tackle the work for the kingdom of God with everything that it involves in relation to creation, fellow humans and ourselves. This is also why sustainable development issues have become an increasingly large part of the life of the Church of Sweden and most other churches. The World Council of Churches has long worked with the connection between justice, peace and the integrity of creation.

Eschatology is literally the study of "the last things", both in terms of time and existentially. It encompasses questions of what happens when the final calendar ends, at the end of time, but also the question of what ultimately gives meaning to the life we are living and what there is beyond death. Eschatology asks the question of what we can hope for in all its breadth and radicality. Its answer is a promise – that when everything ends God is near. When the giver of life, the Holy Spirit, has returned to its origins, when the liberator Jesus Christ has submitted everything to God, then God becomes "all in all" (1 Corinthians 15:28).

In modern times, eschatology has been somewhat less interested in the end of time and the final judgment as the great cosmic finale. Instead eschatology's interest in God's promise of hope and eternal live has grown. This promise is the actual source of the irrepressible hope that permeates all our efforts to build a better world and thereby realise some of the Kingdom of God in the world's

conditions. Such irrepressible hope is expressed in the legendary words attributed to Luther: "Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree." Christian hope is bold and perhaps even defiant because it is based on freedom.

Hope shows its power in everyday life and gains its energy from the church's life in worship and the rhythm of the church year. Advent is waiting for the God who comes to us from the future: the future is more than an extension of current conditions. Lent is a reminder of our dependency on the Creator and on creation, of the fact that the road of love is also the road of suffering, and that God in Jesus Christ has walked that road, right to the bitter end. Nothing human is alien to God, the cross at the core of everything embraces cosmic suffering as well as our own personal suffering. Easter – just like every Sunday – is the celebration of the victory of life over death. We see the entire creation shine in the radiating joy of Easter, as expressed in the Easter Liturgy. The long period after Pentecost with its green liturgical colours for vestments and paraments, is the time of growth and maturity, an exercise in which spiritual life and everyday life are brought into harmony with each other.

Songs of praise and litanies, gloria and kyrie, the sharing of bread and wine in the mass, the – wordless and word-rich – prayer of the heart and body, pilgrim walks, Bible studies, psalms and hymns… there are inexhaustible ways of cultivating the hope that the Creator has placed in us created co-creators. We can and must devote ourselves to this cultivation work in the face of the challenges that lie ahead of us.

In this work, cooperation with other parts of the Christian church and with other religions has become increasingly important – and better. Back in 2008, Archbishop Anders Wejryd convened an international and interfaith climate summit in Uppsala. By harnessing the knowledge available, through self-criticism and conversion, through the worldwide network of churches and through dialogue and advocacy, progress is possible.

In the spring of 2013, the leaders of the Evangelical Lutheran Church in America and the Episcopal Church, also in the US, and the Church of Sweden together addressed American politicians about the climate issue. In 2019, the leaders of these churches renewed and strengthened their commitment. They wrote:

> We claim the deep resources of our Christian faith for this work. We worship a God who created all that exists, who rejoices in its flourishing and blesses its diversity. We follow Jesus Christ, himself one of us "earth creatures," who in dying entered deeply into mortal suffering and who in rising gives hope for the renewal and restoration of all God has made. We are inspired by the divine Spirit, intimately present to all creation, who gives us strength, wisdom and perseverance to join in the "here and now" work of God in healing the brokenness of our hurting home… We acknowledge the dire urgency of this moment not through the lenses of despair, but through lenses of hope and determination.

V What do we do now? Ways forward

Our view of creation and humanity is challenged by the fact that humanity is changing the conditions for life on earth. Ethical issues are coming into sharper focus. In a world where we know that there is a ceiling for the amount of natural resources that we can use, there must also be a "floor" – a social floor that is based on the equal dignity of all people and their right to a liveable life. According to Christian faith, the most vulnerable and exposed must be central to our thoughts and our care.

> "Lord, when was it that we saw you hungry and gave you food, or thirsty and gave you something to drink? And when was it that we saw you a stranger and welcomed you, or naked and gave you clothing? And when was it that we saw you sick or in prison and visited you?" And the king will answer them, "Truly I tell you, just as you did it to one of the least of these who are members of my family, you did it to me."
> (Matthew 25:37–40)

Those hit first by climate change are those who have contributed the least to causing it. They live in poverty, with little capacity to deal with drought and flooding, and most of them live in the areas of the world forecast to suffer the biggest problems of climate-related disasters. They risk being deprived of the right to life and development, if they are not given support for powerful expansion of renewable energy sources. Cheap fossil energy has been a key building block in the prosperity of wealthy nations. From that perspective, the fact that industrialised countries have thereby used up nearly all of the atmosphere's ability to absorb emissions must be regarded as deeply unjust. In light of this, it is understandable that many countries have long been suspicious when the western world wants to talk about the climate. On whose terms must necessary measures be taken? The injustice of the climate issue is also clear in the light of the global imbalance between the power and influence, the resources and rights held by men and women. Men contribute most to climate change; women are most severely affected. The nationalistic forces that have gained more political influence in recent years constitute an important part of the resistance to gender equality that is currently affecting many parts of the world, often with religious overtones. The same forces often oppose ambitious climate policy.[53] Christianity has a powerful counter image: the vision of a fair balance. The Apostle Paul writes to the Corinthians:

> But I am testing the genuineness of your love against the earnestness of others. For you know the generous act of our Lord Jesus Christ, that though he was rich, yet for your sakes he became poor, so that by his poverty you might become rich… I do not mean that there should be relief for others and pressure on you, but it is a question of a fair balance between your present abundance and their need, so that their abundance may be for your need, in order that there may be a fair balance. As it is written, "The one who had much did not have too much, and the one who had little did not have too little." (2 Corinthians 8:8ff)

As Christians we must and want to work for liberation from poverty and for just and fair sharing. This involves more than just distributing assets among people. A creation-oriented approach means that we need to include the entire creation when we think in terms of justice and peace.

Justice is not just a matter of abstaining from financial resources for the sake of someone far away. It is equally a matter of giving ecological space to people currently alive and those who will live in the future by reducing our own utilisation of the earth's resources. Climate change is fundamentally an issue of global justice. The climate crisis should be tackled as part of humanity's dual challenge: to stop climate change at the same time as giving billions of people life and development opportunities, away from poverty and oppression. Increased gender equality is both part of this goal and

part of the route towards that goal. The 2030 Agenda and the 17 global goals for sustainable development are an expression of the insight that these challenges are linked and must be solved together. The Agenda also comprises a concrete action plan showing what needs to be done.

We often discuss how quickly and substantially emissions must decrease in terms of percentages and years. Another way of highlighting the climate challenge is a carbon budget that shows how much carbon dioxide we can emit in total. In 2018 the UN's Intergovernmental Panel on Climate Change (IPCC)[54] stated that the remaining carbon budget is 420 to 580 billion tonnes for a reasonable chance of attaining the goal of no more than 1.5 degrees of global warming.[55] If the 2017 emissions level is retained, this emission allocation would be consumed in 12 to 16 years. How much of the remaining emission allocation is used by the early-industrialised countries is a question of fairness.

Peace with the earth is increasingly becoming a prerequisite for peace between peoples. The role of oil in many of the world's conflicts has long been obvious. When the strategic significance of oil declines and we come to rely to a growing extent on dispersed energy sources that, in contrast to oil sources, are not controllable by rulers or companies, we will be able to anticipate options for a more peaceful world. However, there is a risk of climate change exacerbating conflicts. The competition for limited resources such as water, farming land, airspace and areas of the ocean is already creating tensions that may worsen when the climate alters.

People's lack of food and sustainable means of providing for themselves creates insecurity, contributes to conflicts and forces people to flee.

We must make peace with the earth. For the sake of the poor and vulnerable, for the sake of future generations and for the integrity of creation.

Small and large steps: values and behaviours

Now that the challenge is so immense, how can small steps help? If the world's decision makers hesitate, what does it matter if I recycle and travel by train instead of plane or car?

The ability to think big and radically is needed – but also small individual steps. The extent of the climate issue must not lead to despondency and paralysis. Even the longest journey starts with a first step.

Both behavioural and value changes are required, and there is interaction between them. Small modifications to everyday behaviour can lead to value changes, which in turn lead to new behavioural changes. A routine of switching off lights and standby functions can make us reflect on our energy consumption. Eating more vegetarian food can be a way of reflecting on our own consumption and reducing emissions from meat production.

When our behaviour changes it affects how we think about our actions. And when our values change, we are prepared for, call for and demand the political decisions that must be made in order to take big steps. The small behavioural changes also constitute a

positive opportunity for individuals to live according to their own values, to be part of the solution rather than the problem. Practical changes in our private day-to-day life must not, however, become an excuse for not supporting joint changes or absorb so much of our energy that they become something that we do instead of working towards joint and political solutions.

The individual person and shared responsibility

Sometimes responsibility for the climate transition is largely placed on the shoulders of individuals, who are to change their buying, travelling and eating habits. But there are limits to what one person can do alone. No one can build their own railway tracks or make other major investments that are required in the climate transition. Researchers warn of over-reliance on how much can be achieved by individual consumers changing their behaviour, and they call for policies that systematically make it easier for individuals to make climate-smart choices.[56]

But politically directed changes alone are not enough either. The interplay between individual and collective change is crucial. Individuals are not primarily consumers but citizens who can play a part in political changes and can confirm and support each other in communities and fellowships. When committed citizens get organised, demand clear policies and demonstrate alternatives, politicians dare to make brave decisions. We must therefore address the climate crisis *together*.

During much of the past century the fight against poverty and for

joint welfare comprised a cohesive vision for Swedish society. Towards the end of the century, when sizeable parts of that vision had been achieved, it was largely replaced by future visions that were more about the freedom and dreams of individuals. Life in a poorer era and in poorer countries must not be romanticised. Nor should we ignore the fact that something important is lost as individualism grows.

It is part of Christian conviction that the individual dream does not suffice to create a meaningful life. We find life's meaning in fellowship, sharing and solidarity. The climate crisis is shaking us up. It is also giving us the opportunity for renewed fellowship with people across time and space, with nature and with the Creator.

Politics, consumption and the economy

Together with other industrialised countries, Sweden has a historical responsibility for the emissions that we have produced over a long period of time and that have contributed to today's increase in temperature. The social and economic structure of Swedish society and the country's geographical position, with good access to biofuels, solar energy, wind power and hydropower also give us particularly good conditions for a climate transition. Sweden therefore has conditions for being a pioneering country, demonstrating that a climate transition is possible while also maintaining economic welfare.

The use of fossil fuels must be phased out. The ambition to achieve a rapid climate transition must permeate all politics, and international commitment must be underpinned by a clear justice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perspective. History teaches us that a rapid transition is possible if people are willing and motivated. At the start of the Second World War, production in many countries was completely reconfigured in just a couple of months – and we are approaching a point when this drastic comparison will become increasingly relevant.

From a justice perspective Sweden also has a responsibility to contribute to developing countries' climate change adaptation and climate transition. Our climate support must not be taken from the resources that Sweden has previously reserved to help reduce global poverty.[57] It should be possible to develop and implement technical and organisational solutions in Sweden so that they can be applied on a larger scale and contribute to the climate transition in other parts of the world by bringing technological shifts forward.

Politically enacted controls are required to make the costs of adverse environmental impact visible and spur on a transition. New ways of thinking, economic models and welfare indicators need to be applied that can help us organise a society that promotes human welfare and does not exceed the planet's limits.

Leadership is required. Not just in politics; companies and schools, associations and families, churches and parishes all need people who formulate visions, dare to take a stand and take concrete initiatives, and who do not anxiously wait and see what others will do and think. It is positive to see more and more leaders of this kind coming forward, leaders who are ready to show us the right path, even when it includes twists and turns, and who strive for cooperation to gain momentum.

Life is at stake

We citizens – voters and politicians – need to hone our ability to take action for the long run, to think beyond a term of office, and we must be able to address more than one issue at a time. It must be possible to reduce the use of fossil fuels at the same time as continuing to work for local and global justice, the equal dignity and rights of all human beings, the global water situation, biodiversity and more.

We need strategies for overcoming the mental, social and political inertia that is impeding the necessary transition.

We must not turn a blind eye to conflicting goals and conflicts of interest. If some people are negatively affected by changes, they should perhaps be compensated so that the work of change does not become paralysed. There is a need for fundamental trust in the fellowship of society, that we bear each other's burdens when they become too heavy for someone.

In the transition we need to test various strategies and embrace a diversity of ideas and solutions. New technology is absolutely essential, but it would be risky to rely solely on technical super-solutions. Around the world there are examples worth analysing and learning from, everything from a government-led transition of the energy system in Germany, to practical solutions developed at local level.[58]

What will Swedes consume in the future? Will those who currently have the means to pay to lie on the beach in Thailand opt for singing lessons instead? Will we consume more services than products? Will there be sustainable options for everyone to choose

from? Consumption that creates identity is growing – people's choices of home, travel and clothes are expressions of identity to an ever increasing extent. Identity-creating consumption is rarely price-sensitive, and we can already see how people in many groups gain status by driving eco-friendly cars or eating climate-smart food. In this respect there may be impetus to reduce emissions from consumption.

New business models are germinating. Sharing is offered as an alternative to ownership in order to decrease the use of nature's resources. This can create new contacts between people. Circular production is gaining ground, in which raw materials are recycled and reused instead of simply being discarded as waste. What appears worthless is gaining new worth.

We want to see new alliances between climate research, happiness research, welfare research and religious studies. By showing how energy transition, sustainability, increased gender equality and welfare promote each other, the appetite for good change can be increased. There is a great deal to be gained if it can be shown that a climate-smart life is also a happier life – this will bolster preparedness to give up old behaviour patterns.

Religion and climate

In the 2000s the significance of religions to the development of society has become clearer. We see how religions are still misused to reinforce hate and violent conflicts. Meanwhile, there is also a stronger willingness to conduct dialogue and cooperate to reduce

conflicts and save the climate. Such cooperation is growing within the Christian family as well as in interfaith dialogue.

The Pope's encyclical on the environment *Laudato Si'*[59] garnered a great deal of international attention and strengthened the will to pursue ecumenical cooperation in activities for a fairer and more sustainable world. A long tradition of dedicated work on climate justice within the World Council of Churches, the Lutheran World Federation and ACT Alliance has strengthened the ecumenical voice of churches in various regional and global contexts. A rising number of churches worldwide are embracing the idea of making the time between 1 September and 4 October Creation Time, by organising worship and other activities around creation and our relationship to it. In a globalised world, local worship services about global issues help us understand and feel connected to creation that gives life to all.

Interfaith dialogue about the climate has also grown in the first couple of decades of the 21st century. The Uppsala Interfaith Climate Summit in 2008 has been followed by several interfaith statements, such as the one made in the run-up to the 2015 climate negotiations in Paris. Religious actors who make statements and take action together on climate issues can contribute perspectives that are different to those of many other actors who are committed to the climate issue. They can contribute a profound existential understanding of what it is to be a human being on planet Earth and of what constitutes a good life as well as contributing an ethical approach to creation and an ability to embrace longer time perspectives.

The future starts now

The climate crisis gives us a kairos moment, the right moment to change things for the better. This is the right time to start breaking away from lifestyles and consumption patterns that oppress and enslave people.

Value changes are so much more than theoretical principles. When the climate crisis gives rise to worry and anxiety, but also hope and commitment, these are not merely fleeting emotions. The crisis encompasses existential issues that must not be underestimated or trivialised. A society that understands the existential dimensions of the crisis benefits from allowing the religious traditions' social and ethical "capital" to help build a sustainable society. These traditions often possess cultural integrity, spiritual depth and moral strength that the secular perspectives may lack.

The ability to see our time perspective in relation to an eternal perspective is liberating – if nothing else to be able to hear the rhythm of creation beyond the fast ticking of interim financial reports and terms of office. Here we have the perseverance required for work on the climate crisis.

We need counterweights to the message that our value as humans depends on what we achieve and what we consume. Churches and other faith communities stand for values and contexts that give people identity and meaning, without linking this to performance and consumption. Churches are places where we can broaden our individual – and often consumption-related – dreams and future visions to shared pictures of the future. Literature, art, film and other

forms of cultural expression also contribute to existential processing of everything that the climate crisis gives rise to. The church does the right thing when it listens to them, contributes to them and plays an active part in public debate.

As a church we must create space for existential dialogue and be prepared in pastoral care to encounter people's climate-related worry. Through the church's liturgy, rites, hymns, prayers and preaching we find language, strength and inspiration with which to change our lives and influence society.[60]

The Church of Sweden is also an organisation that uses energy and other material resources, that owns and manages land, buildings and financial capital. The Church of Sweden is therefore responsible for significant impact on the environment and climate, in both a positive and negative sense. This responsibility must be shouldered together – and the opportunities must be well managed – to powerfully contribute to achieving the goals of the Paris Agreement.

With this bishops' letter we want to show that from a Christian approach to life even in the era of the climate crisis there are ways forward that team factual knowledge with strong hope. Our intention is that this bishops' letter will help to release much-needed ability to take good action, both individually and collectively.

Together with churches, organisations, the business sector, committed individuals and politics, we want to work for a transition that occurs at a pace that allows life to be safeguarded. Our commitment

does not start now and does not stop here. Our commitment will continue because we know that the coming years will be absolutely crucial to humanity's possibilities of stopping the worst changes to the climate.

The Bishop's conference from left to right:
Eva Nordung Byström, Diocese of Härnösand, Martin Modéus, Diocese of Linköping, Johan Tyrberg, Diocese of Lund, Thomas Petersson, Diocese of Visby, Susanne Rappmann, Diocese of Gothenburg, Fredrik Modéus, Diocese of Växjö, Antje Jackelén, Archbishop, Church of Sweden, Mikael Mogren, Diocese of Västerås, Karin Johannesson, Diocese of Uppsala, Johan Dalman, Diocese of Strängnäs, Åsa Nyström, Diocese of Luleå, Sören Dalevi, Diocese of Karlstad, Andreas Holmberg, Diocese of Stockholm, Åke Bonnier, Diocese of Skara.

Appeals

Based on what we have written in this bishops' letter, we as the bishops of the Church of Sweden would like to make the following appeals…

… to the parishes, dioceses and national level of the Church of Sweden:

- Let the parish's worship service, prayer, dialogue and song be clear expressions of the hope that can grow into strength and commitment for the future of creation.
- In particular, study Bible texts about justice and righteousness, and about the role and task of humans in creation.
- Encourage each other to learn about the climate crisis and join forces with external cooperation partners to stay below 1.5 degrees of global warming.
- Draw up concrete action plans with the aim of attaining carbon-neutral operations as soon as possible, looking to 2030. This requires transition and behavioural changes in areas such as property management, travel, purchasing and more.
- Let a theologically reflected view of creation influence the financial management of equities, forest and land to reduce climate impact and bring forward the climate transition.

- Take advantage of the opportunities for cooperation available locally, nationally and globally to help accelerate a climate transition.
- Use the tools available to support the climate and environmental work in the parishes, such as environmental certification.
- Carry out joint activities to support and inspire people who want to work for a sustainable and fair lifestyle.[61]
- Draw attention to the fact that the local parish participates in global climate initiatives by supporting Act Church of Sweden's work[62] in areas where climate change has hit hard, and through climate compensation in line with Fairtrade's criteria.[63]

... to everyone in Sweden:

- Talk with others about what you think and how you feel about the climate crisis.
- Channel your concerns into political engagement. Use your rights and responsibilities as a citizen and voter to strive for a substantial climate transition through politics.
- Take concrete steps in your own everyday life. Reduce emissions by changing the way you travel and what you eat and drink, review your savings plans, housing and consumption.
- Support people who are hit hard by climate change.
- Access and make use of the resources in the religious tradition that is closest to you. Seek each other's support and don't give up: no one can change the world by themselves and no one is perfect, but everyone's contribution is needed.

... to Swedish decision makers and government agencies:

- Introduce effective policy instruments and implement necessary investments to make Sweden carbon-neutral by 2045, in accordance with the climate policy framework. Endeavour to reach the goal earlier for the sake of justice.[64]
- Push for a higher level of ambition in EU climate policy.
- Support developing countries' climate work with funding in addition to the aid target of one percent of Sweden's GNP and strive for development of innovative sources of funding at international level.
- Continue to spread good examples and experiences of how a climate transition can be implemented globally while retaining welfare, for example through necessary technological leaps.

... to companies and organisations:

- Invest in renewable energy sources, heightened energy efficiency and sustainable business strategies that help to fulfil the UN's global sustainable development goals (the 2030 Agenda).
- Divest everything that supports the fossil fuels industry.
- Reflect together, learn from each other and test out new concrete solutions. Cooperate and take part in existing networks and initiatives. Form opinion.
- Use your specific roles, resources and responsibility as a starting point for contributing to the development of a just and ecologically sustainable society.

... to all the UN Member States and other relevant international decision makers and organisations:

- Act quickly and constructively to enable fair and effective implementation of the Paris Agreement, while maintaining and safeguarding the principle of climate justice, which can be achieved if countries with major capacity lead the way, and countries with few resources are given promised support.
- Defend and strengthen global cooperation. Act on the basis of the overall approach represented by the UN's global sustainable development goals (the 2030 Agenda).
- Use international financial institutions, systematically and consistently, to accelerate the climate transition in all countries.

... to church leaders worldwide, let us:

- through international ecumenism and interfaith cooperation, endeavour to boost the contribution of churches and religions to climate justice and climate transition.
- create conditions for good dialogue between our different spiritual traditions, which help create peace with the earth and peace on earth.
- contribute to new narratives about what life in a climate-friendly future could involve, not only materially, but also spiritually and existentially.
- support the climate transition at all levels through dialogue with decision makers, joint activities and persistent intercessions.

- contribute in words and actions to a fair and just transformation of society, so that special consideration is shown to those living in poverty and vulnerability, to future generations and to creation, in other words, those whose voices are not heard.
- show through our investing activities that we are leaving fossil investments and are investing in sustainable solutions.

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Page 63	Photo: Bernt Enderborg/Ikon, Rood cross (triumphal cross) from Öja Church, the island of Gotland
Page 64	Photo: Gustaf Hellsing/Ikon
Page 73	Photo: Helen Wiik-Andersson/Ikon, Solar cells on Vargön Church
Page 82	Photo: Getty Images
Page 90	Photo: Mark Earthy/TT "Save our planet"
Page 95	Photo: Adam Ihse/TT
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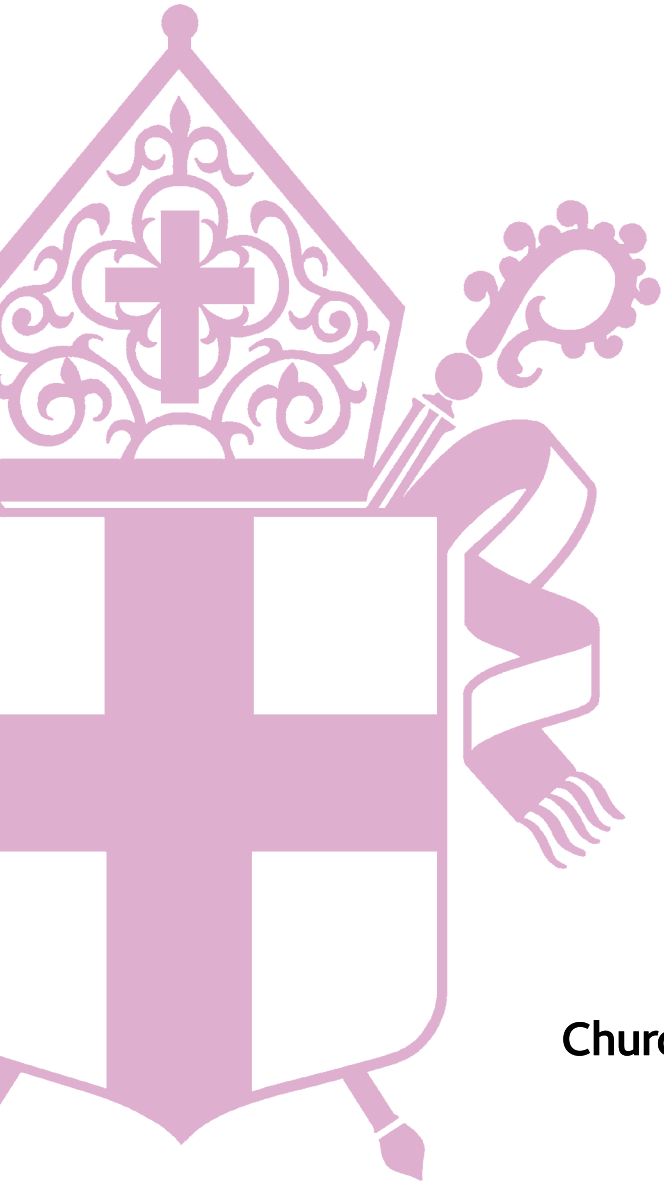

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