### Visualization texts: Create your future

This document contains texts to be read aloud before working on the different climate challenges in the 'Create your future' workshop.

- There is one text for each challenge.
- At the end of the document, there is a text that includes several of the challenges.
- When necessary adjust the text to make it relevant to the group and/or the situation you work with.

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# **Challenge:** High temperatures that involve risks to human and animal health and wellbeing

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

#### It is now the year 20XX (50 years from now). You get off the train and go for a walk.

You find yourself in a town. The date is 17 July 20XX (50 years from now). Summer came early this year. High air temperatures were recorded as early as May. From the end of May until mid-July, there was hardly any rain in the region. A hosepipe ban has been in place for a long time. Groundwater levels have dropped, and are now at their lowest ever recorded levels.

There is a new high pressure system above the area, and the temperature is rising further. On some days, the maximum temperature reaches 35°C. The nights remain warm and do not provide any real coolness. There is no wind, and the heat is oppressive. The air is relatively dry. The forests and land are extremely dry, and there is a high risk of fire.

The water temperature of the lakes is at a record high, and the sea is also warm.

As you walk through the town, you meet people and stop to chat with them. Everyone certainly thinks it's very hot, but the heat doesn't seem to be causing any real problems for residents or the town's various activities. People and businesses have adapted to recurring high temperatures during the summer months. It's a different society now, with a different way of life during really hot periods.

The people you meet talk about how they manage to cope:

- Cooling food and avoiding food poisoning
- Tolerable temperatures in most indoor environments and on public transport
- Electricity distribution
- Domestic waste management and waste collection
- Cooling preschools, homes for the elderly, care homes and hospitals
- Reducing suffering for animals in the town, both wild and domestic

A few days later it starts to rain, but the fields are still dry. SMHI's forecasts show slightly lower temperatures and more precipitation in the future. The heatwave seems to be coming to an end for the time being.

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Flooding that threatens communities, infrastructure and businesses (torrential rain)

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

You get off the train and go for a walk.

The date is 23 August 20XX (50 years from now). The weather has been very warm, and a cold front is approaching. SMHI issues an orange warning for very heavy rainfall and very heavy thunderstorms for the area you are in.

Many parts of the region experience rain and thunderstorms during the day, and in the evening an even bigger storm comes in from the south. The thunderstorm is very strong, and the rain is extremely intense throughout the night. The largest amounts of rain fall in the central community.

When you take a morning walk around the town, you meet people and stop briefly to chat with them. Yes, it's very wet, but it's not a disaster. The water is rushing along certain streets, while in other places there is standing water and some properties seem to be experiencing problems with flooding. Various activities have been adapted to withstand torrential rain, and can continue to function well even during truly extreme events such as this one. It's a different society now, with a different way of thinking about heavy rain and surface water.

The people you meet talk about how they are managing to ensure that things continue to function at an acceptable level, such as

- Private and public roads
- Police, ambulance and rescue services
- Elderly care, schools and preschools
- Industries
- Insurance companies and clean-up companies

It will continue to rain for a few more days, but to a lesser extent. The water drains away and life returns to normal.

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Biological and ecological effects with an impact on sustainable development

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

You get off the train and go for a walk.

You are in southern Sweden on a beautiful day in 20XX (50 years from now). The climate zones have moved a good way north, and the climate has changed.

The effects of climate change on the area's nature, species and cultural heritage are noticeable, but are still limited. The flora and fauna have changed to some extent, with some species having migrated north and new species having arrived from the south. Natural forests and other wooded areas form extensive continuous stretches with many functions. They also provide a northern line of retreat for flora and fauna that have been affected by climate change. Outdoor recreation and energy production do not interfere with natural values, or with increasing tourism in both summer and winter.

Various activities in areas close to nature have been adapted to the new conditions. Accumulated knowledge has been used, and the effects of climate change have been taken into consideration at an early stage.

As you travel around the area, you meet people and stop briefly to chat. "Things certainly aren't the way they used to be," they say. The character of the landscape has changed. New structures for new activities, adapted to the warmer climate, can be seen everywhere. It's a different society now, with a different way of thinking about ecosystems and biodiversity.

The people you meet talk about how they have struck an acceptable balance whereby human activities do not interfere with nature's needs, for example in terms of:

- Urban expansion
- Agricultural industries
- Energy production
- Outdoor recreation

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Floods that threaten communities, infrastructure and businesses (rise in sea level)

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

You get off the train and go for a walk.

It's a chilly day in late autumn 20XX (50 years from now). You are in a coastal town in southern Sweden, and the first real storm of the winter has arrived. The water level is rising; the waves are getting taller and taller, and are striking the beaches with great force.

It is clear that the town has been adapted as far as possible to deal with risks from the sea. Buildings are positioned and designed to withstand today's extreme weather. It is clear to see which neighbourhoods have taken one of the different approaches to dealing with rising sea levels: retreat, attack or defence.

Further inland, you can see a residential area with tall buildings that have also been included in the innovative development. Here, too, measures have been taken to protect properties and other assets from coastal flooding. It is clear that there has been an ambition to achieve equitable climate change adaptation.

You walk slowly through the town in the strong wind. You meet people and stop briefly to exchange a few words about the storm. They point out various nature-based and multifunctional solutions that protect the town. It's a different society now, with a different way of thinking about storms and gradually rising sea levels.

The people you meet talk about how they currently deal with things such as:

- Municipalities' structure plans
- Protecting built-up coastal areas
- Climate change adaptation in sensitive natural and cultural environments
- Questions about co-financing
- Insurance companies' new policies
- Planned retreat/relocation of vulnerable buildings inland

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Increased incidence of pests, diseases and invasive non-native species that affect humans, animals and plants

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

You get off the train and go for a walk.

You are somewhere in Sweden on a beautiful day in 20XX (50 years from now). The climate zones have moved a good way north, and the climate has changed.

Climate change has generally increased the stresses on ecosystems, increasing the risk of invasive species becoming established. New tick- and mosquito-borne infections have started to become established in the warmer climate, and new pest species have appeared in agriculture, forestry and gardens.

Despite the new challenges, new ways of growing crops and using forests and land have resulted in resilience. Different crops, new varieties and different tree choices are used now compared to fifty years ago.

There is a good level of preparedness and an effective national organisation to respond to new threats. The public is also involved, and helps with the work. The healthcare system has knowledge and procedures to deal with the new diseases.

As you travel around the area, you meet people and stop briefly to chat with them. Many things are different now. But people seem to be spending time in the forests and the countryside without fear of new infections.

The people you meet talk about the current situation:

- How agriculture and forestry have adapted to new pests
- How wildlife management and plant protection legislation have changed
- Public knowledge and awareness
- Monitoring new vector-borne infections, and new medicines and vaccines
  Trade rules at EU and international levels

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Landslides and erosion that threaten communities, infrastructure and businesses

#### Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

#### You get off the train and go for a walk.

It is the year 20XX (50 years from now), and you are near a large river somewhere in Sweden. Despite unusually heavy rainfall in the area in recent weeks, the river banks appear to be stable. Nor have any major landslides affecting activities, homes or people been reported in the media. Car and train traffic has been running well.

In the late 2020s, Sweden suffered several major landslides that affected traffic between the northern and southern parts of the country for a long time. These events proved to be a turning point, with several extensive initiatives being launched to adapt our infrastructure to climate change and various financing solutions being developed.

The spot you are standing on is a popular lookout point, and people keep passing by. They stop to chat. Many things are different now. Road, rail and electricity/telecommunications infrastructure is extremely important, and it is clear that enormous efforts have been made to prevent disruption. It's a different society now, with a different way of thinking about infrastructure and landslide risks.

The people you meet talk about the current situation, such as:

- Land use
- Knowledge base and increased awareness of risks
- Right of ownership, legislation and financing
- Consultation and collaboration
- The planning process for new infrastructure
- Maintaining existing infrastructure

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Water supply shortages that affect individuals, agriculture and industry

#### Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

#### You get off the train and go for a walk.

It is a hot day at the end of summer 20XX (50 years from now). You are in southeast Sweden, in a beautiful valley with towns, agriculture and industries, all of which need water. Despite the prolonged drought, with very low flows in the river and abnormally low levels in the groundwater reservoir, the most important needs are being met.

Both businesses and the public are aware of the value of water, and that water shortages are an obstacle to robust societal development. Society is also prepared for periods of water shortages, and businesses do not have to adapt to unnecessarily stringent requirements when water availability is good.

Although we are now better prepared, much remains to be done. While access to water is decreasing, demand has also increased, partly due to the relocation of water-intensive industries from other countries to Sweden.

As you travel through the valley, you meet people and stop briefly to chat. Many things are different now. It is clear that a higher value is placed on clean water in Sweden than ever before. It's a different society now, with a different way of thinking about water.

The people you meet talk about the current situation:

- Conserving water
- Prioritising between different needs
- Planning in areas at a particularly high risk of water shortages
- Water supply, demand and water extraction

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

# **Challenge:** Impact on domestic and international food production and trade

Close your eyes and take a deep breath.

You have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks completely different.

You get off the train and jump on a bicycle that is waiting for you at the station.

It is a hot summer day in 20XX (50 years from now), and you are cycling around the countryside. You cycle past farms and a small forest area, and eventually stop at a bay. It is hot and dry, but there is a water reservoir nearby.

You meet some farmers who tell you about the disastrous summers around 2025 when many crops were destroyed by drought and pests. At the same time, there was a war elsewhere in the world that affected international trade. The combination of drought and war caused food shortages, disruption to supply chains, electricity shortages and eventually migration flows. The farmers also explain that crops and trade flows are still affected by extreme weather and international conflicts, but to a manageable extent.

It's a different society now, with water management, international cooperation and trade agreements/treaties for preventive work to ensure food security. Major famines have also been prevented through trade and redundant supply chains.

The way we think about international trade and food production has changed, and you hear about:

- New international treaties
- Knowledge, access to data and new irrigation technologies
- Prioritisation in the event of acute food shortages
- Developing new resistant crops
- Long-term planning in food production and supply chains

Suddenly you are back in the present day, in 20XX (current year). Take a moment to think about the thoughts you have had. Open your eyes and write down what you saw in 20XX (50 years from now).

#### Future vision – a warmer country

You and your colleagues have just boarded a train after an interesting meeting in a nearby town. The train is gradually getting faster and faster. Isn't it going a bit too fast now? You are suddenly blinded by a bright light. When your vision returns to normal, the landscape outside looks different.

It's August 20XX (50 years from now) and you soon see the silhouette of your town/area appearing. But not much of it looks the same. The surrounding landscape looks different. You go into the town and see some buildings you recognise, but the urban landscape is otherwise new. You get off the train and start walking.

During the last month, a long heatwave has affected both humans and animals. It has not rained since May. A strong high pressure system is now above the region, and temperatures are rising further. You seek out shade and maintain a calm, leisurely walking pace.

As you walk through the town, you meet people and stop to chat. Everyone certainly thinks it's very hot, but the heat doesn't seem to be causing any real problems for residents or the town's various activities. People and businesses have adapted to recurring high temperatures during the summer months. It's a different society now, with a different way of life during really hot periods.

A few days later, a cold front approaches. During the night, an extreme thunderstorm comes in from the south. The thunderstorm is very strong, and the rain is intense.

The next morning, you go for a walk in the town. You meet people and stop to chat. It is still raining a little. The water is flowing along certain streets, while in other places there is standing water. Yes, it's very wet, but it's not a disaster. Land and activities have been adapted to withstand torrential rain, and can continue to function well even during truly extreme events such as this one. It's a different society now, with a different way of thinking about heavy rain and surface water.

The next day, you and your colleagues take a trip outside the town. Heatwaves and torrential rain also affect flora and fauna in the countryside and in the forests.

New pests, invasive species and new vector-borne infections have arrived in the county, but there are ways to manage them so that they do not cause too many problems. Farmers and foresters have also learned to cope with more extreme weather. They use adapted methods and choose crops and trees that can cope with the changed climate. The degree of self-sufficiency for several foods and input goods has increased. It's a different society now.

During hot, dry summers, there are obvious water shortages. When you talk to people, they say that there is good preparedness and there are established systems for dealing with water shortages. People and businesses have adapted, and are functioning well. It's a different society now.

You go back into the town and visit a company which carries out extensive international trade. Climate change in other countries and on other continents has led them to identify new trade chains for the things they need for their production. Cross-border cooperation is strong, but has changed in character since the 2020s. It's a different world now!

You come back to the present day, in 20XX (current year). Take a moment to think about what you saw in 20XX (50 years from now).