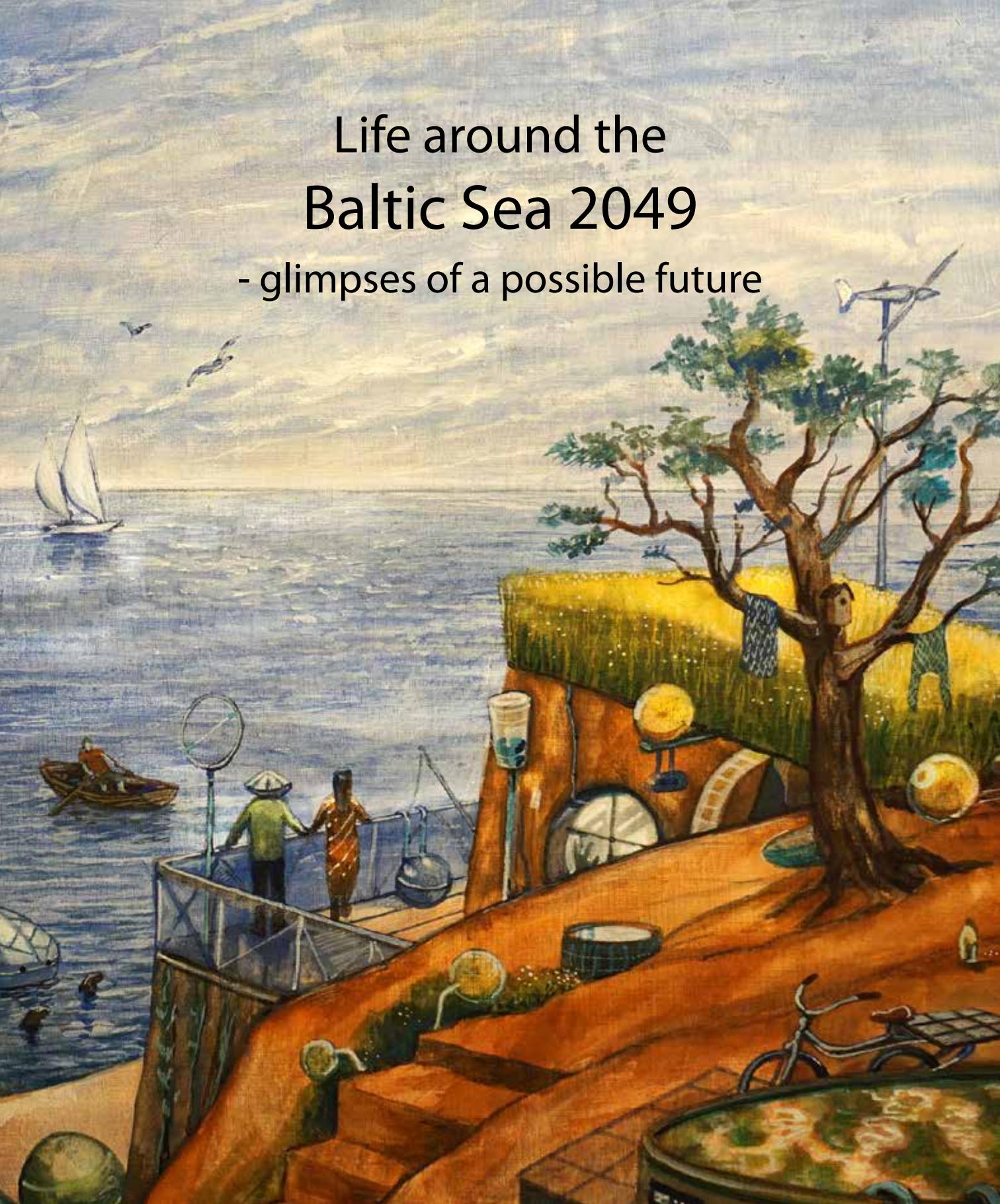


Life around the Baltic Sea 2049

- glimpses of a possible future



The vision of life around the Baltic Sea in 2049 was wrought in an age shaken by summer drought and winter storms, alarming reports and political turbulence. It spans over vibrating tensions between crisis and opportunity. The point of departure is positive: "We made it! The Baltic Sea is recovering. How did it happen? What will our lifestyles be like?"

In 2049...

- ... more of our daily routines are connected to basic human needs, such as food, water and shelter.** *Page 7*
- ... we will not own as many things as we used to. We share jobs, houses, means of transport and tools, and we exchange time and services.** *Page 8*
- ... energy is a key issue: A patchwork of different solutions is in place, where we exploit local conditions and use many different sources in parallel.** *Page 9*
- ... water reuse is standard procedure, also at home. Treatment plants are water factories delivering clean water and agricultural nutrients.** *Page 11*
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- ... intelligent use of resources is a wild mixture of low tech and high tech. Both are needed, but there is a real risk for polarisation in society.** *Page 18*
- ... we live healthier than before in many ways: We eat healthier food and we move more. Medicines can cure almost all diseases – but not for everybody.** *Page 20*
- ... we value time higher than money – and studies show that people feel better than 30 years ago, despite the material challenges.** *Page 22*
- ... the awareness of the value of resources – such as water, soil and food – has grown a lot among regular people and is part of all education and activities.** *Page 24*
- ... as far as sea life is concerned, the body of regulations is all encompassing and holistic, so that different activities can benefit each other through planning efforts.** *Page 25*
- ... the Baltic Sea is warmer and more brackish and new species have immigrated. However, the sea is also cleaner and healthier due to reduced pollution.** *Page 26*



Life around the Baltic Sea 2049: glimpses of a possible future
Clear water lapping onto cliffs warmed by sunlight, the portable aquameter indicating green for swimming, despite the fact that it is mid-July. Children splashing water, seagulls happily fighting over yesterday's fish guts and the roach fish pie is yummy. Who would have dared to think that this idyll were possible 30 years ago?

Yes, who would have dared to think that the Baltic Sea in July could be free from blue-green algae, that there would be more seabirds than reeds in the inlets, that fish would be numerous and healthy to eat again?

It is the year 2049 and much of what seemed hopeless in the beginning of the 21st century has been turned around and restored. The EU Water Framework Directive, the HELCOM Baltic Sea Action Plan and the Global Sustainable Development Goal 14 turned out not to be paper tigers only. The emissions of toxic substances and nutrients have been reduced and even if the restoration still is in progress, the Baltic Sea is recovering. So let us enjoy the sunshine and the swimming today. We will be reminded of all the other things when we travel home with our cyclomobiles this evening: forests dried

brown, dry crops lying down in the fields. What happens if Europe's harvests fail yet another year? What about the ever more hostile fresh water negotiations in southern Europe? Is it really a good idea to build a fresh water duct southwards? What power do small countries in the north really have if power relations change?

FROM WORKSHOP TO VISION

But wait – what is this really? First summer idyll and clean water lapping onto the cliffs. And then, a feeling of an approaching catastrophe.

Every year the Åland based foundation Östersjöfonden organises the seminar *Get to know your neighbour*: a venue for informal discussions and contacts around our common inland sea: beautiful but polluted, important for our livelihood, but with wide dying bottom areas. In preparation for the 30 years anniversary of the Östersjöfonden, the participants – a select number of prior award winners and partners – have been given an assignment: to draw up a vision for the future. What will the Baltic Sea be like in 2049, at the 60 years anniversary? Politicians, activists, researchers and civil servants participate in the vision workshop: a highly qualified number of representatives for 90 million people in nine countries bordering on the Baltic Sea. The point of departure is positive: "We made

ADELE, 10 YEARS OLD, LIVES IN A SELF-SUFFICIENT COMMUNE AND RUNS ITS AQUAPONICS SYSTEM WITH HER GRANDFATHER.

"Early potatoes should be in the pot no later than 20 minutes since they have come out of the earth," my grandfather says. It is he and me who have cooked today. We selected the biggest fish from the aquaponics system and I gutted one myself. It is a bit disgusting but quite fun because granddad explains well and makes fun about everything.

Now we are eating fried tilapia with early potatoes and salad in the big kitchen and it is probably the best food I know. Summer food is so much better than winter food. In the winter, we often have grasshoppers with sauerkraut and peas and beans and salty pork and such. "If rich people were to know how good lives poor people have," grandfather says with his mouth so full of food that pieces of potatoes are flying across the table. Mum looks at him critically. My younger brother Adam giggles.

Mum, dad, me and Adam and my best friend Tingeling and her parents live in the big house. And our cat, Matrix, who is given that name because of some really old film. There are seven more kids here at the farm, and a number of dads and mums and sheep and goats and chickens and cats and bees and rabbits. And grandmother and grandfather live in the little old house at the forest's edge, because "it is better that we old folks get flattened if the pines fall over in the next storm," granddad sometimes says.

Granddad and me run the aquaponics system. It looks like a greenhouse from the outside, but there is also water and fish in it. It is called a closed loop, because everything goes round and round. We compost our food rubbish so it turns into earth

it! The Baltic Sea is recovering. How did it happen? What will our lifestyles be like? Yet, there are no utopias. Maybe that is because the year 2019 is no ideal situation. Even if agreements are signed and deadlines are kept, 30 years is not a long time. Still we are in a greater hurry than that if we want a living sea which can nurture us.

A few statements from the discussions:

"We take for granted that we will be able to live more or less like we do today, but we won't be able to."

"People are afraid to lose something – in particular losing to someone else. How can this be changed? Either we find the answer to that question – or otherwise change will be impossible."

"Even if many people are engaged there still are many unresolved questions, first and foremost regarding who is going to do the work and who is going to pay for it."

"We can no longer take for granted that our nature is an infinite resource, always accessible. Knowledge, courage and a total overhaul of today's economic system are required. How will we get courageous leaders who can take uncomfortable decisions?"

"The drought in 2018 was a warning signal. Åland cannot survive one such year more and we must demand that our politicians take the courageous decisions."

or food for fly larvae that the fish get to eat. And the fish poop in the water, and that fertilises the plants that float on top of the fish. And then we eat the fish and the vegetables; the fish guts and the haulm go into the compost ... and so it goes all the time. "If we take care of all the nutrients it is worth more than gold," granddad says, "but if we are not careful it ends up in the sea, and there it is almost as bad as poison." On top of that, it is good to have as much as possible of what we need at home at the farm, especially food. The grown-ups talk about that all the time. "For you never know what the world will be like next year," they say.

We also have fruit trees and berry bushes. And many kinds of plants. If a plant dies one year because it is too rainy or too sunny, there will be other kinds to get food from. Mums nettle orchard is always in good shape, perhaps because it stings. We eat dried nettles and rosebuds in the winter to get vitamins and mum makes nettle balm, which is good for everything. All the grown-ups are good at something, such as building things or taking care of animals or singing or resewing clothes. "We try to live in balance with nature," mum says, "and all are needed to help out." When my younger brother tags along with Tingeling and me, I do not feel that he is very useful. But after dinner when all the children are outside playing smuggling refugees or inundation, we have great fun. When I grow up, I would like to take care of animals and draw and paint things. What I like most is to draw things with my friend Tingeling. All the adults save paper bags and pieces of cardboard for us to draw things on and every year we have an exhibition during the Midsummer Festival. In the winter when it is dark and wet, I'm envious of the children in town who are able to go to the Technoteque every day. However, in the other seasons I would not want to live anywhere else in the whole world.

The discussions are full of hopes and threats, concrete measures and uncertainties. Even if climate change has been slowed down, it has hardly been stopped. Extreme weather, drought, lack of fertile soil and other resources, masses of refugees and struggling democratic systems in the wake of the crises are there, even in the brightest future scenarios. Regardless what international agreements are signed, the problems we have accumulated will not disappear overnight.

The vision of life around the Baltic Sea in 2049 was wrought in an age shaken by summer drought and winter storms, alarming reports and political turbulence. It spans over vibrating tensions between crisis and opportunity.

What will the consequences of our choices here and now be in the long term?

How to distribute resources in times of increased scarcity?

Is it high tech or low tech that is going to build our future?

What decisions are to be taken at what level so as to produce as great an effect as possible?

HERE YOU ARE: A FEW GLIMPSES OF A POSSIBLE FUTURE, MULTIFACETED AND ENIGMATIC AS REALITY ITSELF.

JOEL, 74 YEARS, HAS BEEN AN ACTIVIST ALL HIS LIFE. FORMERLY A JOURNALIST HE IS NOWADAYS MOSTLY A LIGHTHOUSE KEEPER AND PHILOSOPHER.

It is me who keeps the lighthouse this week. It really manages itself, so I only need to check on the biodiesel generator if there has not been any sunshine. I like being here around the lighthouse. I can have my coffee when I want, such as in the middle of the night, not bothering anybody, letting time flow in its course as the light from the lighthouse pours out across the sea. There are a few of us living out here, taking care of the lighthouse, fishing, hunting seals and growing potatoes in the bladder wrack piles on the shores. We coordinate the collection of data regarding the state of the Baltic Sea and we keep an eye on who is moving on the water. We are civilians of course, but with powerful binoculars and we know whom to turn to in case we see something unusual. Imagine, this is exactly what I used to dream of when my life was taken up by work, small children, and volunteer work in the big city. And now, I am here.

I am the activist type of person, always have been. As a young person, I was the angry vegan. I chose to be a journalist to change the world, documenting nature and wildlife being damaged by human emissions. I published pieces on the damaging effects of plastic rubbish and hormones in the Baltic Sea. However, despite the wide circulation of my reporting, nothing happened. For a while I was one of them who recommended a state of emergency in Europe to find the means to take sufficiently effective measures to balance climate change fast enough, regardless if people and enterprises wanted this or not. I ran for offices in a number of elections as well, but I was probably too extreme. For a while, I

In 2049, more of our daily routines are connected to basic human needs, such as food, water and shelter.

Our part of the world has remained relatively spared from extreme weather and lack of water. However, here too, it is now more common that harvests fail. Energy is expensive and so are imported goods. Even in big cities, agriculture takes place on roofs, walls, and balconies. Food security, regional self-sufficiency, and pooled crisis supplies are self-evident. Biological protection and sturdy plant varieties are also needed, since climate changes have brought about increased amounts of vermin, and traditional pesticides have been banned. Periods of drought interchange with wet and grey weather periods. Large areas of agricultural land need to be restored after decades of industrial farming. However, the growth season is longer now and during good years, we get two harvests. The vulnerability has been reduced with new farming methods, new plant species, reintroduction of older varieties, as well as by using many crops in parallel.

It is now self-evident to think in terms of recycling and sustainability. A farm is not to have more animals than it can produce fodder for, and it is the manure and leguminous

lost hope completely, and felt that I might as well live an elegant and comfortable life, since there was nothing I could do for the planet anyway. But that was not as fun as I had thought. I turned unpleasant and cynical towards those who tried harder than I did. In addition, I was wrong. I no longer feel that there is no hope, although I find it hard to explain what I mean by that. Hard times make the best in humans come to life. Today, marvellous things are going on, both locally and globally that would not have been possible 20-30 years ago. I am old now, so I tend to think that everything is meaningful in some way. I want to enjoy the rest of my time on this planet, without stealing more from the children of the future that we already have.

We live an isolated life on our windy island, just like lighthouse keepers always have. The autumn storms are massive nowadays and we are not always able to harvest our potatoes. However, the 19th century houses are built to last and we have sufficient stores of dried groceries and freshwater. Simple solutions are often more resilient than the comforts of civilisation. We are equipped to weather the storms and prepared for blackouts, days without access to the web and to having porridge for dinner too.

I was born into an abundant society where our identities were linked to our possessions. Now we have got used to living a simpler life and society cannot deliver the same welfare as earlier. In times of scarcity, everything boils down to distribution systems. We are not used to being dependent on each other and for sure I am afraid of growing old and sick. However, I believe that young people today are more capable of building a sustainable society and a new economic system that us old folks who are still stuck in our old ways.

plants produced at the farm that fertilise the fields. Farms that bind more carbon dioxide than what they liberate into the atmosphere are given tax cuts, and organic waste is converted into biogas or fertiliser. One advantage of the increased need for practical work to be done – such as producing food, maintaining water treatment systems, or looking after children – is that it is easy for people, also for immigrants, to contribute as much as they are able to. Contributing with workdays can also be an alternative to paying tax. All hands are needed.

We have needed to learn new ways of thinking about food and we have also widened our view of what is edible and how food can be produced. Invasive species of fish and species that were seen as worthless earlier are considered as proper food today. Both seaweed and mussels are cultivated in the Baltic Sea and insects and legumes are considered as regular protein intake. Some 30 years ago, food production equalled 40-50% of our ecological footprint. Now our changed habits have cut down emissions of greenhouse gases within food production by 80% compared to in 2019.

In 2049, we will not own as many things as we used to. We share jobs, houses, means of transport and tools, and we exchange time and services.

Most people work less than before. It is easier than before to live inexpensively, but more time is also needed to meet our bare necessities, as we no longer buy everything readymade. In 2049, it is seen as normal to own collectively, borrow, trade, take over and share. We repair, reuse and make things ourselves instead of buying everything new. In many places, there are local currencies or time banks so as to facilitate trading between multiple parties.

The nuclear family is not dead, but is not culturally central as before. An increasing degree of self-sufficiency produce various types of kinship, not solely based on consanguinity and couples, but also on basic necessities such as food, clothing, heating and shelter. All generations are catered for, but everybody needs to contribute to their household. As the safety nets of our societies are shrinking, citizens invent new types of collective and cooperative solutions to everyday life. It is then an advantage to have complementary roles and competences.

Back in 2019 mobile phones and computers were expensive for families to acquire since everybody was expected to own such. Hence, the electronic dumps grew massive. Technology has continued to develop, but today it is only the very richest who can afford luxuries such as speaking household appliances and virtual entertainment. The Technoteque is the solution: Here all the equipment that is needed in a digitised world is available, but in the form of a common resource, and not as privately owned assets.



In 2049, energy is a key issue: A patchwork of different solutions is in place, where we exploit local conditions and use many different sources in parallel.

Fossil fuel as a cheap and powerful global lubricant has had no heir to its throne. It is still there, but is heavily taxed and regulated. Instead, energy from the sun, wind, waves, as well as geothermal energy, biogas, biodiesel and bio-carbon, even human motion and activity, are used: every type of energy for multiple functions, often reused several times. Our means of storing energy in batteries have improved and clever energy distribution systems between small-scale plants, running on renewable energy, are in place. In spite of this, energy is still a scarce commodity, even though we have the competence and

the technology to do almost whatever we want. The eternal apple of contention is therefore the question of who is allowed to use the energy. Who decides who has priority? In such a situation, self-sufficiency is a great advantage.

In 2049, the countries around the Baltic Sea have a common energy strategy in place, focussing on renewable sources of energy without adverse effects on humans and the environment. Municipalities and towns manage regulating and coordination to maximise local predispositions and temporary fluctuations, but the actual energy generation is decentralised and comes in all kinds and sizes. Total energy use limitations are strict, but it is the results that count: how the standard is achieved is less regulated. Regulations have been drawn up to allow for solutions not yet thought of: In times of low predictability, testing new ideas is supposed to be easy. However, every entrepreneur and every citizen are held accountable for their actions. Who pollutes, pays for it. Importing goods require warranties that their production has not polluted the environment more than if they would have been produced in the Baltic Sea area.

Rapid trains and hydrofoil ships replace most air travel and the vacuum tube train network is under construction between Europe's capitals. Most sea shipping is running on a biogas and wind energy mix. However, all transport is more expensive and we have

**LINE, 35 YEARS, LIVES BIG CITY LIFE,
WORKS FULLTIME CUSTOM DESIGNING
PEOPLE'S ECO-BUDGETS, AND IS TRYING
TO HAVE CHILDREN WITH HER HUSBAND.**

The woman in front of me on the picture wall is a little older than me and looks tanned and strong. She has happy eyes and wrinkles from laughing, even if she is looking a bit sullen right now. However, so far the standard increment for "unused resources" is the best way to include the subsistence farmers too, in some kind of system and statistics, even if they grow their own food and make, trade and share things with each other instead of buying them in a controllable way in shops.

- The point is we are really trying to avoid red-listed goods and superfluous consumption, she says, trying to explain one more time what I already have heard: Their farm is a carbon sink, taking up more than it emits, so the system is punishing their efforts instead of rewarding them.

- I understand your frustration, I say in my most professional voice. It happens automatically, since I meet so many unpleasant people. However, this time it is not fair. I start all over:

- I agree with you that the system is a bit clumsy. However, thanks to the fact that your bio-carbon plant is certified, at least I can give you the lowest type of increment. She shrugs her shoulders, mumbling something about being able to afford a bit of French wine sometimes. I would trade all wine in the whole world for two children, as she has, but I do not say that. I can see in her file that she has children and that influences her eco-budget. Nevertheless, the rest is none of my

got used to less rapid solutions. Normal people spend their holidays at home or travel propelled by human or renewable energy. The young explore the world through adventurous volunteering missions, such as building protective walls to the sea at Europe's coastal cities or housing for refugees. Very few of the young have experienced rain forests, coral reefs or even palm trees on a sandy beach other than as holograms at the Technoteque. However, school study visits have been enabled by this new kind of educational travel in time and space.

**In 2049, water reuse is standard procedure, also at home.
Treatment plants are water factories delivering clean water and
agricultural nutrients.**

Climate change has produced more uneven water access, with rain periods and droughts in succession. Water storage is critical to be able to access water during dry summers. The fundamental idea is that water is something we borrow and not own, and that it is to be circulated, cleaned and returned. Two taps at the sink is standard: one for drinking water and another one for other types of use. Water from washing hands and showering is filtered, to be used again in the household, for flushing toilets or for irrigation.

business. Riches can be many different things and this woman and I have entirely different types.

My job, eco-budget consultant, is quite new still. I can make certain changes in people's account settings and give advice to those who wish to apply for major alterations and exceptions. However, most of my time is spent training people in how the system is functioning as well as advising those who find it hard to make both ends meet. The personal eco-budget system is a way of rationing goods generating high levels of carbon dioxide emissions or otherwise burdening the ecosystem. The rules are complicated, however. Some win, others lose and not all people are good at staying within their budget limits. Most of all, people dislike having their acquisitions inspected. And the person who is targeted by their frustration, is me.

The rugged mother of two is my last client today. It is time to remove my professional nametag and to go back to just being myself. The deli on the corner has put aside our nutritionally calculated dinners: seaweed noodles with fish balls and a pile of herbs, but not equally large helpings for Erik and me and with different side dishes. All is produced locally and in a sustainable way, so I do not even need to produce my eco-budget card. I will take the tram to my house. A bit of running before dinner will make me relax. That is important, especially at this point. And to avoid worrying and negative thinking, too. There is still a small chance we will get pregnant, with a little medical assistance, if we behave correctly and stay physically and psychologically fit. There is nothing wrong with us. We just happen to be children of the hormonally disturbed generation before us, not as fertile as we would like to be. Therefore, we keep our fingers crossed – and do what we can.

In addition, most people have dry toilets nowadays since it is regarded as primitive to mix human waste, chemicals and medicines with water, when it can be treated otherwise. The dry toilet contents is composted, to be turned into efficient fertiliser or biogas.

The fact that fresh water is a scarce commodity has led to the discussion of who owns it. Who has the right to decide how this key resource is to be used and distributed? More or less fair rationing procedures are in practice in dry regions. In our area, it is discussed what amounts of water consumption are reasonable. In 2049, the guideline is that the fees for a basic consumption level are low, but that they rise steeply for those who often want to take long showers, etc. In agriculture, rainwater is obviously used, instead of wasting purified water. Those who start up new industrial activities must account for how the water is to be circulated.

Water use and management is a mix of centralised and decentralised solutions. Legislation is the base: strict building and circulation standards, rules for collective ownership and cooperative water systems. The laws are drawn up with a view to allow for adaptability to local dispositions and challenges: from big cities, to farmland and archipelagos. Both the Baltic Sea and other lakes and waterways are in the process of recovering from

BENJAMIN, 49 YEARS, IS AN AI ENGINEER, CREATES INTELLIGENT FRESHWATER SYSTEMS AND MAPS THE BOTTOM OF THE BALTIC SEA IN HIS SPARE TIME.

I have green juice for lunch: a perfect mix of green leaves, algae, milk acid bacteria and essential fatty acids. Afterwards, I go for a swim. It is the sea and me every day of the year, regardless of temperature and temperament. Today is a breezy day with high, capricious waves. Maybe a rope with a loop at the dock ladder would be a good idea if something goes wrong.

My drive is to find solutions. I was allergic as a child, a typical child of the chemical substance society, but I have built up a perfect health. I am not so good with people, but I have arranged my life so that I have all the technology I need to work from home. In addition, I live on board a boat. I get electric power from a small wave power plant, I have no worries about variations in the sea water level, and when I am off work, I can unmoor without even getting dressed. My whole job is about finding solutions. I create intelligent water systems that save expensive freshwater and clean it efficiently enough to allow it to circulate in several steps.

Water really interests me most of all. I also find artificial intelligence interesting, which happens to be a very good way of controlling the water cleaning process. Sensitive sensors transmit information that I as a human cannot register. I create algorithms through my programming that detect patterns and process beyond my own perception. I feed parameters and questions into the system. Then the software analyses the materials. It finds similar bacteria, hormones, and uni-

the overconsumption party of the petroleum era, so putting a halt to eutrophication and impacts from chemical substances such as pesticides, drugs and micro-plastics have had high priority for a long time.

In 2049, decision-making has been decentralised to a great extent. Society provides the structures, but citizens contribute actively and have more responsibilities.

The economic and ecological turmoil of the 21st century has tested the sustainability of societal structures. Many weaker democracies have succumbed and given place to totalitarian rule. Hence, international treaties are implemented through increased supervision of the citizens. The Scandinavian countries have taken another, and often slower and more cumbersome road, struggling with the questions: What is the role of the state, and what needs to be dealt with locally? How can society point out general directions and yet allow for new, creative solutions? In order to assure the well-functioning of recycling and such, cooperation between different sectors is required.

identified chemicals, as well as ways to manage them. What filters are to be connected and what emissions need to be investigated further? When is it necessary to issue an alarm? In complex water systems, such as in industrial plants or in city blocks, artificial intelligence determines which water can be used for what and selects cleaning methods. As for myself, I lubricate the system so to speak. I refine the software code, stretch the limits as to how far the system is able to govern and repair itself, and I react when there is an alarm.

Today there was one of those alarms as a wave of food poisoning was connected to vegetables from the hydroponics enterprise Cave Food that grows them in old garage buildings. Maybe rainwater has leaked into the system – or, maybe more likely, it is the human factor. It is a scandal of course. Not that stomach flues are rare nowadays. If the cleaning fails ever so little, the bacteria start growing exponentially. For this reason, I have desalination and cleaning equipment on board my boat.

If there had not been the alarm, and if there had been less wind, I would have had other plans for the afternoon than this boring troubleshooting with giant logistics charts all over the picture wall. I am a member of an all-Baltic association that maps the state of the seafloor and reports the findings to the Baltic Sea hydrological institute. We have the habit of working simultaneously with the picture wall on, chat a little and maybe end with a beer together. It is a good setup for me, with the rest of the world at my fingertips, both ON and OFF. Today I had been looking forward to ON. I reckon I will have a beer on my own at the end of the day.

Both small and large municipalities act as testing grounds for the solutions of the future, not only in technology, but also regarding social projects, resource distribution and education. In a sense, the entire society is a testing ground nowadays, with a succession of experiments: At what level are we going to make what kinds of decisions to reach our maximal potential efficiency and flexibility? The UN, the European Union, the Baltic Sea Region, The Nordic countries, the nation states, the municipality? Or even the family or the individual?

One slogan has rooted itself: "Private simplicity, collective luxury", meaning that the common resources are to be invested where they can benefit the many, whereas each private household lives a more basic life. The common area includes education, care, culture and access to technology. The society provides the framework and pays for special competences – whereas much of the actual work is carried out by volunteers or as workdays, as an alternative to paying taxes. There is no longer any fixed pension age,

KIM, 41 YEARS, RUNS A GROCER'S SHOP WITH HER PARTNER ALEX, AS A PART OF A LOCAL GROCER'S COMMUNE, THINKING ABOUT FOOD AND ECO-BUDGETS.

Is there anything more sensual than a grocer's shop? Burying your hand into the grey peas and lupine beans, tasting a handful of dried blueberries and filling the lungs with the special atmosphere of a room filled with many different smells. Jute sacks, dried goods and spices. On top of that, fragrances varying according to the seasons and the latest deliveries: fresh bread, honey-smelling wax cakes and ripe apples, the raw smells of seal meat and other game. When I was a child, the grocer's did not smell anything in particular, since every product was wrapped in plastic. Today we sell most things in bulk and all packages can be reused or composted. - What is there to buy today? people ask as they enter the shop with their jars and bags. It is necessary to grab the opportunity, as special deliveries are capricious and seldom sufficient. A couple of buckets of fresh roach, a dozen of jam jars. Maybe even exotic fruit or chocolate.

A small general store like ours cannot afford the technology that is associated with hyper-personalised food and customer recognition, digital shopping lists and health meters. Nor do we have contracts with large-scale mushroom, vegetable or mussel growers with the capacity to deliver their products all year round. Our unique selling point is our communication with local growers and with our customers. And our knowledge, of course: How to prepare different produce and how to replace what is not in supply?

In addition to the till, we only have the mandatory software for eco-budget rationing. That is bad enough. I understand that the rationing is needed, but I hate to

since the elderly are more numerous and healthier. In a society no longer mainly financed by taxes on salaries, there is no longer as much funding available for pensions, and in one way or another all who can, need to contribute.

The local community is more present than before in people's lives. There is more focus on local resources and self-sufficiency, and recycling structures demand confidence, both between neighbours and in the system itself. As many people as possible need to feel integrated, so that they will want to contribute – also immigrants. Local decisions correspond to locally perceived needs. Simultaneously personal responsibility increases as well as the need for competence and courage in decision-making locally.

watch over people and I hate to feed information on people into a large anonymous data system. Who knows how that information will be used suddenly, without anybody's bad intentions initially? But that is the way it is. I chat with the customers and feed acquisitions classed orange and red into their carbon accounts. Dairy products, ham, coffee, spices.

Imagine, earlier we bought seaweed from Japan wrapped in plastic, hazel nuts from Turkey and South America and sunflower seeds from China, although all of that can be produced here. People overate sweets and readymade foods and artificial taste additives, even though they were able to buy better things than that. In a way, we eat better food now. Have not locally grown produce always been the highest form of luxury? Just harvested, just pulled up from the sea – what can be better than that, ever? The fact that some products only can be had during their season makes for a natural change, so that it is possible to appreciate foods more than before when everything could be bought all the time.

Alex and me are not the owners of the shop. We are part of a grocery commune where most members are growers who produce what we sell in the shop. Our contribution is the actual management of the shop. We feel like we are at the centre of the world as people and goods come and go. Food is essential and concrete – still pleasant and creative: In what plates does the crunchiness of the grasshoppers come out perfectly? How to highlight the mild seafoodiness of the roach meat? Which chutney and what side dishes soften the sharp taste of the seal meat?

Obviously, it does not make us happy when we open up a sack of walnuts and find out that half of its contents is made up of pinecones and small stones. We did pay for it. Nevertheless, in the end we always have food on our table, which perhaps is not the case for the walnut thief. Even if I cry over the loss, I know that the world is a tough place for many. We ought to be thankful for what we have.





Intelligent use of resources is a wild mixture of low tech and high tech. Both are needed, but there is a real risk for polarisation in society.

Technical development has not stopped – quite the contrary. In 2049, everything can be done digitally. On the other hand ones and noughts cannot be eaten. The old conflict between economy and ecology has turned into a polarisation between high tech and natural solutions, although both have a mission to fulfil.

Scarcity of resources and climate challenges have forced us to recede in the material sense. In 2049, a major share of our total work is used for basic human needs. However, there is a great difference to traditional agricultural societies: Simplicity and low tech is now combined with cutting-edge competences and advanced technologies, so that the existing resources will be used as efficiently and sustainably as possible. In the big cities, high tech solutions meet the demands for large-scale sustainability on a comparatively small surface.

Robots did not take over all work from people after all. As petroleum and minerals got more expensive, and as the economic safety of the workforce diminished, it was again

**DANIELS, 53 YEARS, IS A REFUGEE
COORDINATOR: AN URBAN CIVIL SERVANT
DEDICATED TO HIS WORK, BUT WITH
PROTECTED PROFESSIONAL IDENTITY**

My measurements confirm what I knew already, I feel fine. I have slept for eight hours, my blood pressure and my blood sugar level are perfect and my stress level is low. I read the news as I run on the treadmill – the electricity I generate is enough for the picture wall and the coffee maker – before I take a shower in cleaned greywater. Then I grind the ecological cooperatively grown beans for my daily cup of pleasure. I register how almost 1000 aromatic substances explode in my nasal and oral cavities after almost 16 hours without sensory stimulation. My breakfast has stood in water overnight: a fermented porridge with nuts and berries, with its nutritional contents calculated for a male of my age with my degree of physical activity.

I am still Daniels Kuus as I get out of the door, bicycle to work and am identified through facial recognition in the staff reception of the inconspicuous building next to the refugee coordination centre. Then I pick up my nametag on my way through the subterranean corridor, and turn into Maris Danielsson instead. That name is connected to my professional role, so I can do my job without constant threats and hatred. It is not me who determines who will be allowed to stay or where people are going to live. I am just one of them who organise the admission of refugees. However, this is difficult for people to understand. Many think we should keep our soil and our water to ourselves. They feel that too great resources are invested in the integration process. They do not realise that every single person who manages to establish their life here reduce the risk of exclu-

less expensive to have people do work, where it was not too dirty or dangerous. Other than governments, larger educational institutions and big enterprises, it is only the very richest and mightiest who have access to artificial intelligence, robots of various kinds and other technological luxury for their use or pleasure. A kind of parallel realities are created where low tech and high tech life styles are polarised and made accessible for different people.

In 2049, we will have seen several new generations of social media, communication methods, payment technologies, and political platforms coming and going. Yet technology still raises questions about power and integrity. Is artificial intelligence a threat or an opportunity? How should we use virtual reality, and what does it do to people? Who has the right to own what equipment and have access to what knowledge? Encryption gets ever more advanced, but so do the ways to circumvent it. The quantum computer can be a powerful weapon and in totalitarian states those in power have almost unlimited possibilities of supervising their subjects. It is more important than ever to check

sion, crime, and radicalisation. In addition, the conditions for life on earth have grown less predictable. Our luck may change. One day it might be we, who stand at some frontier, begging to be admitted, dependent on other people's compassion and readiness to share what they have with us.

Many times, I meet people that are so vulnerable, that they are unable to perceive that my job is to help them. Today, however, I know that my first meeting is going to be more constructive. I am to meet with an integration group that already have done their first language immersion and that apparently works well together and are keen to integrate into our society. It is great fun to try to find the assets and talents of these people. We do that together with their group tutors – specially trained day labourers and volunteers – with a view of helping them contribute to our society as soon as possible.

I am dedicated, but I do not want to burn out. Hence, when I take off my nametag at the end of the day, I also take off my professional identity. The subterranean passage to the inconspicuous building next to the Refugee Coordination Centre, works as my identity transformer. I work out after work, meet friends or run my own creative project, a small company importing health technology. Two evenings per week, I volunteer at the senior citizen centre where my mother lives. However, I never mention my job. I am single and fairly well off, since I live a simple life, with the exception of a few technical comforts. In the other evenings, my home is my castle: a 25 square meters well-insulated calm space with light surfaces, only a little furniture, large windows overlooking the Baltic Sea and a really good sound system.

facts and sources in news distribution, since all kinds of technical communication is possible to manipulate. We select our media and our personal influencers carefully – or disconnect entirely, move out into the forest and stop getting involved.

In 2049, we live healthier than before in many ways: We eat healthier food and we move more. Medicines can cure almost all diseases – but not for everybody.

By producing a larger share of the food locally, people eat more basic but healthier food: less ready-made, less chemical additives and empty calories. In parallel, food can be high tech and especially in big cities, hyper-personalised food is in fashion. In restaurants, one can have one's food personalised as to its nutritional contents and larger food retailers offer shopping lists according to personal preferences. Conscious customers want the highest possible nutrition for their money. All health parameters can be measured – this is a part of the high tech life style of rich metropolitan people.

At the same rate as people are healthier, health care systems have grown less equal.

CARINA, 82 YEARS, WORKS AS A TEACHER, HAVING SEEN GENERATIONS OF CHILDREN TRANSITING THE CLASSROOM TOWARDS THE CHALLENGES OF THEIR TIME

The only thing that can be heard in the classroom is the scratching of the pencils on the paper. These ten-year-old children look just like ten-year-old children always have as they work with a written task. The topic of the assignment is "My Favourite Animal". Mirjam is braiding her black hair. Sigurd is biting his pencil. They write by hand. Earlier we did not think this would be the case, as the entire future was spelled like d-i-g-i-t-a-l and fine motor skills were trained on the smart phones. My own children learned everything through screens, and they turned out all right too. However, as time went by, computers grew too expensive for schools. It also became apparent that children who did not write by hand a lot found it more difficult to read things that others had written. They had grown accustomed to the computer fonts to a point where they were unable to understand regular letters and shopping lists. Perhaps I am old-fashioned, but I think it is nice to teach children to communicate without expensive technology that can be controlled by someone else. There is enough data on these children anyway on the Internet, from DNA, hereditary disease and appointments with physicians to the salaries of their parents and their carbon budgets.

The purpose of school is still the same, giving the children the knowledge they need to become healthy adults who can manage life of their society. The multiplication table is still the same, but maps have been redrawn several times since I was a child. Biology focusses more on ecosystems, cycles and human influence on nature. Learning to read still is the most important task. However, today's children

Medical science advances, diagnoses can be produced earlier and more diseases are curable. However, society's resources for health care are reduced and many of the new cures are expensive. Expected life span and old age vitality have increased for privileged groups, thanks to technical and medical advances. For people who have fled from starvation and hardships, maybe from severely polluted areas, the situation is the opposite.

In 2049, medical ethics is discussed: Who is to benefit from expensive cures and on what grounds? Is it money, position in society, or age? An important question is how hormones and other potent chemicals are to be dealt with, so as not to burden the ecosystems or lengthen the life span of certain species in unnatural ways. Never have resource distribution and prioritisation been more difficult: We possess tremendous amounts of knowledge and the ability to save lives and we remember an age of boundless resources – a situation we are no longer in.

also have to learn to be deeply sceptic towards all they see and hear, since all digital information can be manipulated. Who says this, and why? Who benefits if this is true? As a teacher, I feel like a tightrope dancer every day. On the one hand, I am to teach the happiness of reading and the confidence of learning. On the other hand, I am to teach them to be wary and suspicious. I feel too old for that tightrope. I would like to take it easy and plot about my own little projects, like retired people used to earlier. After my three working days I have no more energy for anything that week. Nevertheless, I am grateful for my health and clarity of mind. I am thankful for the new heart medicines that increase my energy level, instead of reducing it. I am thankful to be able to help a few old friends who have not been as lucky with their health as I have. First and foremost, I really love these children and to teach them things. That, if anything, keeps me youthful.

We live in paradoxical times. The polar icecaps keep melting and in many parts of the world, life has grown difficult. Still the Baltic Sea is doing better, the poison level is being reduced and I feel that society has become less hard in some respects, with less stress and focus on performance. According to our curriculum, children are to learn to manage our planet. People who are aware of what they do to the earth and to each other, will make some kind of tracks. It is my job to teach Sigurd, Noon, Ingrid, Ahmed and the rest to believe in themselves and their ability to manage situations. Yesterday, they programmed robots at the Technoteque. Today we write and do maths. Tomorrow is nature day. We will take our bikes to the beach, bringing only water cleaners, fire strikers, knives and extra sweaters, hoping we will find something to make food from. The children are learning to see and use that which is there around them, take care of themselves, and cooperate. I wish that would have been the case a long time ago as well.

In 2049, we value time higher than money – and studies show that people feel better than 30 years ago, despite the material challenges.

Status is no longer determined by material freedom, but by freedom to manage our time: more quality time, less constraints, personal solutions for the different challenges in life. What is envied most is no longer objects, but personal abilities and generosity: to be able to afford something, or to have the energy and inspiration to share resources such as time, harvest or talents. Exposing oneself to physical and psychological challenges is no longer confined to extreme sports, but can also concern survival adventures, fasting or self-chosen silence, not very different from asceticism in traditional religions or rites of passage.

Humans are cultural beings with needs such as belonging, expression, playing and believing in something. There was a time when people attempted to fulfil these needs with material consumption. Now there is less room for that – so other dimensions in life have gained space. Cultural life flourishes in many ways. Culture and creativity are also prominent components of education and reception of refugees: Freedom of expression and communication is considered vital for people's self-esteem, as well as for tolerance,

MILLE, 38 YEARS, MANAGES A CARBON NEUTRAL FARM, GROWS QUINOA AND HEMP, AND IS SELF-SUFFICIENT AS FOR FOOD.

I like being near that which is growing. Here I squat, a grown human being, in the quinoa field with my children, my human plants, playing we are hares. We nibble on the leaves, waving our paws and ears (well) and move carefully so we will not damage the crop. I show the tapered quinoa ears that are to become our breakfast porridge, veggie burgers, and quinoa risotto this coming winter. The summer this year is hot and dry, so the orange flowers turn brown ahead of their time. We have collected every drop of water from our gutter system, siphoned up as much as we could get from a pond nearby and added some greywater from our house when the drought was severe. Thankfully, the quinoa is a resilient plant, hardened by the mountainous climate of the Andes in South America for thousands of years. Now we are growing a subspecies adapted to Nordic conditions.

The same goes for the hemp. My parents got upset as we started to grow it, because their generation associated the finger-like leaves to cannabis and drugs. But nobody can get high on industrial hemp. Instead, it is a fantastic old cultivated plant, with strong resistance to extreme weather, strong winds and insects. It yields nutritious edible seeds as well as fibres for ropes and textiles. How about 35 grammes of protein per 100 grammes of hemp seeds, compared to 27 grammes in beef? We produce oil, butter, flour, and protein powder. The fibres are used by the textile commune in the next village. The dungarees I am wearing today happen to be made of our own hemp. They never wear out, and will probably outlast me.

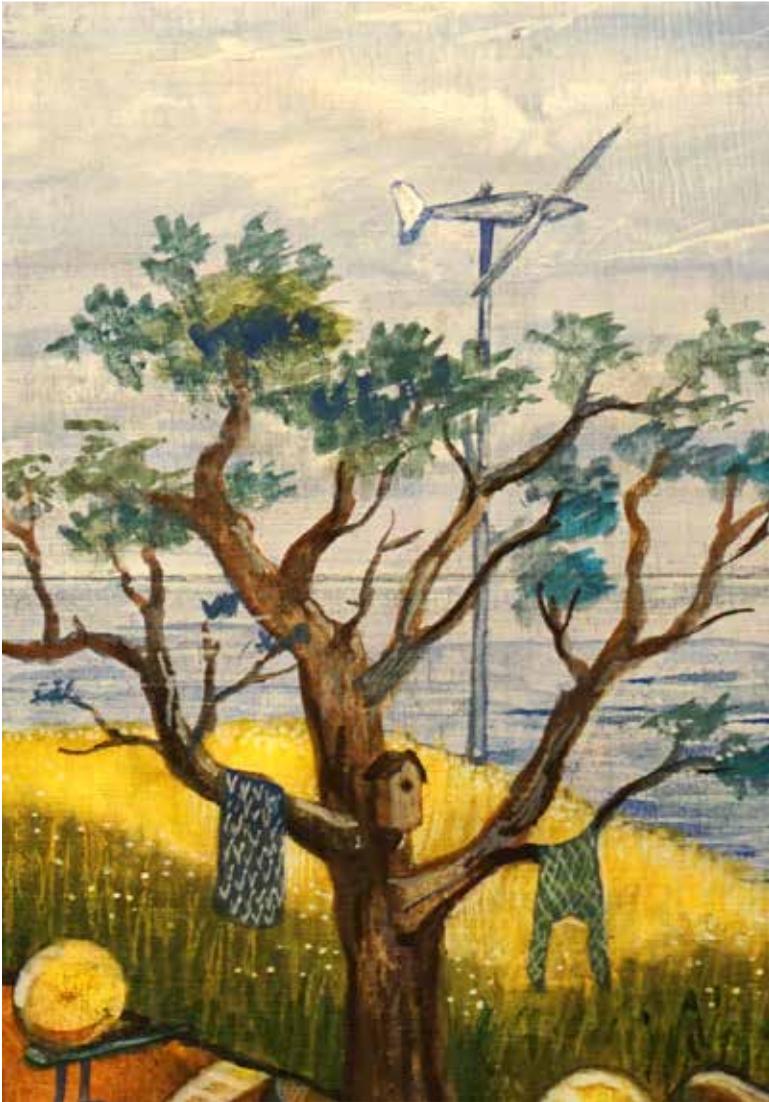
Life in the countryside is so hands-on. First we plant, then we work, then we harvest

respect and confidence between people. Tales of good and evil, the search for the meaning of life and for the proper place of humans in the world are present in all cultures. In 2049, we are more interested in these myths than ever before. We want to understand ourselves, each other, and our place in the world.

The challenges have created a kind of pioneering spirit where people feel that they are actively involved in influencing their own situation more than earlier. Despite the fact many have harder lives physically, both youngsters and older people seem to be doing better psychologically. Social control is stronger and we are more interdependent of each other, for better and for worse. Yet statistics show that we feel better and are healthier. Today we laugh as much as in the 50s: 18 minutes per day, compared to 6 minutes in the beginning of the 21st century. Is it due to the fact that we do more together with others now? Or is it because we no more can take as many things for granted, but remember to appreciate what we have? The world is less predictable. Everybody needs to assume responsibility, replenish their storages and contribute to the totality. We live with an ever present awareness of crisis, because we do not know what is around the corner. That leads to the effect that more people feel involved and needed.

and eat the result. We develop, reuse and reduce; we are inspired by each other and trade services, seeds and harvest. The machines are smaller and lighter nowadays to harm the soil less and to use less fuel. But they are expensive, so we own them collectively with other farmers and change auxiliary equipment according to the crops.

During the warm half of the year there is a lot of work to do, even though we use volunteers during the most intense periods. I can fall into my bed with my body aching in the evening, wondering how I am going to make it the next day. Still I seldom feel stressed, unless there is a torrential rain or a desert-like drought. And what a luxury to walk in the garden with the children a sunny Wednesday afternoon, weeding a little, picking green leaves and herbs for dinner, and to savour the sweetness of the raspberries. We check on the beehives and the little walnut tree that does not produce nuts yet. I show Mikola, four years old, how to lift up and hold a hen, so she will not be afraid and run away. We release the chickens among the berry bushes and the fruit trees, to seek fly larvae in last week's cow dung and kick around the manure where that is needed. All of this makes sense in an eternal cycle. A farm or a village is not to have more animals than it can produce fodder for, and the manure of the farm that is to be the fertiliser needed for the fields. We keep the arable land covered by crops a substantial part of the year in order to retain the nutrients. In addition, we bind a great deal of carbon by producing bio-carbon in our own kiln. This is good for our soil and good for the climate. Here at the farm, the world feels far away. However, we do care a lot locally. Sure, people are fighting, but we also cooperate and are there for one another in a better way than when I was a child. Life is good.



In 2049, the awareness of the value of resources – such as water, soil and food – has grown a lot among regular people and is part of all education and activities.

Sustainability, awareness of resources, and how to behave in nature and how to use resources without destroying them, are obvious components of education, information from authorities and integration programmes for migrants. We have better rules and clearer protection of natural resources such as water and soil, as well as for fishery, agriculture and mining. The gap between research, legislation and practical activities has been

closed to some extent. Interdisciplinary work methods and projects, where knowledge and resources are tapped into in more than one way at the same time, are prioritised to benefit all kinds of recycling and to increase resource use efficiency.

In 2049, we regard water and land as a totality. Forest and its harvesting is planned with regard to how this affects nature's resilience to storms, ground water levels, nutrient and carbon emissions, etc. Wetlands and waterways are restored; ground water is protected and managed. Emissions of polluted water, fouling and other destruction of natural resources are fined or punished even more severely.

Many of the artefacts of the petroleum era are now preserved as treasures or collector's items in museums or owned by private persons: Sometimes they are laughed at, sometimes seen with nostalgia, or even as things to use with a little embarrassment, such as elegantly thin panty hose or practical plastic in household vessels or toys.

As far as sea life is concerned, the body of regulations is all encompassing and holistic, so that different activities can benefit each other through planning efforts.

Maritime areas are better protected. Economic control mechanisms encourage positive choices, and the punishments for breaching the rules are more severe. Legislation concerning chemicals is more holistic, so that it no longer is possible to swap just a single atom if a substance is banned. Pre-emptory checks are stricter; medicines are designed to be biodegradable and the collection of medical residues and chemicals have been improved.

The Water Council of the Baltic Sea is an international network on the municipal level for strategies regarding water use and water protection. Both by supporting local projects

and by relaying information about them, ideas are disseminated and experiences collected, facilitating work for others who try to achieve similar results. The Water Council has contributed to a stronger Baltic Sea region with equivalent training of civil servants in the region and with the Baltic Sea Interregional Water Standard that regulates drinking water and other water systems in buildings and households. The aim is to find models for collective and fair management of vital common resources.

In 2049, the Baltic Sea is warmer and more brackish and new species have immigrated. However, the sea is also cleaner and healthier due to reduced pollution.

The Baltic Sea has been affected in many ways by climate change. The sea level is rising and the land area is diminishing at the same rate. In particular, in the southern parts coastal municipalities and settlements have problems. The Baltic Sea will not be like the Mediterranean, which is salty and deep. Instead, it will be more like a lake with less salty water especially in the north and east. Hence, conditions will vary, both for wildlife and for cultivated species. The fish will be smaller and there will be less predatory species.

NIKOLAS, 28 YEARS, DECONTAMINATES SEASHORES FROM PHOSPHORUS. HE CAME AS A CLIMATE REFUGEE WHEN DEMOCRACY IN HIS HOME COUNTRY BROKE DOWN.

I listen to *rebetiko* in my ear protection gear, and when it is extra sad, I sing along. Not because I am good at it, but there is nobody around to hear it anyway. In case somebody would come near, the noise from the suction nozzle is deafening. I work as a phosphorus decontaminator and dredge sediments in eutrophicated bays and lakes that are to be restored. I started working early this morning and now the sun rises as a luminescent sphere above the black sea. The peachy-rosy sky is reflected in millions of little black waves and the wind power farm is a silhouette at the horizon. Everything is quiet and beautiful except me in my monster machine.

The clay I bring up from the bottom is pumped onto a barge and sent to a biogas plant. The organic waste is transformed into biogas and the phosphorus is separated from the residue and then sold as fertiliser by the bag. The uppermost layers of the sediment with more nutrients, which were cleaner and not so solidly packed, apparently have been harvested a long time ago. Now we dig up old sins: residues of phosphorus that was shipped here from Chile or Morocco long before I was born, that has been washed out with the rainwater from the fields. At that time, nobody cared about phosphorus efficiency.

I also come from far away. When I was young, I raced with my friends in endless olive groves. However, the summers grew drier and drier, the olive trees burnt and people grew poorer and more afraid. It grew important who had the power over the soil and the water and democracy gradually transited into dictatorship.

Coasts and subaquatic areas are mapped continuously to follow the development and to provide background information for efficient measures. Restoration and follow-up measurements are prioritised. Research is done on small societal units that can be adapted to various predispositions and purposes. It started as experiments vying to show possible solutions to the growing problems in the Baltic Sea, but has developed into cutting-edge competences that are exported. Thanks to the fact that the water quality has improved, fish is again healthy food and a sustainable source of protein. The food we get from the sea is a substantial resource, including roach fish and seaweed.

I was one of those who questioned things. I got involved in strange conversations that I had not initiated, and I was warned and threatened. When we were invited to a wedding in the north, I took the chance and fled with my wife Eleni and our son.

This is not a dream job by any means. It is dirty and monotonous. The filter that is in place to stop animals from entering the suction jams frequently and has to be rinsed. The moving parts are ice cold and no matter how many pairs of gloves that I bring, eventually everything get wet and cold anyway. But I am not complaining. We have come to a peaceful, democratic country, with water to drink, food on the table and employment as soon as I learned how to say, "My name is Nikolas."

Ana from the Azores takes over after lunch. Then I have a meeting with my integration group. We do not only have regular language sessions anymore. Instead we discuss world events or values that our tutors wish to teach us, such as how to move around in nature, equality of the sexes or so. We also do workdays in projects. Afterwards I will pick up Theo and cook dinner and tonight we are going to the Technoteque. The first Tuesday every month I reserve the picture wall for half an hour to talk to the folks back home. But... well, I don't know. I can see my mother's tears, but I cannot caress her grey hair. I can see that my dad's back has grown curved, but I cannot carry his sacks. Technology makes us believe that the world is no bigger than a walnut. Yet I do not think we will ever be able to afford the long journey back home again. So I sing the sad songs of my homeland when nobody can hear me, doing as good of a job that I can, here in my new country, trying to get used to the fact that my new sea isn't as salty as my old.



FINALLY...

In 2019, when the Östersjöfonden celebrates its 30 years anniversary, the Baltic Sea is one of the most polluted seas in the world. Around us the world is in turmoil, politically, economically, and ecologically. In Sweden, a well-known insurance company refuses to insure new buildings near the water due to climate change.

We live in the gap between two different ways to see the world. On the one hand we go on living, shopping, eating and traveling embedded in the very comfort and over-

NIM, 22, STUDIES RESOURCE DESIGN IN HELSINKI, SECOND YEAR, TRIES TO MAKE "LEATHER" FROM SEAWEED AND VLOGS ABOUT MATERIALS.

The seaweed web is not very unlike leather, but it still changes shape and smell when damp. Who wants such clothes? Bad days, such as yesterday, I think that my Baltic Sea leather is just a fix idea that never will work. However, most of the time I love spending time in school and work with my project. In the afternoons, I distribute custom-nutritionised food rations by bicycle to people who do not have time to cook themselves. I share the job with a friend in order to be able to afford studying, as well as getting my workout and a meal. However, my first priority is my materials studies here.

My classmate Laru passes by with a cup of fermented herbal tea for me. This is something that poor students relish, since we seldom are able to afford fancy imported goods, such as coffee or real tea.

- But what on earth is that in your hair?" she says and laughs. Now others come by and look. They keep guessing about what the thin pieces of string with knots have been used for before they ended up in my hair...

Last year's course in material science dealt with issues such as: What is good for what purpose? How is each resource to be managed? We trained seeing opportunities and recycling; of course we dressed in our self-designed outfits. This year we are old and wise, sitting in the lab with our own serious materials projects, whereas the freshmen have their own creative catwalk.

However, it is given thing, that it should be possible to see that we study design.

consumption that is threatening the climate and the planet. On the other hand, an increasing number of us are becoming aware of the need for change. Is it technology, that is going to save us or is “back to nature”? Perhaps a combination of both?

The purpose of the Östersjöfonden visions workshop was to find tomorrow’s delicacies, but it turned out there were both sweet and sour caramels in the goody bag. At least seen from the old perspective, in which we are convinced of the importance of material welfare and economic security as necessary components of a good life.

The image of life around the Baltic Sea in 2049 is far from pitch black. However, it is a rather down-to-earth story; not as much far-out robotics as dirt under the nails, volunteer work and “garbage” fish in the dinner plate.

- I am fascinated by the focus on people being involved in their own food production, says Lotta Nummelin, Manager of Östersjöfonden, about the discussions during the workshop.
- And I get curious: Do these thoughts express longing or fear? Do we believe that a

In addition, I believe that design is necessary. The world is in total disarray with hurricanes and flood and crop failures and wars and none of us in this room even knows whether we have capable sperms or if we can get pregnant when it is time for that. However, it is now that we live and want to surround ourselves with beautiful object and to look good. Clothes are too expensive and are supposed to last for a long period, but jewellery can be made out of whatever. There it is the concept that is central. I can make them today out of anything and eat them or put them in the compost or in the fire tomorrow.

- I’ll load up a video about my hair creation on the vlog later, I say.
- I’m sure it’ll get somebody started, Laru says and rolls her eyes.

The vlog, the video log, has become my kind of thing. I take up current affairs and try to angle it into a materials topic. Sometimes for fun, sometimes in earnest. Now people have started to send me all kinds of funny materials to see what I can make out of them. Sometimes it is bizarre stuff, but mostly good. I want to inspire people and show that it is possible to make something out of anything. Each piece of clothing or thing is a chronicle telling the story of what people thought was beautiful or important at the time. In addition, each material is a challenge: “What am I going to make out of you, so you fulfil your mission in the world?”

Sometimes people ask what I am going to do after I graduate. If I succeed with the Baltic Sea leather, the company we cooperate with in the seaweed project at school might hire me. I like the fact that seaweed is a cheap local resource that grows in large nets, rigged up between the foundations of wind power pylons, drawing nutrients out of the maritime ecosystem. However, what I learn here will benefit me wherever I end up, seeing opportunity in all things and making things with my hands.

subsistence economy is our only chance to survive, or are we longing for concreteness and growing as a counterweight to our own life at the screens? I think I can subscribe to both perspectives.

Less money and things, fewer resources split among more people. More time, more cooperation, and more creativity. Reduced welfare services and increased personal responsibility. Climate change influencing what there is to eat. High tech and low tech in a fascinating mix. And so on.

What should be given priority as we steer our society into an unpredictable future?

How are we to educate our children – and all the rest of us?

How can we manage to change enough – fast enough?

So far, there are more questions than answers. However, the people are the change. We are 90 million people in nine countries around the Baltic Sea.

What will happen if each one of us contributes with our skills to create a good future around the Baltic Sea?

The text and the biographical descriptions of persons that you now have read build on ideas and discussions from the workshop Life around the Baltic Sea in 2049. It is not the purpose of the texts to be exhaustive or “true”.

Is someone or something missing?
A personality, a profession, a role in society?

Or maybe:

WHAT WILL YOUR OWN LIFE BE LIKE 30 YEARS FROM NOW? YOUR CHILDREN’S LIVES, YOUR GRANDCHILDREN’S?

Write your own biographical description and share on social media using the hashtag #Östersjön2049

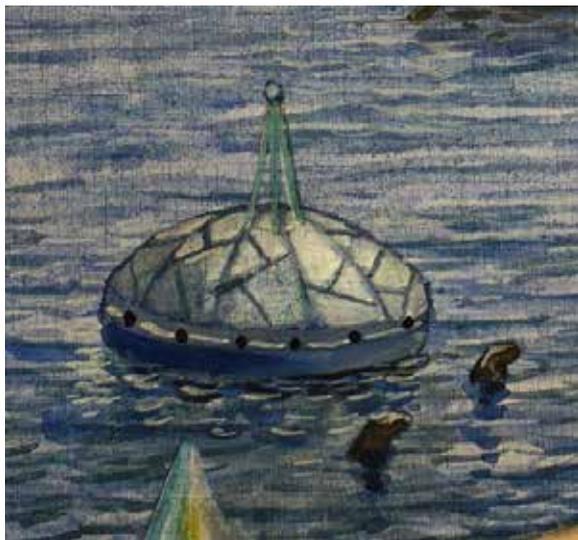
**THANKS TO ALL PARTICIPANTS OF THE WORKSHOP
"LIFE AROUND THE BALTIC SEA IN 2049"**

Get to know your neighbour 13-14 November 2018 in Mariehamn

Carina Aaltonen	<i>Parliament of Åland, Åland</i>
Susanna Airola	<i>Viking Line, Åland</i>
Jonathan Alm	<i>Water Centre for Innovation/ Campus Roslagen, Sweden</i>
Henrik Beckman	<i>Östersjöfonden, Åland</i>
Jens Berg	<i>Montem. Finland</i>
Mattis Bergquist	<i>Gullers Group, Sweden</i>
Oleg Bodrov	<i>Public Council of the South Coast of the Gulf of Finland, Russia</i>
Tony Cederberg	<i>Husö Biological Station/ Åbo Akademi University, Åland</i>
Arthur Granstedt	<i>BERAS, Sweden</i>
Aija Kaski	<i>Keep the Archipelago Tidy, Finland</i>
Lena Kautsky	<i>Baltic Sea Centre/ Stockholm University, Sweden</i>
Päivi Kippo-Edlund	<i>City of Helsinki Environment Centre, Finland</i>
Salla-Maria Lauttamäki	<i>Regional Council of Southwest Finland, Finland</i>
Petra Lindberg	<i>Campus Gotland/ Uppsala University, Sweden</i>
Gisela Linde	<i>writer, Åland</i>
Johan Mörn	<i>archipelago promotor, Åland</i>
Ann Nedergård	<i>Åland Water, Åland</i>
Lotta Nummelin	<i>Östersjöfonden, Åland</i>
Frederica Pastore	<i>Coalition Clean Baltic, Sweden</i>
Gunilla Rosenqvist	<i>Blue Center Gotland/Campus Gotland/ Uppsala University, Sweden</i>
Folke Rydén	<i>Folke Ryden Productions, Sweden</i>
Amelia Strömborg	<i>Water Centre for Innovation/ Campus Roslagen, Sweden</i>
Janis Ulme	<i>Mana Jūra, Latvia</i>
Soile Warttinen	<i>SOLKLART, Åland</i>
Jonas Wilén	<i>artist, Åland</i>



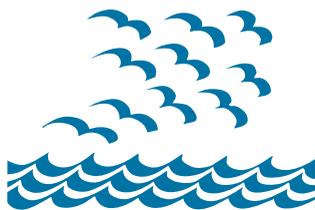
In addition to all intense discussions, the workshop resulted in heaps of post-its, drawings, mind maps and texts. Our writer Gisela Linde dug into the materials in search for ideas and patterns, assigned with the task of interpreting the entire collection in a coherent text. Our artist Jonas Wilén brought with him his impressions to his studio and created his interpretation as pictures.



“We made it! The Baltic Sea is recovering!”

How did it happen? What will our lifestyles be like?

A few glimpses of a possible future,
multifaceted and enigmatic as reality itself.



ÖSTERSJÖFONDEN

Östersjöfonden (The Baltic Sea Fund) is a foundation working to protect the Baltic Sea. We want to draw the attention of the region to our common and sensitive sea by spreading knowledge and inspiration, and by annually awarding forerunners with the Baltic Sea Award. Our mission is to create a meeting place for Baltic Sea activists of all kinds, and to encourage new initiatives as well as to engage more people.