CONTRIBUTORS

LEGALLY RESPONSIBLE PUBLISHER
Wendela Spelmans
mediapres@sasse.se

EDITOR-IN-CHIEF
Filippa Högling
cred@sasse.se

VISITING ADDRESS
Saltmätargatan 13-17

ADDRESS
Minimax/HHS
Box 6501
113 83 Stockholm

COVER PHOTOGRAPHY BY
Kalle Segersven
Sofia Westerlind
Fanny Lundvall

TREASURER
Kalle Segersven

PRINTING HOUSE
Printr

COVER ILLUSTRATION BY
Filippa Högling

CONTRIBUTORS
Eleonor Toni
Emma Perlelin
Jakob Nordfeldt
Jonas Glädt
Natalie Wild
Veranika Tsikhaneka

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CONTENT

LETTER FROM THE EDITOR

The Nature Issue is the last issue of this academic year and thereby the last issue by The Editorial Team of 2018/2019 and my final year with Minimax.

I owe Minimax a lot, and it has perhaps been the highlight of my time so far at SSE. I have invested most of my time and effort into this project (perhaps to the dismay of my teachers) during my two years here and working with it has become a part of my every day as natural as a lecture in the aula, and I will probably miss it a lot. But, I am very grateful I have had this fun project to waste my time on.

When I started as Editor in Chief last year, I wanted for Minimax to be a place and forum where you were free to follow your passion, develop your interests, dive into topics you find interesting and bring forth perspectives not included in our education. It is to be a creative safe space for all students, a creative outlet and a complement to our studies. Happily, we have, throughout the year, had many contributors and covered a wide range of subjects, reflecting interests and perspectives of the students.

In this issue, we explore topics such as nature's impact on us, on how to communicate sustainability, on what happens with the recycling of plastic and what the Paris Agreement really is about. It is a fitting ending to a year filled with a great variety of content, ranging from poems and illustrations to investigative and informative interviews and articles.

Thank you for this year and thank you for reading.

FILIPPA HÖGLING
Editor-in-chief 18/19

PHOTO | KALLE SEGERSVEN
DESIGN | LOUISE RIBRANT

EDITORIAL TEAM 2018/2019

EDITOR-IN-CHIEF & DESIGNERS

EDITOR-IN-CHIEF
FILIPPA HÖGLING

HEAD DESIGNER
LOUISE RIBRANT

DESIGNER
HANNA KOPELMAN

DESIGNER
VELITCHKO VELITCHKOV

DESIGNER
CARLOTA FERNÁNDEZ

JOURNALISTS

JOURNALIST
LAYAL CHEHADÉ

HEAD JOURNALIST
HEDVIG TINDBERG

JOURNALIST
LINN CERVELL

JOURNALIST
WALLACE DOUGLAS

JOURNALIST
ALFRED ERIKSSON

PHOTOGRAPHERS

PHOTOGRAPHER
SOFIA WESTERLIND

PHOTOGRAPHER
FANNY LUNDVALL

HEAD PHOTOGRAPHER
KALLE SEGERSVEN

PHOTO | FANNY LUNDVALL

DEAR SWEET SPRING, HAPPY DAYS ARE HERE AGAIN

When I get up in the morning, I take a moment to survey the yellow walls, the soft green curtains, my pale purple rug. I take a deep breath and savor the few moments between sleeping and waking that I have before it is time to get out of bed and head out for my day. In these moments, I am the soft morning breeze that rustles through the trees outside my window. I am the staccato chirps of sparrows, robins, blue jays, and cardinals that make their homes between the slowly budding branches. Their nests await the rebirth of a new year. Their songs call to my languid mind like the most pleasant alarm.

Get up! Get up! Spring has come for you!

A sweet melody, only heard for a rare few months of the year. One that inspires hope, peace, and a chance to breathe again after winter's tight grip left all our throats sore and our chests tight with ice and snow.

I turn over, feeling the caress of my sheets, and yank my curtain aside. The slippery fabric swings across my window as pure, bright, blessed sunlight comes to splash my face like the most pleasant cold water. Sharp, at first, but refreshing as it continues to wash over my tired eyes.

Wake, darling, I have come for you.

In the United States, 6% of the population is affected by Seasonal Affective Disorder (SAD), a form of Major Depressive Disorder, triggered by the darkness and cold of winter climates, particularly in northern regions. An additional 14% of the US population suffers from a milder form of SAD, nicknamed the "winter blues."[1] In Sweden, approximately 8% of the population suffers from SAD, while another 11% suffers from these "winter blues."[2]

As someone with both family and personal experience with seasonal affective disorder, the winter is a long dark tunnel, like a train going under a mountain; it feels never-ending, an unceasing pressure on your brain,

pushing you further into dark holes and away from joy. You chug-a-chug-a-chug through the dark, repetitive and draining days. We are lucky if we see the sun rise or set at all. Between classes, work, and other commitments, it is entirely possible to both wake up and fall asleep surrounded by darkness; everything becomes one long, never-ending night.

The cure for SAD is sunlight. Warmth. Open skies and long days. It is why the first sign of spring, cracks not only the ice-covered ponds, but the ice covering our hearts and minds, too. When I feel that sunlight hits my face it is more than a brief sensation of warmth -- it is the hug from my mother after a long day at school, the taste of warm cookies straight from my grandmother's oven. The contentedness I felt when I sat and had a true fika for the first time. The peaceful moments when you watch a movie or show with the people you love. Sunlight captures that indescribable essence of 'everything is going to be okay.' It is almost as if the sky beaming down to tell you:

It's alright child, you made it.

So, when I open my curtains in the morning to the first rays of a new spring, I am opening my mind and my soul once again to long days spent by the ocean, afternoons on the grass, evenings on the porch surrounded by laughter as bubbly and as free as a fresh-flowing brook. I cast off the harsh spiny shell of my winter persona and leave it behind for next year's laundry. I flood my room with hope, true hope, for the first time in a long time. I dance to my mirror just to see myself smile against the splintered rays casting themselves across my walls like daytime's very own stars.

Nature, our guardian goddess, is there for us in oh so many ways. In summer, she gives us dazzling days and hazy nights impart a sense of timelessness we never knew we wanted; things are slow, but deliciously so. We are carefree, vibrant; nothing can touch our souls. In the fall we are wisened, watching the change from summer's fresh beauty to autumn's pensive hues, to the touches of winter's gnarled age. Throughout winter, she challenges us, teaches us to be strong, to have perseverance, fortitude. To see that even in the darkest times, we will not crumble. And it is spring, her dear sweet spring, where we rise like phoenixes to see that we can truly become strong and beautiful again. With the sun, we begin to shine from within, bringing our luminosity out from under the covers and back to the universe once again.

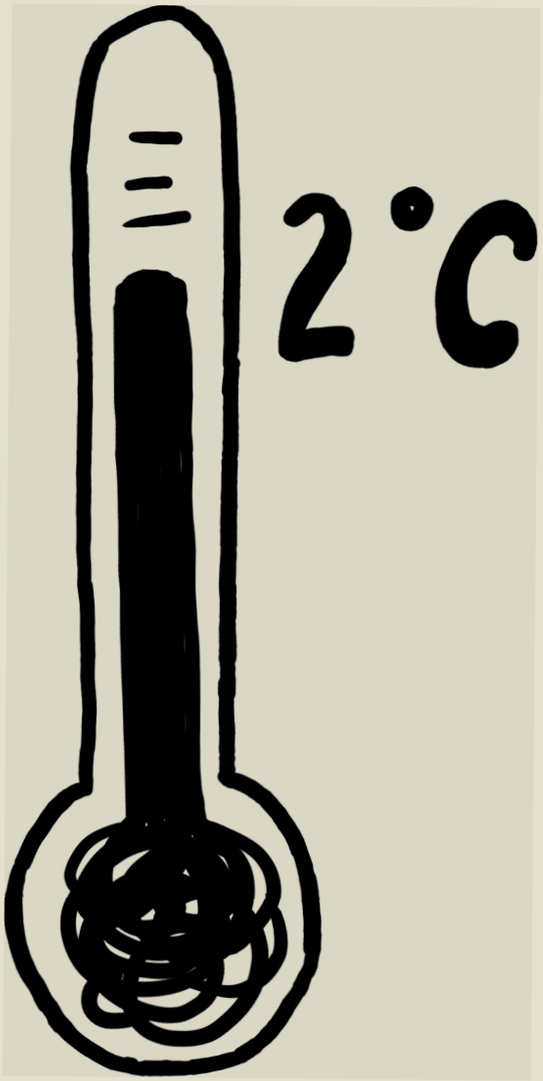
In the balance of life, there is no light without dark, no joy without sadness. We have sway and flow with the cycles as they come and go. But we must always remember, spring is coming, and she's hurrying with open arms.

TEXT // WALLACE DOUGLAS
DESIGN // HANNA KOPELMAN

[1] Targum, *Seasonal Affective Disorder*
[2]Geddes, *Will Norway Ever Beat the Winter Blues?*

THE PARIS AGREEMENT AND WHAT IT ACTUALLY SAYS

It is constantly brought up in politics and the climate change debate, and is often referred to as humanity's last chance to save the planet. A lot of people have heard of the 1,5 degree goal, but other than that, it can be quite difficult to wrap one's head around what the Paris Agreement actually consists of. This agreement that has been signed by almost all countries in the world, and has an agreed upon goal that is vital for earth's survival – what does it really entail? And does it actually force world leaders to take responsibility of global warming?



How it works

The Paris Agreement was established by the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in December 2015. The central aim of the agreement is to keep global temperatures from rising above 2 degrees celsius, with the ambition of limiting the increase to 1,5 degrees celsius, compared to the atmospheric carbon dioxide levels that existed before the industrial revolution.

169 parties, consisting of individual countries and the European Union, initially signed the agreement. Today, the number of signatories has grown to 197. Of the 197 parties that so far have signed the agreement, 187 parties have also ratified it, which means that they are legally bound to report on their progress of cutting greenhouse gas emissions. The major emitting countries that have not signed the agreement, are Russia, Turkey and Iran.[1]

All parties that have signed the agreement are expected to plan and submit to the UNFCCC what actions they will take on a national level to reduce their greenhouse gas emissions. These are referred to as the nationally determined contributions (NDCS).

Nationally Determined Contributions (NDCs)

The NDCs are the heart of the Paris Agreement, as they form the plan on how to limit the global temperature rise to 1,5 degrees celsius. Every party is expected to make a national adaptation plan in which they describe how they will work towards mitigation of emissions and adapt to climate-resilient development. Countries are expected to make their best effort given their national objectives and their economic abilities.

The NDCs have to be renewed and submitted every fifth year. As the NDCs initially were

TEXT | HEDVIG TINDBERG

submitted in 2015, the next submission will take place in 2020. This means that every party is expected to update or renew their action plan next year. For instance, the European Union submitted a common NDC in 2015, stating that member countries together will reduce their greenhouse gas emissions by 40 % before 2030, compared to existing levels in 1990.[2]

All NDCs are recorded and available at what is called the NDC Interim Registry, in which they are referred to as INDCs, standing for intended nationally determined contributions. So far, 183 parties have submitted their first INDCs, which together are estimated to have a coverage of 94,6 % of global carbon dioxide emissions.[3]

NDCs are not only planned, they are also followed up through what is called the global stocktake. Every fifth year, all parties collectively evaluate how the implementation of NDCs is going and if countries are on the right direction towards reducing greenhouse gas emissions. The first global stocktake took place in Bonn in 2018, during the Talanoa Dialogue, and the second will thus occur in 2023.

To further encourage parties to work together in combating climate change, the UNFCCC also offers subsidiary programs. For instance the Ad Hoc Working Group on the Paris Agreement, also called APA. It gives further guidance on how parties can form their INDCs and how to measure the results for the globalstocktake.

[1] M. Denchak, *Paris Climate Agreement: Everything you need to know,* NRDC, 2018
[2] UNFCC, *Submission by Latvia and the European Commission on behalf of the European Union and its Member States,* 2016
[3] UNFCCC, *All NDCs*
[4] UNFCCC, *What is the Paris Agreement?*

The Key Aspects of the Paris Agreement

With the NDCs forming the heart of the agreement, these are the key aspects of the agreement outlined by the UNFCCC:[4]

1. The long-term temperature goal. Limiting global temperature rise to below 2.0 degrees celsius post-industrial levels, but aiming at limiting the rise to 1.5 degrees celsius.

2. Global peaking and climate neutrality. This aspect aims at reaching a global peak of greenhouse gas emissions as soon as possible, but recognizes that the peak will take longer to achieve for poorer countries.

3. Mitigation. All contributing parties should communicate their NDCs every fifth year in an informative and transparent, while also maintaining them and domestically measuring their effectiveness.

4. Sinks and reservoirs. This aspect encourages parties to conserve and enhance sinks and reservoirs of greenhouse gases, that is for instance trees, fossil pools and absorption of carbon dioxide by oceans.

5. Voluntary cooperation/ Market – and non-market-based approaches. Encourages parties to cooperate on mitigating greenhouse gas emissions.

6. Adaptation. All parties have to formulate a National Adaptation Plan.

7. Loss and damage. Actively working against reducing the loss and damage related to climate change, by reducing our vulnerability to extreme weathers.

8. Finance, technology and capacity-building support. Encourages rich countries to support poor countries economically in building climate-resilient futures. It also emphasizes the importance of making finance flows consistent with low greenhouse gas emissions.

DESIGN | HANNA KOPELMAN

9. Climate change education, training, public awareness, public participation and public access to information. Each country are to work for the education of their population regarding sustainability issues

10.Transparency,implementation and compliance. Expects all parties to act and communicate with transparency.

11. Global stocktake. Takes place every five years to assess the collective progress of all parties' work to combat climate change.

12. Decision 1/Cp.21. Includes a number of measures and actions to be taken prior to 2020, when the second submission of NDCs will take place. It also includes the Non-State Actor Zone for Climate Action, which is a platform that allows civil society, private sector, financial institutions, cities etc. to share their efforts to climate-resilient development.

The Cost of the Paris Agreement

In media today, there is a lot of focus on what the cost of the Paris Agreement will aggregate to in terms of the costs of actions cutting greenhouse gas emissions. It sounds extremely large that the costs of the agreement are estimated to become 1 % of global GDP. But frankly, it is way more relevant to ask ourselves: what costs do we avoid by reaching the Paris Agreement?

Costs related to climate change have to be viewed in the long-run; mostly in terms of health costs resulting from pollution and natural disasters. The World Health Organization (WHO) estimates that by achieving the Paris agreement, up to 1 million lives would be saved every year worldwide until year 2050. It is furthermore predicted that the costs of implementing the actions needed to fulfill the agreement, are only half of the costs that healthcare alone will demand, if no action is taken. As stated earlier, meeting the Paris agreement would cost around 1 % of global GDP, but the health impacts of air pollution alone in the 15 countries with the largest emissions, is estimated to cost approximately 2 % of global GDP.[5] As Dr Maria Neira, WHO Director of Public Health, Environmental and Social Determinants of Health, said:

"The true cost of climate change is felt in our hospitals and in our lungs. The health burden of polluting energy sources is now so high, that moving to cleaner and more sustainable choices for energy supply, transport and food systems effectively pays for itself. "When health is taken into account, climate change mitigation is an opportunity, not a cost."[6]

Hot discussions on the Paris Agreement

What has been discussed a lot about the agreement is the legal aspect of it. The agreement is legally binding for parties who ratifies it, which a vast majority has done. However, as stated earlier, it is only reporting and updating NDCs that is legally binding. To actually cut emissions is not legally binding. This means that countries that fail to cut their emissions will not face any punishment.[7]

Furthermore, although the agreement has attracted many parties, one still needs to look at cutting global aggregated emissions. China, India and the US are the greatest emitters, yet China is not planning on cutting their emissions until 2030.[8] The agreement has therefore received critique for being too focused on attracting as many parties as possible, by offering "nice and free" game rules, and for overlooking the importance of drastically cutting emissions.

"The Paris Agreement is the burning lantern of hope in combating climate change. But it also has the potential of being a huge disappointment, silently shadowing our planet"

Another uncertainty of the agreement lies in the aim to encourage poor countries to mitigate their emissions, while not constricting them from economic development and growth. Many poor or middle income countries that are currently expanding their economies, argue that they should be given the opportunity to expand their

197 countries signed
187 countries ratified

economies in similar ways of richer countries. Yet, the world has already used up more than two thirds of the carbon that will raise global temperatures by 2 degrees celsius, meaning that there is no room for poor countries to follow development paths that come with large emissions.[8]

Some final thoughts

Perhaps the Paris Agreement does not sound very complex, as it has a clearly stated and agreed upon goal of limiting global temperature rise to 1,5 degrees Celsius. But one has to remember that the destiny of this planet is depending on this agreement. It is about saving this planet, and from an economist's viewpoint; preventing the long-term health costs that global warming will bring.

There are still many questions remaining about the impact of the agreement. Will countries obtain their NDCs? If they do not, what will happen? Will they be punished? Legally, they will not.

It is clear that this agreement comes with a massive amount of responsibility; responsibility that has been put into the hands of world leaders. This can make one feel insignificant and powerless, and I imagine that many people would agree. As individuals, we can of course do our best to live sustainably, but in the back of our minds, we know that the decisions of world leaders, are the ones that will determine how severe climate change will be.

The Paris Agreement is the burning lantern of hope in combating climate change. But it also has the potential of being a huge disappointment, silently shadowing our planet.That is why it is more important than ever that we continue talking, striking and fighting for leaders to take their responsibility, so we reach the 1,5 degree goal.

[5] UNFCCC, *WHO: Health Benefits Far Outweigh Costs of Meeting Paris Goals*
[6] UNFCCC, *WHO: Health Benefits Far Outweigh Costs of Meeting Paris Goals*
[7] M. Thorslund, *Top 11 facts from the Paris Climate Agreement that will blow your mind*
[8] J. McCarthy, *6 must-know facts about the Paris Climate Agreement*

THE MYSTERIOUS HUMMMMMM

TEXT // LINN CERVELL
PHOTO // FANNY LUNDVALL
DESIGN // VELITCHKO VELITCHKOV

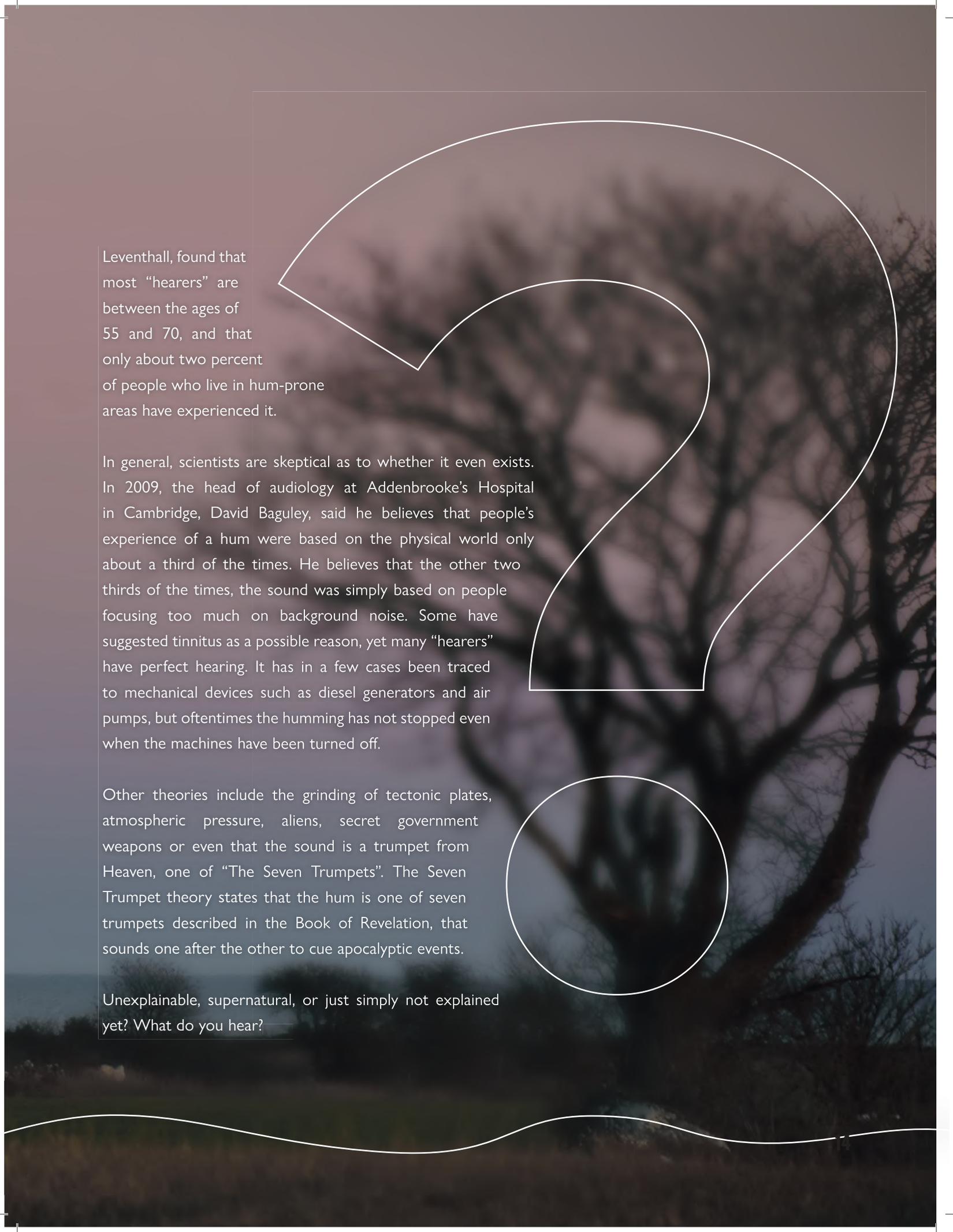
There is a sound. Can you hear it?

Low, rumbling almost. If you listen closely, can you feel it?

For thousands of years, there have been reports from all over the world of a mysterious low-frequency hum. It has been heard over both open deserts, hills and from inside buildings in cities. It is called Taos Hum. What causes it? Nobody knows. Despite numerous scientific investigations, the source still remains a mystery. While some have described the phenomenon as an unbearable torture, causing insomnia and stress- others find it relaxing. Within meditation and some religions it is replicated in mantra, where they sometimes call it "the sound of HU"- the sound of God.

Ari Kopel, author and graduate from the University of Miami writes in her wordpress blog "Ari Kopel"; "When I sing this or listen to it, I'm "Home"; and every single atom in my body sings and I feel my vibration rise and my Being becomes more refined. When the sound of the singing stops, I feel it and miss it. It's because this is my natural state – being ONE with the frequency/ sound of Prime Creator."

There are many theories as to what Taos Hum actually is, and how come only some people hear it. One study from 2003 made by acoustical consultant Geoff



Leventhall, found that most "hearers" are between the ages of 55 and 70, and that only about two percent of people who live in hum-prone areas have experienced it.

In general, scientists are skeptical as to whether it even exists. In 2009, the head of audiology at Addenbrooke's Hospital in Cambridge, David Baguley, said he believes that people's experience of a hum were based on the physical world only about a third of the times. He believes that the other two thirds of the times, the sound was simply based on people focusing too much on background noise. Some have suggested tinnitus as a possible reason, yet many "hearers" have perfect hearing. It has in a few cases been traced to mechanical devices such as diesel generators and air pumps, but oftentimes the humming has not stopped even when the machines have been turned off.

Other theories include the grinding of tectonic plates, atmospheric pressure, aliens, secret government weapons or even that the sound is a trumpet from Heaven, one of "The Seven Trumpets". The Seven Trumpet theory states that the hum is one of seven trumpets described in the Book of Revelation, that sounds one after the other to cue apocalyptic events.

Unexplainable, supernatural, or just simply not explained yet? What do you hear?

INTERVIEW | FREDRIK MOBERG

Fredrik Moberg is one of the founders of Albaeco, an independent, non-profit organization that works with strategic environmental communication, science communication and education connected to sustainability. He works both with scientific research and getting research about sustainability to get through to the public. As someone knowledgeable about how to communicate efficiently and specialized in marketing sustainable solutions, Minimax met with him for an interview about marketing, sustainability and how to create change in society.

"I helped found Albaeco because there is too much interesting and relevant scientific research that does not reach the public. Or it might be accessible to the public, but it does not get through to them. My favourite quote from the Swedish indie rock band Bob Hund is "Vi vill inte bara nå ut, vi vill nå fram" (translation: "We do not want to reach you, we want to get through to you"). One key aspect of sustainable development for me, is to ensure that the best research is available and has an effect."

Moberg continued discussing how to get through to people with research results, results that too often stay confined within the institutions that created them.
"An efficient way to reach the public is to go through social media, and through there enter the public debate. Another way of reaching the public that we have embraced is through art, music and exhibitions. We created an exhibition at Stockholm House of Culture a few years back, about our research at Stockholm Resilience Centre, and we have worked a lot with artists and musicians, so that we through art, can get through to people. If you encounter these complex issues directly from research, it might seem overwhelming, difficult and with an emphasis on the threats, instead of the possibilities; but through art, you can create pretty interesting things."

To get people's attention and reach them with complex research results is sometimes a challenging task, and the discussion continued with talking about the difficulty of making issues

TEXT | FILIPPA HÖGLING

PHOTO | FANNY LUNDVALL

HOW TO MARKET THE GOOD OF NATURE

comprehensible without oversimplifying them: "I often work as a link between researchers and journalists. I have to understand that scientists do not want their research simplified too much and that journalists want the material understandable for their readers. It is a challenge to manage those conflicting interests. But often, you can convey a sense of the complexity of the research and give people aha-moments, without going into every detail. You can show that even though things are connected in unexpected and complex ways, the solutions can be surprisingly simple. So, all in all, you cannot simplify so much that you dumb it down, but you still need to make it tangible enough so people can act on the information."

Moberg further discussed the issue of measuring the effects of communication and marketing and how to do so in the best possible way.
"Albaeco, that I work with, wants research results to be accessible and for them to have an effect in society. And we want that to result in large scale change in attitudes and behaviours. How do you measure that? It is a constant issue that we continue to struggle with. You can measure how many visited your website, how many read you articles, but that does not tell you that much about what you want to achieve. The classical communication theories tend to tell you to measure what you can, even if that perhaps is not your desired effect."

How to most efficiently combat climate change is a widely discussed topic, and Moberg elaborated on his way of doing so through ensuring the best scientific research is always available and has its intended effect.
"You should work with different stakeholders in society. Stockholm Resilience Centre, where I work both as a researcher and communications advisor, collaborate with everyone from farmers to innovators. You need to be out in the field and work with those who use the resources, and not just sit in your academic ivory tower and tell others what to do without understanding their everyday life. We strive to work interdisciplinary with ecologists, economists, chemists, lawyers and others, but also with those who are practically using nature's resources. In this intersection, the real exciting stuff happens.

"It is also important to differentiate between broadcasting and narrowcasting. It might be more important to reach a key person or politician working on investigating an issue, than reaching everyone. It is easy to think the most important thing is to reach as many as possible, but sometimes, it is about reaching the right people at the right time."

As an expert in marketing sustainable solutions, Moberg shared his view on how sustainability issues should be communicated to have the best possible effect.
"The way sustainability is marketed is changing. Historically, there has been an emphasis on what not to do rather than what to do. And perhaps there has been too much talk about what we risk losing instead of what we stand to gain from a transition into a more sustainable society. It might be a bit cliché, but it is actually more appealing with "I have a dream" than with "I have a nightmare". "I have a nightmare" is to a large extent what has been communicated, and perhaps that needs to change.

"There are major challenges when it comes to global environmental changes, most people know that. But the severity of the issues easily gets you down and you think that you are too insignificant to do anything about the situation and then it all seems pointless. Stefan Edman, an eminent biologist and sustainability profile, once said that the mental acidification is the worst environmental problem of them all. That is, when no one longer believes there is a solution, then nothing positive will happen.

DESIGN | LOUISE RIBRANT

"And now, we have Greta Thunberg reminding everyone that it is important to understand the severity of the crisis, which I completely agree with. And I also agree that when it comes to people in positions of power, you can put an emphasis on the urgency of the environmental threats. But when reaching out to a broader audience, I believe you have to focus more on what you yourself can gain from a shift to a sustainable lifestyle.

"I do also hope that people will realise the severity of the situation and make sacrifices in their everyday life, and some people do. But research shows that that is about 5-10% of the population. In order to make this way of thinking mainstream, I believe you have to change your way of communicating. A larger share of positive messages is what has shown to be the thing that gets most people to act, according to environmental psychologists."

When asked about how the economic system had to change in order to enable a transformation into a sustainable society, Moberg concluded:

"I believe we have to work both with the current, rather blunt economic system, that is too linear and a bit of an ecological illiterate, and do what we can within the boundaries of that system, but I also believe you have to think about more radical solutions, including circular and sharing economy. Today, when you sell an item, you want it to break so you can sell a new one. In the circular and sharing economy, that logic changes. If you rent out an item, you do not want it to be too sensitive to trends, you want it to be repairable and you want it to be sustainable. Then it will be included in your business model to create things that can be repaired and recycled and are long-lasting."

Moberg also had concrete ideas for what should be changed within the economic system, in order to create possibilities for a sustainable development to occur.
"Today, we subsidize things that are harmful for the environment, such as fossil fuels. That has to change. When I speak with companies and CEOs, I am impressed with how much will there is to change. But for that to happen, I believe the rules of the economy has to change as well. It has to be costlier to release greenhouse gases. It is too cheap today. But if you put the right price on coal, you can create an efficient economic instrument. We have to internalize the external effects, otherwise it is in companies' interest to merely move costs, so they do not have to carry them themselves. But, if you have to pay the real price for polluting, things can go in the right direction rapidly.

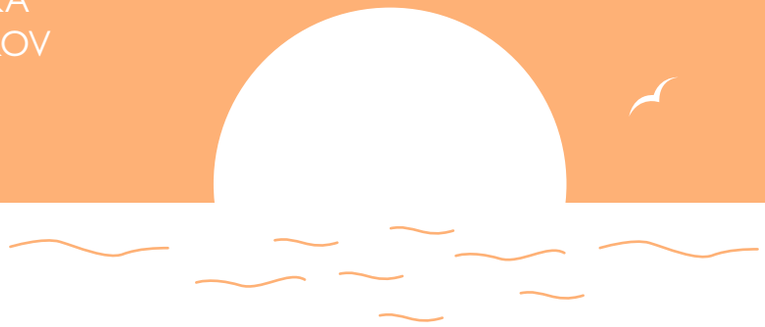
"In our research, we have worked quite a bit with putting a value on nature, and there are so much we get from nature that we take for granted, which is what we call ecosystem services. It is easy to merely view a forest as a commodity storage for timber and paper, but then you miss all the things the forest is contributing with through its mere existence, like for example how it is sequestering carbon dioxide as well as purifying the air. If we are blind to the true value of natural capital, we will continue externalize the costs of destroying them. We cannot see the true value of nature in the economy nor in the balance sheets of companies and that is beginning to change."

As the interview drew to an end, and Moberg was asked for tips for SSE students who dreamed of working for a transformation into a sustainable society, his advice was concrete and precise: to read up on sustainability issues and complement their studies with courses in ecological economics or similar.

PHOTO | JEANNIE LUNDVALL

NATURAL ANTI-STRESS

TEXT // VERANIKA TSIKHANENKA
DESIGN // VELITCHKO VELITCHKOV



We live in a modern world of multitasking, rushing, and concrete jungles. We begin our day not with the light of the sun, but with the glow of our mobile phones and laptops. Most of us hardly find time to sleep and meet with family and friends in all of this chaos, and would struggle to recall the last time we went out in nature. The environment in which we live, the rhythm of life and even our bodies, adapt to our new way of living. But we all, are still children of the nature, and it is important for us not to forget about our Mother, and continue giving her frequent visits, just as good kids do.

There are a lot of benefits to visiting nature. It is not only about getting back to our roots, it is also about recharging our bodies and reducing stress. Many poets have been praising and glorifying the beauty and the power of the nature for centuries, and while it might seem for some, just a gesture of an artistic soul, there is the scientific ground behind it.

HERE ARE A FEW SCIENTIFIC REASONS WHY NATURE TRULY MAKES YOU FEEL BETTER:

Vitamin D Helps Your Body Function More Efficiently

It also improves blood flow and lowers blood pressure by literally relaxing your blood vessels.

What to do? Literally just go "out there" whenever you see the sun shining (be fast if you want to catch those rays in Sweden)!

Being in Nature Causes You to relax and Center Your Mind

It allows you to leave stress behind and focus on something more pure: to spend some time alone with just yourself

What to do? Once in a while, leave all of your electronic devices behind, find a calm spot in a park or forest, and try to reconcile with the nature for at least 15 minutes.

'FOREST BATHING' - the practice of spending time in a forested area in an effort to reap wellness rewards

Breathing is Your Body's Built-In Stress Buster

Deep breathing stimulates the body's parasympathetic reaction, which calms us down, and together with fresh air, this improves blood pressure.

What to do? By simply stopping to smell the roses, you can put the brake on your body's natural stress response.

Recent research found that people began to feel psychologically restored after just 15 minutes of sitting outside in both the park and forest. After a short walk, these feelings increased, and slightly more so if they were in a forest. And the benefits were not just relaxation. On measures of perceived vitality — which one might think rise when in the city — only nature did the trick, although it took forty-five minutes of sitting and strolling in nature for perceived vitality to increase.

But how do you come about getting out in nature? Start with small steps – find the nature spot that is closest to the place where you live and start exploring! Take the morning walk through the park instead of taking the bus. Go for a picnic instead of going to a café. Go out biking or skating instead of watching a movie. Later on try to build these "15 minutes of nature" breaks into your every day.

In Japan, people practice something called forest bathing, or shinrin-yoku. This is not exercise, hiking, or jogging. It is simply being in nature, connecting with it through our senses. Shinrin-yoku is like a bridge. By opening our senses, it bridges the gap between us and nature. I would encourage you to let nature enter through your ears, eyes, nose, mouth, hands and feet: listen to the birds, look around, smell the roses, lie on the ground. Drink in the flavour of the forest and release your sense of joy and calm. This is your sixth sense, a state of mind.

HOW TO PREPARE FOR YOUR OWN NATURE ADVENTURE

Be aware of your surroundings

Make sure it is safe and if you go alone – let someone know where you are heading to (do not be scared – it is only precaution)

Protect your skin and body

Depending on the weather conditions and the type of place you are heading to – make sure you prepared all the necessary protection and picked the proper clothing

Wear the right footwear

Uncomfortable shoes might ruin the whole experience

Stay hydrated

H2O is a part of nature and a part of us, so make sure you keep its level balanced

Remember – it is already in us. Nature is a part of us, the most caring and effortless part, that helps us to cope with all the artificial things in our lives. So let it into your world and it will take care of you.

CAN PALM OIL BE SUSTAINABLE?

CAN PALM OIL BE SUSTAINABLE?
CAN PALM OIL BE SUSTAINABLE?

TEXT // LAYAL CHEHADÉ
DESIGN & ILLUSTRATION // CARLOTA FERNÁNDEZ

We should ban palm oil.
We should not ban palm oil.
We should be conscious of the palm oil we are using.
Palm oil is dangerous.
Palm oil is necessary.
Palm oil is unavoidable.
Palm oil has lately been on everyone's lips, but what is actually the issue with palm oil?

Palm oil is the most used vegetable oil on the planet. It has a reputation of being a miracle oil, that can be used in anything from cosmetics to foods to fuel. It is cheaper than other vegetable oils and it makes your cake healthier, your shampoo bubblier and your makeup smoother. That is why it can be found in almost 50% of all the products in one's local supermarket.[1] In Asia and Africa, palm oil is essential for its use as cooking oil. Even though palm oil has many areas of use, the use of it is controversial given the major effects it has on climate change and deforestation.

Oil palm trees are very efficient crops as they yield more crop per area of land than any other production of vegetable oil.It takes approximately four to six years to grow an oil palm tree but when it is grown, it can live up to 30 years and it only needs a small area to do so. The oil is then obtained from the flesh of the fruit. The palm oil which we find in our everyday products is called palm kernel oil and is extracted from the nut of the fruit. The tree can mainly be found in Malaysia and Indonesia, countries that together account for 85% of the production of palm oil.[1]

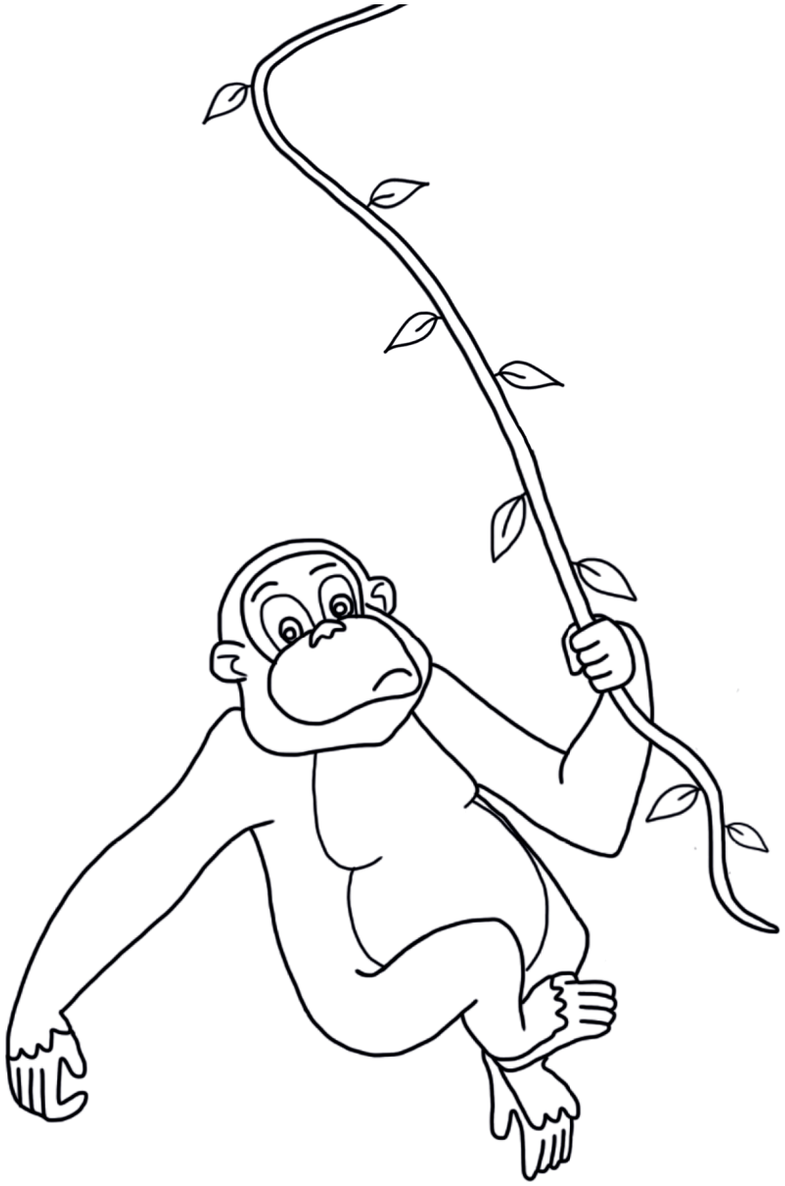
[1] WWF, *8 things to know about palm oil*
[2] The Guardian, *How the world got hooked on palm oil*

The magic of palm oil

The production of palm oil has escalated at an unimaginable pace during the last decade, as more and more industries have found the magic of it. In 20 years, from 1995 to 2015, the use of palm oil has quadrupled. It is estimated that by 2050, the consumption will quadruple again. The largest use of palm oil is in Asia, with India, China and Indonesia accounting for approximately 40% of the consumption worldwide.[2]

The use of palm oil in Europe differs greatly from its uses in Asia. In Asia, it is primarily used as a cooking oil. In Europe on the other hand, almost half of the palm oil used in biofuels and the other half in grocery items.

Not only has the benefits of palm oil affected industries, it has also affected the countries producing the oil in both negative and positive ways. The palm oil production has contributed to economic growth and helped reduced poverty in, for instance, both Malaysia and Indonesia. Palm oil accounts for almost 14% of Malaysia's gross national income and it is Indonesia's most important export.[2] On the other hand, there has been reports of both worker exploitation and child labour at palm oil plantations.[1]



1. CLIMATE CHANGE

The production of palm oil has caused rainforest destruction in Southeast Asia. Today, Indonesia is being deforested faster than any other country in the world, due to the extraction of palm oil. Since there has been such a high demand for palm oil, rainforests are being cut down, to make place for palm oil plantations. The deforestation, combined with the process of transforming the soil into plantations is adding millions of tonnes of greenhouse gases into the atmosphere, which contributes to global warming.

2. ANIMAL LIFE

The deforestation affects some of the most biodiverse forests found on earth, meaning that palm oil production causes damage to vital ecosystems and harms biodiversity. It has devastating effects on animal life - affecting, for instance, both orangutans, elephants and tigers. Orangutans are considered as pests at the plantations, as they climb trees searching for food. As a consequence, the palm oil corporations has targeted orangutans and are killing them by running them over, burning them alive or shooting them. It is estimated that around 50 orangutans are killed every week due to palm oil extraction.[3]

Elephants are also considered a problem, by the corporations extracting palm oil. They often come to the plantations looking for food, which they used to find in the rainforests that are now cut down. The elephants are killed by poison.[3]

3. AIR POLLUTION

A common way to cut down rainforests is by burning down trees. Burning has grave consequences since it releases carbon dioxide into the air – which leads to air pollution. The air pollution, in turn, affects many places in Southern Asia, leading to poorer health among humans.[3]

[3] Palm oil investigations, *What is palm oil?*

The issue with palm oil

Can palm oil be sustainable?

The issue with palm oil is complicated. Many say that we should ban all use of palm oil, because it is produced in unsustainable ways and has hazardous effects. However, there are voices, such as WWF, saying that banning palm oil would not solve the problem. After all, palm oil is one of the most efficiently grown crops, and producing other vegetable oils requires much more land area. For example, the production of coconut and soybean oil requires four to ten times more land area than the production of palm oil. This can further be illustrated with the fact that palm oil supplies 35% of the world's vegetable oil, even though it only demands only 10% of the land used in vegetable oil production.[1] Moreover, palm oil is an important export for countries such as Indonesia and Malaysia, meaning that there is a lot of employment relying on palm oil production.

Unfortunately, it has been found hard to produce palm oil sustainably. The main reason is the complexity of the production, and that the industry has a complicated supply chain. It is nearly impossible to trace the palm fruits to the land that they originally came from once they are at the production mills.

According to WWF, the best thing consumers can do is to be aware of which kind of palm oil they are buying. There are RSPO (Roundtable on Sustainable Palm Oil) certified products which promise that the palm oil used, has been produced in sustainable ways that do not harm workers or nature. It is not perfect, but it is one step closer to a more sustainable trade.

So what is the solution? There is not a simple answer. It might feel like there is no solution to this complexity, but there is. I believe that the solution partly lies in consumer responsibility, in terms of being informed and picky when choosing what palm oil to purchase. Consumer awareness is important, as it puts pressure on producing companies to take responsibility and act sustainable.

FACTS
FACTS
FACTS

Palm oil grows across or 10 degrees north or south of the equator.

The oil palm tree is also known as Elaeis Guineensis.

Each individual fruit consists of 50% oil.

Palm oil can be harvested all year around.

Each tree can produce 10 tonnes of fresh fruit per hectare.

On average, 3.9 tonnes of crude palm oil and 0.5 tonnes of palm kernel oil can be extracted per hectare.

HOW TO A ZOMBIE

Being a "prepper", has been poked fun at for decades. Only crazy people would spend so much time and energy to prepare for a supposed "apocalypse" that might not even happen. But the fact is that more and more people are becoming survivalists. Even celebrities like Post Malone, Jamie Lee Curtis and Steve Huffman are preparing in their own ways. And nature might not only be the cause of the apocalypse, but surviving in nature could also be one of the biggest threats that follow.

In this very moment, a worryingly zombie-like epidemic named chronic wasting disease (CWD for short) is spreading amongst deer in the US. Symptoms include drastic weight loss, lack of coordination, drooling, not fearing people and aggression. Zombie fanatics are going crazy, saying that contaminated meat might spread the disease to humans. So I ask myself, with a society dependant on services provided by the government, what would we do if a zombie outbreak actually did happen? Maybe preppers are not far off. And maybe all those hours I spent watching guts being ripped out in movies were not a complete waste of time.

So, if you are interested in surviving - here are 7 tips on how to survive a zombie apocalypse, if (or when) it happens.

Tip. 1 The Emergency Kit

For any type of apocalypse, you will most likely not have access to vital resources like water, heat, food or electricity. In order to to combat this, fill a portable "crisis box" with medicine (if necessary), blankets, room temperature food, a lighter, a crank - or solar driven radio, and duct-tape. Stock up your pantry with foods that can last if you have to bunker down. The box should contain enough rations for you to be able to survive the first 72 hours post outbreak. (For more information on this, read "Would you survive a crisis?" On page 33).

Tip 2. The Outbreak

In case of a war, a fire, a gas leak, or water resource intoxication, citizens will receive warning through a loud siren called Hesa Fredrik. But since we don't yet have a Hesa Fredrik for zombies, we're most likely be informed of the situation through either TV, radio or phone notifications. Things might not seem too bad at first- but you know better. If they start talking about people ripping each other's faces off, it's time to act fast, when the situation is still manageable.

Tip 3. Individualist or Companionship?

If you're only want to protect yourself, you're ready to go; either look for other survivors to team up with, or start your new life as a lone wolf. But if you have friends or family you probably want to meet up with them as quickly as possible. (Working together not only enhances your chance of survival but also makes the post-apocalyptic life worth living). If the cellular operators still work, call each other and decide on what location to rendezvous. It's always good to have decided a meetup-spot beforehand. Choose somewhere relatively far away from the city but also easily accessible by your choice of transportation.

Tip 4. Leave the City

If you live in a city, it will soon be packed with panicking people, cars, and flesh-eaters.

You want to find a secluded area. (Rural, less inhabited areas mean less people, and fewer zombies). However, you don't want to go too far from civilization in case you need supplies. Take a car and drive as far as you can, and walk the rest by foot. Until you've found a safe place, you cannot stop moving, no matter how exhausted your are. (Also; you could also travel with a Voi for approximately 20 kilometers, if nothing else is available. And don't forget to wear a helmet, although it might not suffice as biting protection...)

TEXT | LINN CERVELL

SURVIVE APOCALYPSE

Tip 5. Shelter

Whether it's for a shorter or a longer period of time, you will have to find somewhere to rest. If you're charismatic enough, you might be able to stay the night at someone else's house. Otherwise, empty houses are an option. And if the weather allows it- put up a camp. If it's possible to find a shelter near a lake, you can boil the lake water to stay hydrated.

Oh right, and the flesh-eating zombies... Hang a few tin cans on a string that surround your shelter. When they walk into the string, the sound will hopefully warn you of their presence. Also, learn to recognize their sounds. A gurgle? A houurgh? A burrrrh?

Tip 6. Vitality

The Swedish woods are full of goods, but what mushrooms are poisonous? What berries and herbs can treat medical conditions? Learn from books or other survivors. Weapons that make it possible for you to keep distance from the zombies are safer than short-range weapons. Even the smallest scratch from a zombie could cause an infection and make you catch the disease. And don't get too cocky about having the coolest weapons- it's more about being smart than going crazy with guns.

Goods such as gold and silver, alcohol, cigarettes, coffee, food, guns, ammo and gasoline will be sought after. By trading goods, both parts can solve conflicts in a peaceful way and at the same time gain from each other.

Tip 7. Embrace and Adapt

Post Patient X, nothing will be the same. Only those who adapt will survive. So now is your chance to put some dirt on your face, wear sunglasses, walk away from the explosions and all that. Or, you could sit inside and finally read that book you've been wanting to read for so long. Maybe a simple, rural, survivalist life is your true calling?

But, in all seriousness, maybe you will find some of these tips useful. Because no matter what catastrophe, you have to know how to be independent. And it isn't unlikely that a societal crisis will happen someday. Doing a little research and preparing the essentials for your survival doesn't take too long, and it could in fact save your life. So, are you a survivor? Will you become a prepper? I know I'd rather be safe than sorry.

DESIGN & ILLUSTRATION | CARLOTA FERNÁNDEZ

THE GEMS OF EUROPE

TEXT // HEDVIG TINDBERG
DESIGN & PHOTO //
VELITCHKO VELITCHKOV

Summer to me, is exploring the capital cities of Europe. Crossing streets in buzzing traffic, watching impressing buildings standing tall in the sun, walking by cozy cafées in every street corner, spending late nights on rooftop bars, going on scooter rides on narrow streets.

But am I not forgetting something? The never-ending queues to museums, the crowded and boiling warm spaces in public transportation, the melting ice cream, the expensive hostels.

For people like me, who love to spend their free time exploring new destinations, the interrail system in Europe is a golden opportunity to go see many countries and places on a relatively small budget. When sitting down with a map and planning an interrail trip, it is easy to pick up a pencil and draw out one's route from one capital to the next. From Stockholm to Oslo, to Copenhagen, to Amsterdam, to Berlin, to Prague, and so forth. But there is so much more of Europe to discover than the capitals; smaller cities, historic places, beautiful nature. And they are often as easy to reach by train as the major cities.

So this summer, why not use your interrail-pass to go off the beaten track and discover some gems? Here is my list of six places to go explore.

LAKE BLED, SLOVENIA

Lake Bled appears to be taken from a fairytale; a white church standing alone on the petite Blade island in the middle of an azure blue lake. The lake is so small that one can walk around it, and if you prefer traveling on water, why not rent a small boat and row out to the island?

The photo is from
Meteora, Greece

METEORA, GREECE
This is a spectacular rock formation-complex with greek-orthodox monasteries built on top of them, some of which are still being used. Meteora is listed as a world heritage and offers several nature activities. Except for visiting the monasteries, one can go hiking, rock climbing, bicycling and rafting here. In the nearby area is also a spectacular cave, in which researchers have found elements traced back to Neanderthalensis.

MONTEPULCIANO, ITALY
Many people think of wine when they hear of Montepulciano. But Montepulciano is not only famous for its wine, it is also a medieval town in southern Tuscany. If traveling to Florence, make sure to pass by this town to enjoy its historic charm, to watch outdoor theaters and of course, to drink lots of wine.

KOTOR, MONTENEGRO
Beautiful Kotor was elected as the number one city to visit by Lonely Planet in 2016. The medieval town is situated right by the mediterranean sea and has a fortress which one can climb for a stunning view over Kotor's old town - a world heritage site. A fun fact about Kotor is that it's famous for its cat-friendliness. The city even has a cat museum.

VAL POSCHIAVO, SWITZERLAND
When train-traveling between Italy and Switzerland, make sure to pick the route that goes through the breathtaking valley of Val Poschiavo. The little red train called the Bernina Express, will take you through an idyllic Swiss landscape of mountains, crystal blue lakes, fields of flowers and alp houses.

SICILY, ITALY
Believe it or not, but one can actually take the train all the way to Sicily. There is a ferry that carries the train from the mainland, and then the trail track continues all around the island (although most trains are regional and travel rather slowly). It is popular to take the train to Siracusa - an ancient, coastal city with a spectacular Greek outdoor theatre, cozy markets and two castles.

Now imagine sunrays warming your face, an ocean breeze bringing out goosebumps on your forearms, a sunset fading into a sunrise. Summer is near and Europe is calling for you to go explore its gems.

WHAT ABOUT COCOA?

We all love chocolate. Preferably in large amounts. But the production of cocoa is not as heavenly as the taste of our favourite candy bar. The cocoa production still today includes both child labor and forced labour. And many of those farmers who are of age and do get paid still earns the bare minimum and live in extreme poverty. What you as a consumer can do, is to stay informed, put pressure on chocolate brands and only buy Fairtrade certified chocolate and Tony's Chocolonely.

Some facts abour the current situation

Many cocoa farmers live in extreme poverty and according to Fairtrade earn as little as **2-4 SEK** per day.

There is a pervasive issue of child labour in cocoa production and according to the cocoa barometer, there is currently **2.1 million** children working within the industry in West Africa alone, from where around 60% of the world's cocoa is produced.

Furthermore, an estimated **14,000** children working in cocoa agriculture were victims of child forced labour between 2013 and 2017 in Ghana alone, according to the Global Slavery Index.

The amount of children involved in hazardous child labour increased with **46%** from 2009-2014 according to a study from Tulane University and within the cocoa industry there is hundreds of thousands of children working as forced labour according to Fairtrade.

Fairetrade

Fairtrade certified cocoa ensures that no child under the age of 15 is producing the cocoa and that no child under 18 is performing hazardous work. The cocoa farming can be hazardous as pesticides and dangerous equippment is being used.

Fairtrade certified cocoa also ensures that the farmers producing the cocoa has been paid a larger amount for their product and recieved a premium for the community that could be used for education.

How world price of cocoa affects cocoa farmers

The world market price for cocoa declined rapidly between September 2016 and February 2017 with a tonne of cocoa going from above US $3,000 to below US $1,900. 90 % of all cocoa is produced by smallholders (individual farmers with small areas of land) with under 5 hectares land, and they bear the risk of the volatility in price. Smallholder cocoa farmers in Côte d'Ivoire, already struggling with poverty, saw their income decline by as much as 37% in the beginnng of 2017. Low prices and fluctuation in prices are by the cocoa barometer described as major threats to achieve a sustainable cocoa sector. According to Fairtrade, cocoa farmers in Côte d'Ivoire are on average earning US $0.78 per day, and the living wage (*minimum income necessary for a worker to meet their basic needs*) is estimated to be US $2.51.

Tony’s Chocolonely

Tony's Chocolonely is a chocolate producer and a project started in 2005 by three Dutch journalists as a way of shining a light on slavery in cocoa production. Its mission is to create 100% slave-free chocolate. Also, the physical chocolate bars are unequally divided to symbolize how the profits from the chocolate is extremely unequally divided and how some profit from other's misery.

All of the cocoa in these chocolate bars is Fairtrade-certified and in addition to this, Tony's Chocolonely pays an additional premium to its cocoa producers in order to ensure they receive a living wage (minimum income necessary for a worker to meet their basic needs). Furthermore, Tony's Chocolonely have close contact with and long relationships with its producers as a way to increase transparency along the supply chain and reduce the risk of slavery being involved in the production.

Tony's Chocolonely aspire to be a good force in the chocolate industry and to inspire other firms to follow their lead and for customers to be more aware of how their products are produced, so that one day we can eat chocolate with a clean conscience, knowing it is produced fairly.

TEXT & DESIGN | FILIPPA HÖGLING

THE MINIMAX CHOC

With the purpose of trying out different Fairtrade- and ecofriendly-certified chocolate bars, and crowning the tastiest, Minimax roamed the grocery stores in the vicinity of Sveavägen 65 and gathered a tasting group. The group, consisting of Designer Velitchko, Journalist Layal, Editor-in-Chief Filippa, and Head Photographer Kalle, was relatively unanimous in the process, but nonetheless there were some surprises uncovered at the end!

In order to facilitate the selection process, the chocolate bars included in this test were chosen only from products marked with the Euro Leaf - the European Union's ecolabel for agricultural products. The test was carried out as a blind tasting, where the testers simply were served a piece of chocolate without knowing what brand or type of chocolate it was.

First, the panel tries a bar of vegan white chocolate from Green Star, which besides being free from animal products, also is gluten-free.

Kalle: It doesn't really taste that well… I am not convinced, it isn't creamy.

Layal: Agreed, it doesn't have that much flavor.

Velitchko: The taste is a bit watery, but it's a plus that it isn't too sweet.

Filippa: I am not too fond of white chocolate, but this was okay. I too like that it wasn't so sweet.

Next up we have a bar of dark chocolate, with a touch of sea salt from Marabou Premium. Besides the Euro Leaf, it is also labelled with Cocoa Life - a project by Mondelez aimed at improving conditions for cocoa farmers. The sea salt, however, proved to be hard to identify for the testers with Filippa being the only mentioning the saltiness.

Kalle This one is good, it tastes a bit of chili or something.

Layal: I think it's coffee, no, mint!

Velitchko: … or maybe raspberries?

Kalle: I still think it's chili. But I like it, it's fresh. High points for this one!

Velitchko: I would actually consider buying this.

Filippa: Yes, it has a nice taste and just the right amount of salt.

It is time to present our next white chocolate. This time it is a Fairtrade-labelled white chocolate with 30 % cocoa and a hint of Madagascan vanilla.

Kalle: This white chocolate was much better than the first one.

Filippa: Definitely!

Layal: It is so much creamier and tastes more of chocolate.

Velitchko: I think it has vanilla in it, it might be the best white chocolate that I have ever eaten!

Kalle: This one is not too sweet either. I don't usually like white chocolate but this one is nice and you can see the black vanilla seeds.

TEXT | ALFRED ERIKSSON

OLATE TEST

	Green Star Vegan White Chocolate	Marabou Premium EKO Dark Chocolate with Sea Salt	Green & Black's Organic White Chocolate with Vanilla	Garant Organic Dark Chocolate
Layal	1	4	3	2
Kalle	1	3	4	2
Velitchko	1	4	2	3
Filippa	2	1	4	3
	5	**12**	**13**	**10**

Last out we have an organic 70 % dark chocolate from Garant. This Fairtrade bar is perhaps also the most unadventurous of the test samples, as it contains no extra surprises, which the panel did not fail to notice.

Velitchko: It has a strong aroma, but it doesn't really translate into the taste.

Layal: I, on the other hand, think it has a lot of taste, but it is not that creamy. An ordinary dark chocolate simply.

Filippa: Actually I think this might be my runner-up, after the white chocolate with vanilla.

Kalle: Same here, but it is a bit boring.

It is time for the tasting group to rank the chocolate samples in the order of preference, with the most preferred receiving 4 points, and the least preferred getting 1 point.

Although some testers were not previously too fond of white chocolate, the one from Green & Black's managed to convince most of them with its vanilla flavor, crowning it the winner of this tasting round. However, it was a tight race with the dark chocolate with sea salt from Marabou Premium, even though a majority of the panel believed it was flavored with chili. Last came the other white chocolate from Green Star.

DESIGN | LOUISE RIBRANT

WOULD YOU SURVIVE A CRISIS?

TEXT // LAYAL CHEHADÉ
DESIGN // VELITCHKO VELITCHKOV

Imagine all the electricity shutting down. Your home, your street, your nearby supermarket lay in complete darkness as the sun sets. You cannot call or text anyone, because you cannot charge your phone. How long would you make it? Would you survive in a world where it is just you and nature? Most of us probably would not. Neither would the Swedish state.

Most of the Swedish population would have run out of water, food and heat within the first week of a crisis.[1] It is alarming to see that emergency and crisis responses have not been a priority for the Swedish state and that most of the population have not thought of it until now. For the last couple of years, the Swedish state has tried to prepare themselves and the population for a crisis. Last year, most of us received a brochure titled "If the crisis or the war comes", informing us about how to be prepared for a war, a natural catastrophe, such as a tsunami or a wildfire, or a cyber-attack. It is for the first time in three decades that these kinds of brochures have been distributed to civilians.

Since the Cold War, the Swedish emergency and crises responses have almost been non-existent. The Swedish emergency and crisis responses can be described as the ability to prevent, resist and manage crisis situations. The purpose is to protect the life and health of the population, society's functionality and the ability to maintain our fundamental values such as democracy, legal certainty, human rights and freedom.[2] However, according to the brochure sent out by the government, there has been a change in the mindset that democracy and peace should not be taken for granted. The unstable political situation between Europe and Russia could be one reason, while another could be climate change. Yet another reason is perhaps that our generation simply would not make it through a crisis. We have been brought up taking for granted that everything we need to know can be found in our smartphone. We rely on google to teach us how to make a fire, or what to buy in case of an emergency, which we ironically would not be able to do if a crisis actually strikes.

It is quite likely that the majority of Swedes do not realise the amount of personal responsibility that lies in crisis preparation, as we rely on the state to help us. The state has a primary focus on providing security and electricity to for example hospitals, but normal households have to be prepared to make it alone. Furthermore, almost 50% of the Swedish food supply is imported, which is a

1. Landgren, *Sveriges krisberedskap under all kritik*
2. Regeringskansliet, *Krisberedskap*
4. Cederblad, *Uppsving för krisprylar efter SVT:s serie*

large number compared to the rest of Europe.[1] If there would be difficulties in importing food, the Swedish population would be starving within only a few weeks.

The Swedish state recommends that you keep storages of food at home to be prepared. There are numerous shops online and even stores such as Clas Ohlson who are selling prepared boxes which contain all the necessary items you need to survive for about 72 hours. Due to the rising awareness of emergency and crises responses, there has been a splurge in purchases of emergency boxes. [4]

If you are looking for more information about the Swedish emergency and crisis responses and about how you can be more prepared, you can find it at this governmental website: www.krisinformation.se

WHAT YOUR EMERGENCY BOX SHOULD CONTAIN

FOOD: You should keep foods with a long shelf life, which are rich in carbohydrates and proteins, and which require little water and short cooking time. For instance:

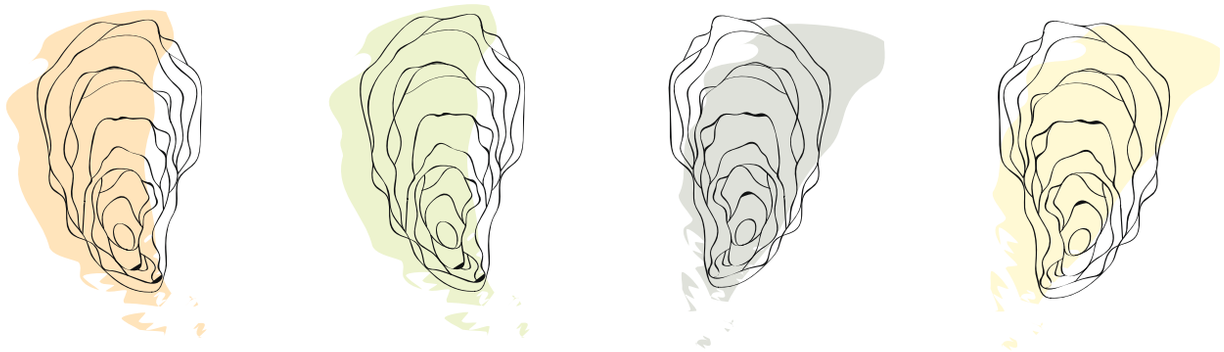
-Potatoes, Carrots
-Rice, Pasta
-Canned food such as meat sauce, salmon and mackerel
-Cooked beans, lentils, vegetables

WATER:

-You should keep bottles of water amounting to three litres per person per day
-Water cans which you can fill with water

COMMUNICATION:

- A radio powered by batteries or a hand crank radio – it will be your primary source of communication when the network shuts down and there is no electricity
- A paper list containing all the important telephone numbers
- Powerbanks



The World Is Our Oyster

TEXT // ALFRED ERIKSSON
DESIGN & ILLUSTRATION //
LOUISE RIBRANT

The human being is curious in its nature and live for the thrill of adventures and getting to know the unknown. We seek for the truly genuine experiences, the beauty of untouched nature; places still unchartered by the rest of humankind.

Yet, the coral reefs are bleaching, beaches are flooded by plastic and local communities one by one, make place for generic hotels that could be found anywhere on earth. The pictures we take are filled with a myriad of other explorers, blocking the magnificent view, distracting nature itself from displaying its beauty. We cannot go swimming, not due to of the risk of jellyfish, but because of the overload of trash in the water. The white sand is not really sand, but rather a mixture of microplastics and polished pieces of glass.

Yet, the coral reefs are bleaching, beaches are flooded by plastic and local communities one by one, make place for generic hotels that could be found anywhere on earth.

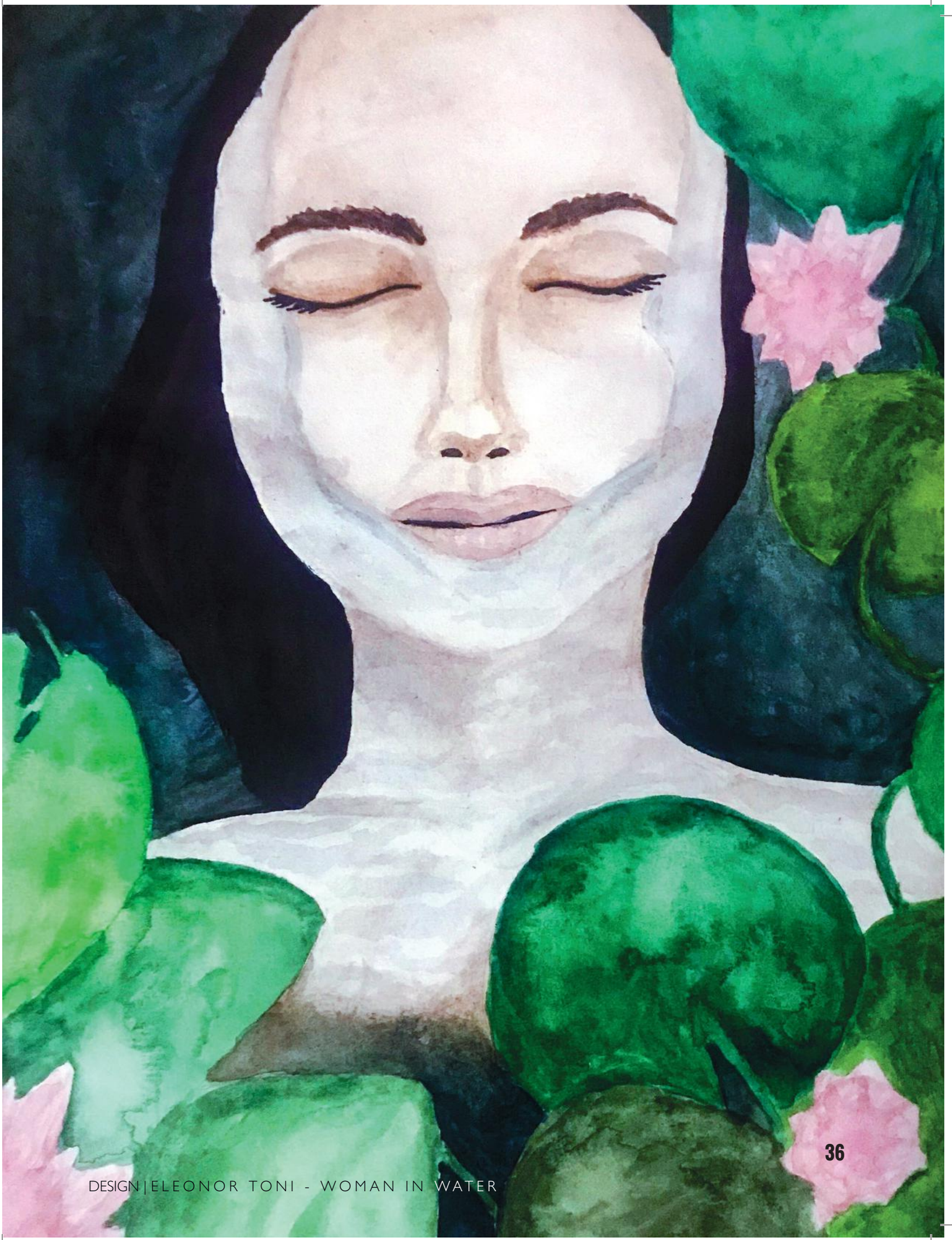
This is not the product offering we thought we were buying when booking the trip. We wanted to be here alone, not sharing the experience with that busload of tourists that travelled the same road, that was built to make the place more accessible. We wanted it to be untouched. Instead we get to witness the traces of all the tourists that were here before us.

If we are patient, we might get that perfect picture though. The plastic-filled sea can be edited to the exact shade of sapphire blue that we desire. And if we wear flip flops, it actually feels like we are walking on real sand.

When we get home, we praise this perfect place to the skies. The beauty, the people, the food. We tell our friends that "You must go there!"

We look for the next destination to conquer. Maybe this time we should go to this spectacular place? We heard it is supposed to be like the new Bali. Still untouched and not too mainstream.

If we go there next month, we might even get there before it is destroyed by our own Instagram likes.



DESIGN|ELEONOR TONI - WOMAN IN WATER

ENTERING CRYPTOLAND AND DIGGING INTO THE VALLEY

TEXT // NATALIE WILD & JAKOB NORDFELDT
DESIGN // VELITCHKO VELITCHKOV

It's just like one of those old pendulum-style clocks you would find at your grandmother's house. We're swinging back and forth between excitement and nervosity, while time is slowly bringing us closer to embarking on a flight across the Atlantic Ocean. When the clock strikes a full hour, you're safe in the knowledge that a small wooden bird will appear with loud tweets. That is not the case for us. When we arrive to California and Argentina, we really have no clue about what to expect. We are this year's GELS scholars, and we are about to dive into something very different from SSE.

We applied for the GELS scholarship without really knowing what we were about to embark on. We developed our project plans. We had our interviews. To be honest, we were both pretty certain we wouldn't receive the scholarship. But a few weeks later, an email from a certain Lars Strannegård that started with "I have the pleasure to inform you..." arrived. And now, we find ourselves in front of a unique opportunity to practically explore what we are passionate about in a foreign country on the other side of the world. It's exciting. It's terrifying. In contrast to university studies, there is no clear manual or right way of conducting your project - it is entirely up to you! However, in the midst of it all, there is a network of inspiring alumni scholarship holders available for guidance and advice to help us develop the best project plans possible.

So what are we going to do? Jakob is going to produce a film that will challenge our understanding of virtual consumption as we know it, by diving deeper into the world of Silicon Valley and tech giants. Meanwhile, Natalie is going to assess the demand for cryptocurrencies in Argentina in the light of their high inflation rates. Now,

don't be intimidated by all our buzzwords. It definitely sounds more complex than it is. We're both really just trying to learn more about things that interest us. And that is all we have to do. The criteria for applying to GELS is deciding on a topic of interest and choosing a suitable country where your project plan could be conducted. The world is your oyster! Why not start thinking about if there is something that makes your heart skip a beat, and perhaps if there is someone you can explore it with? GELS has brought students to Nepalese mountaintops, to Japanese megacities and to the Kenyan grasslands. You would be amazed of how different the projects have been. That's what makes this scholarship so cool and so different. It doesn't tell you what to do. It doesn't tell you how to do it. It only encourages you to actually do something with that extraordinary idea you have had in the back of your mind.

There's so much more we want to tell you, but we can't fit everything into this short text. So keep an eye out for the GELS lunch in May, and the information session later this autumn. And we would love to take you with us on our projects through instagram (@gelsscholarship). But above all, don't forget to apply next year. It's worth it.

Jakob Nordfeldt, Lars Strannegård and Natalie Wild

PHOTO | SOFIA WESTERLIND

STORIES FROM SIBERIA... THE 2019 WINTER UNIVERSIADE
THE STUDENT OLYMPIC GAMES

The Universiade is the equivalent of the Olympic Games – but for students. It is the second largest sporting event worldwide. I was fortunate enough to get to participate in the 2019 Winter Universiade in Krasnoyarsk, Russia, as a part of Sweden's ice hockey team. Having regretted turning down the opportunity to go during the 2017 games in Kazakhstan, I was quick to accept the invitation to participate this year. Looking back, it will undoubtedly go down as one of the best decisions of my life and something I will never forget.

Everything about the Universiade is world-class, and from the moment we arrived at the airport until the day we departed, we always had our attaché with us. As we arrived at the newly constructed athletes' village, we first had to go through two security checkpoints before entering the perimeter; something athletes had to do several times a day. The village was gigantic and hosted over 3000 athletes from more than 60 different countries, with lounges, gyms, a massive food court, a hospital and even a bank; everything you needed within a span of about 1 square kilometer. At this point I realized how big the Universiade really is, and it blew my mind completely!

On March 2nd, the Opening Ceremony was held in front of thousands of people, where President Vladimir Putin declared the 29th Winter Universiade open, followed by two hours of amazing performances. It truly was a world-class show.

Going into the first game against Switzerland, I remember thinking I would be extremely nervous, but honestly every game was an unbelievable experience, playing in a sold out arena! As if that was not enough, after every period, euphoric kids and fans were reaching down for high-fives and autographs as we made our way to the locker room; moments I will forever cherish. Even though we did not win a medal, each game felt like playing in the final. Knowing that I will never participate in a sporting event close to this big again, I truly tried to soak it all in during every single game.

The 2019 Winter Universiade was by far the most epic adventure of my life and something that I will always remember. I hope that this will inspire others to participate and represent SSE in the 2021 games. If you have the chance: DO IT! It will be the most awesome experience of your life.

TEXT | JONAS GLÄDT

DESIGN & ILLUSTRATION | HANNA KOPELMAN

AS THE POOR GET RICHER, THE TREES GROW TALLER

TEXT & DESIGN// VELITCHKO VELITCHKOV

There is a lot of talk about deforestation. The brazilian Amazon forest might come to mind, as it has famously been cut down at a frightening rate. Indeed, the irresponsible exploitation of the world's forests is a concerning issue, as it endangers enormous natural resources as well as a large numbers of animal species who call the forests home. All in all, news of deforestation make it difficult to feel optimistic about the future of the world's trees, nature, and in extension, climate and earth.

However, over multiple decades, there has been a surge in reforestation in several places around the world. For instance, in Brazil, the largest reforestation project in history is set to plant an astonishing 73 million trees between now and 2023 - covering an area larger than that of 30, 000 football fields![1] While this alone will not restore the Amazon forest, it is a step in the right direction. Since bad news concerning the world's forests are abundantly reported on, let us now consider the progress that has been done - as the facts on the matter are not only important, but also surprisingly inspiring.

First of all, let us contextualize the statistics on the current situation. The size of the Earth is mind-boggling, and this makes it difficult to retain the sense of proportion so crucial to the proper assessment of the situation. As a case in point, consider that between 2010 and 2015 deforestation amounted to 7,6 million hectares per year.2 That sounds enormous, and in absolute terms it is. But to grasp the true significance of the change, one must ask: what is the total forest area? According to the FAO, there are currently 4 billion hectares of forest on Earth - that is 4 billion football fields, or over 100 times the surface of Norway. 93% of that surface is natural forest, and the rest is planted forest area.[2] Since Earth has 14.8 billion hectares of land, that means that roughly a third of its surface is currently covered by forests. And those 7,6 million hectares of forest loss, are countered by a gain of 4,3 million hectares per year, amounting to a total net decrease of forest area of about 0,08% per year - less than a tenth of a percent.2 Now, this is no cause for celebration - in and of itself it is absolutely way too much. But it is not a rate which should induce total panic, and change is on the horizon.

The natural forest loss (disregarding the forest gains and disregarding artificial plantations) is still considerable, but the loss is decreasing. The loss of 10 million hectares a year that took place in the 90's has decreased to a yearly loss of 6,5 million hectares (of natural forests) between 2010 and 2015, a decrease of 35 % in two decades.[2] There is reason to have hope for the future of the world's forests.

Furthermore, rich countries are not losing any forest area. In fact, not only are they not losing forest area, they are actually increasing it. Rich regions today have more forest area than they had before the Industrialisation![3] For example, the United Kingdom has three times more forest area today than in the beginning of the 20th century and will soon reach levels the likes of which

1. Lorraine Chow, "*World's Largest Tropical Reforestation to Plant 73 Million Trees in Brazilian Amazon*" (2017), EcoWatch
2. Report from Food and Agriculture Organization of the United Nations, "Global Forest Resources Assessment 2015 - *How are the world's forests changing?*", second edition (2016)

have not been recorded for almost a thousand years![3] [4] The forest coverage of the UK consisted of only 5% of the total land area in the beginning of the 20th century. It began increasing again in the 1940's and by 2018, it was up at 13%, a level only surpassed by the levels recorded in year 1086.[5]

More interestingly, a recent study published by Chen et al. in the journal Nature Sustainability, based on satellite imagery from the NASA has shown that, even though forests might still be losing land area, Earth is literally getting greener! In fact, what they call green leaf area (which encompasses not only tree-covered area, but also other types of green vegetation), has increased by 5 percent between 2000 and 2017. At least 25% of that increase came from China alone, with its ambitious tree-planting programs. Other regions with strong green leaf area increases include parts of Asia, North America, Europe and parts of the Middle-East. Only 5% of the world's surface is losing green-leaf area, in areas in Africa, South Africa and central Australia, mostly in areas struck by poverty or remote and uninhabited areas. Green-leaf area encompasses vegetation other than forests, and is thus a broader metric, but it's still an important sign, and since all green vegetation converts carbon dioxide into oxygen during growth, this is good news. [6] [7]

Why are the countries with more developed industries and with high consumption per capita the ones increasing forest area? Or rather, why are only some of the poorest and most remote areas the ones loosing forests and vegetation? The environmental Kuznets curve may be part of the answer. The idea is that countries will tend to see a decrease in their natural resources while their economy is developing, until people have satisfied enough of their basic needs to concern themselves with the environment, at which point they will start reducing pollution and invest in a more sustainable management of - for instance - the forestry resources. The natural resources then begin to increase again. While the Kuznets curve has failed to explain developments in some areas, it does seem to align observations concerning the world's forests.

It is important to note that there are several opinions on how best to reach global sustainability. Ecological marxists claim capitalism is the source of sustainability challenges, economic liberals believes a sustainable future is attained through innovation and free market interactions, neo-malthusians are theorising on the need for a decrease of population to save the globe, and globalists are calling for a strong world-government to solve the issue. The environmental Kuznets Curve is a model often used by those arguing for the compatibility between market-driven economic growth and environmental protection. Of course, you do not necessarily need to adhere to the entire ideology surrounding it to it to recognize that it does offer an explanation in the case of the observed evolution of the world's forests.

Following the idea of an environmental Kuznets curve, the british journalist Matthew Ridley explained in a speech at Wageningen University and Research what he calls the "forest transition". In fact, he explains, once a country hits a GDP per capita of around $4,500, forest area begin to increase.[8] The number is, of course, approximative and varies depending on the geographical area, but the point is that when people attain a decent living standard, forests tend to grow. Countries like Russia, China, Vietnam, and many more have rather recently hit their point of "forest transition" and see a net increase in forest area.[3] Furthermore, the Chen et al. study about green leaf area, mentioned earlier, showed that China and India are leading the greening of the Earth, much thanks to their recent economic boom.[6] They are rapidly developing and their poverty is sharply decreasing as we shall see later. Nemani, a co-author on the study, explains that the unexpected findings of the study show that "Once people realize there is a problem, they tend to fix it. [...] In the 1970s and 80s in India and China, the situation around vegetation loss was not good. In the 1990s, people realized it, and today things have improved. Humans are incredibly resilient. That's what we see in the satellite data."[7] Meanwhile, China's real GDP per capita went from less than USD 200 in 1980 (today's value) to well over USD 8,000 in 2017.[17]

Also, the fact that net wood-exporters like Europe or heavily populated and industrialised countries like China manage to increase their forest and green-leaf area hints that the net reforestation of rich countries cannot solely be explained by their importation of wood - it is not

3. Alexander C. R. Hammond, *"No, We Are Not Running Out of Forests"* (2018), Human Progress
4. Victoria Ward, "*Forest levels booming as UK woodland returns to highest level in more than 250 years*" (2010), The Telegraph
5. Report from Forest Research, "*Woodland Statistics*" (2018)
6. *Chen et al. , "China and India lead in greening of the world through land-use management"* (2019), published on the journal Nature
7. Abby Tabor, "*China and India Lead the Way in Greening"* (2019), NASA Earth Observatory
8. Matt Ridley, "*Speech Matt Ridley at the Opening of the Academic Year 2017/18"*, Wagenigen University & Research
9. Report from Food and Agriculture Organization of the United Nations, *"State Of The World's Forests 2009"*,

that they stop producing wood, but rather that they find more sustainable ways to do so, and replant trees in sufficient quantities to compensate for the loss of trees.[9] For instance, about 42 percent of China's "greening contribution" (i.e. the part of the increase in green leaf area that China was responsible for) came solely from its programs to expand and conserve forests, and overall Chen et al. found in their above mentioned study that "human land-use management" is an extremely important factor in the greening of the Earth. In other words, countries, companies and farmers are learning to manage the natural resources more efficiently and sustainably. "Nearly all forests are managed in the EU".[6]

Chi Chen from Boston University, the lead author of Chen et al., noted that the fact that China and India are leading the Earth's greening "is a surprising finding, considering the general notion of land degradation in populous countries from overexploitation."[7] As people rise in Maslow's hierarchy of needs, from the "basic physiological" needs toward those of "self actualisation", people begin to care about the air they breathe, the water they drink and the view that surrounds them. Regions like China and India have only recently begun to see their poverty decrease and are therefore only beginning to restore their forests and vegetation, while more established wealthy regions in Europe and North America already have come a long way in the restauration of their forests.

When in economic hardship, people might not have a choice to abstain from the forestry revenue that can truly be the difference between life and death for the population - no matter how badly the forests are handled. But, if you are to follow the reasoning behind the environmental Kuznets curve, as incomes grow and capital accumulates, countries tend to waste fewer of their own resources, to acquire more efficient and less polluting production methods, and to begin to manage their forests in a more sustainable manner. We can observe that this, at least, is occuring with the world's forest area. To put it simply; as the poor get richer, the trees grow taller.

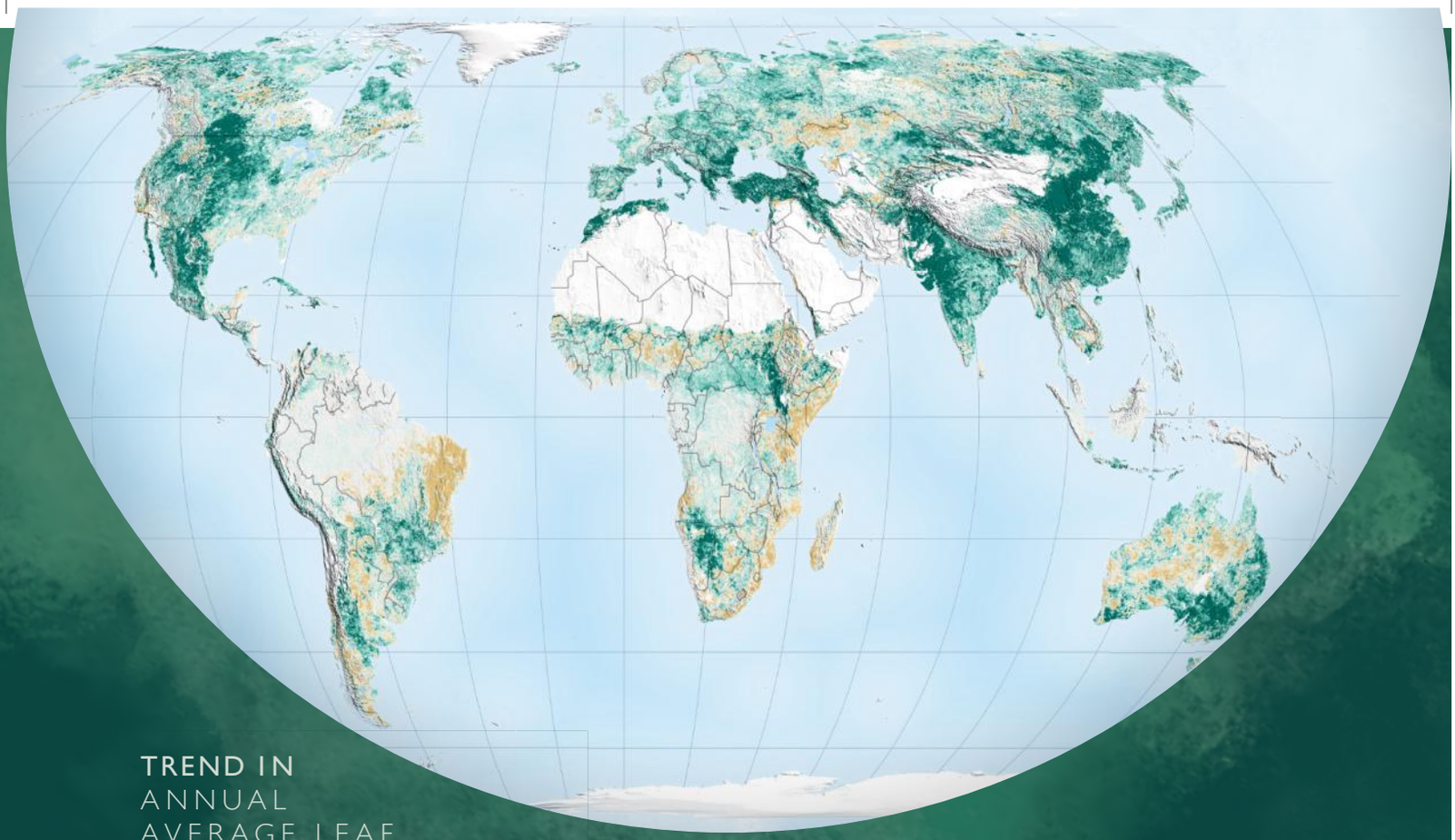
In other words, our best bet for saving the forests is making poor people richer, and doing it fast. But how are we to do that? Poverty sounds like an unending and complex problem, a gordian knot which will require all our effort to resolve. However, it turns out we are already heading steadily in the right direction. According to data from the World Bank and OurWorldInData, in 1966, 50% of the world's population lived in extreme poverty. But in the last 50 years, we have made an incredible leap and the poverty rate has plummeted down to 9% in 2017.[10] In China, 42% of people lived in extreme poverty in 1997 - in 2017, the rate was an incredible 0,7%![10] Furthermore, the chinese overall average wages increased by an incredible 8,2% per year between 2008 and 2017.[11] And surely enough China has gone from a net deforestation to a net afforestation. [3, 6, 7]

So, are we running out of forest? The answer has to be no. While it is true that we have not reached net-zero deforestation yet, the rate of net deforestation is rapidly decreasing. When including other types of green plants, the green leaf area is even increasing in the world! Many aspects of environmental development, especially concerning forests, go hand-in-hand with alleviation of poverty, and we are already heading in the right direction.

However, merely looking at net deforestation rates does not show the entire value of forests and the effects of deforestation. What is important to mention, is the loss of biodiversity that has occured because of deforestation. While reforestation in itself is beneficial to the environment as it cleans the air and binds carbon dioxide, it will not bring lost species back to life and the previously disrupted ecosystems can have more complex consequences than merely the loss of trees.

However, further damage could be avoided with the help of natural preservation programs and the continued decrease in the destruction of natural forests. This type of programs have proven to be effective, notably as the Belize Barrier Reef, the world's second largest coral reef was recently removed from the UNESCO List Of World Heritage In Danger. Thanks to an action started in 2015, the reef and its biodiversity are today no longer threatened by extinction.[12] If such an action can be successful for a large underwater coral reef, perhaps it could also be successful for the protection of wildlife and biodiversity that has been damaged by

10. Max Roser and Esteban Ortiz-Ospina, "*Global Extreme Poverty*" (2017), Our World in Data
11. Jiang Chenglong, "N*ew report suggests China's contribution to global wage growth*" (2018), China Daily
12. UNESCO, "L*andmark Conservation Action leads to Belize Barrier Reef removal from List of World Heritage in Dange*r" (2018)



TREND IN ANNUAL AVERAGE LEAF AREA (PERCENT PER DECADE, 2000-2017)[7]

deforestation. There is also evidence to suggest that the environmental Kuznets curve also could be applicable to wildlife preservation, but that is perhaps a topic for another time.

While it is important to recognise environmental problems in order to solve them, it is also important to keep track of our advances, and specifically what caused them. If the rate of deforestation is decreasing, it is crucial to note that improvement, and identify its driving causes in order to know how to act going forward. Awareness of environmental issues is increasing, but not much is heard regarding the incredible progress that is made. Because progress has been made.

We have mentioned the progress concerning deforestation and poverty, but we can also note technological progress that hints at improving resource management, and the progress we are making towards solving even larger issues. The average cost per watt of solar panels, for instance, has gone down from $66 to $0,6 per watt between 1976 and 2016, according to OurWorldInData.[13] In 54 years, the fuel efficiency of airplanes has increased by a whopping 45%.[14] It is even probable that improving fuel efficiency will cut Co2 emissions by a larger amount than reducing air traffic, especially if new technologies, like electric engines and bio-fuels are implemented. Since 2004, new cars have become 29% more efficient in terms of real world Co2 emissions in the USA.[15] A company called Mootral has even developed a natural food supplement able to inexpensively reduce the methane emissions of cows by over 30 percent![16]

If we want to reach our sustainable development goals, whether it be concerning poverty, sustainability or deforestation specifically, we should pay as much attention to what is going wrong as to what we are doing right, so we can do less of what causes the problems and do more of what best resolves them.

13. Hannah Richie and Max Roser, "Energy Production & Changing Energy Sources" (2019), Our World In Data
14. Anastasia Kharina and Daniel Rutherford, *"Fuel efficiency trends for new commercial jet aircraft: 1960 to 2014"* (2015), The International Council On Clean Transportation
15. Report from United States Environmental Protection Agency, *"Highlights of the Automotive Trends Report"* (2018)
16. Information from Mootral.com, *"All About Mootral"*
17. World Bank national accounts data, and OECD National Accounts data files.

THE FUTURE OF SASSE

As of today, SASSE really is a professional playground, promoting good camaraderie between its members and developing people through our projects. But it might just be that the students' joint interests are somewhat forsaken. The majority of the roughly 2 000 students at SSE are not actively engaged within the Student Association at all, and with the insights gained it becomes clear that there is a lot more that can be done for these members who really are just students of SSE. Student benefit must not be hard to achieve, small gestures can make the time at SSE a lot more convenient!

SSE has for a couple of years had the ambition to become *"An international business school located in Sweden"*. The wish from SSE management is to make SSE fully international and to be a strong competitor in the world of business schools, and we can see this happening step by step. Today 50% of the students at our master programs are international, and since 2018 there

"Creating an international environment entails more than just gathering students from different parts of the world in one place."

is international admission to the RM Bachelor Program. The Bachelor Program in Business & Economics is currently the only program at SSE that does not have international admission, which however is planned to start in the fall of 2020. Furthermore, SSE is aiming to increase the number of exchange spots drastically on both Bachelor and Master levels. It is therefore certain to say, that all students at SSE will experience an even more international environment just in a few years, with classmates from all over the world.

Since SSE wishes to become a strong international competitor, we as an association have to be prepared for a more diverse student body with many international students. Because frankly, how to integrate international students in SASSE have been a topic up for debate for many years, but we are still not doing it to a successful extent. SASSE's mission is to look after all students' joint interests, and the whole range of the student body must be considered when setting the structure for how the association operates and thereby what kind of events and activities that are offered to the students.

In January 2019, the SASSE Board of 18/19 visited four different student associations at four universities in Singapore, a country known for

PHOTO | EMMA PERLELIN

its multicultural environment. The topic of internationalization was discussed with the associations who shared their experiences, best practices and challenges. The Singaporean student associations provided us with a lot of inspiration and hands-on areas of improvement when it comes to integration of international students, but also in terms of career management services, welfare services and governance structure.

However, one of the key takeaways from our visit is that internationalization is difficult. Even in a country like Singapore, where English is an official language, it is a struggle. We need to be prepared for that international students will arrive at SSE with a completely different set of prerequisites and experiences than our Swedish students. They will not only face cultural differences, but also homesickness and lack of knowledge about the country that is now their home. Our role as a student association should be to facilitate our international students' stay here: to lower any cultural barriers, to serve as guidance when needed and to be the best cure for homesickness that we possibly can be.

Sincerely,
The SASSE Board 18/19

Interested in reading about all the takeaways from the trip? E-mail president@sasse.se and ask for "The Future of SASSE"!

DESIGN | HANNA KOPELMAN

CLIMATE COMPENSATION - BUYING PEACE OF MIND?

TEXT // ALFRED ERIKSSON
DESIGN // CARLOTA FERNÁNDEZ

Striking youths, "flying shame" and a continuous feed of alarming climate reports. Few are those who to this day deny climate change and awareness on how to fight it, is on the rise. Climate compensation is one of the suggested solutions and is nowadays often offered as an option when buying, for example, flight tickets. But is climate compensation the problem-free solution to eliminate all emissions or is it just a way to buy yourself some peace of mind?

In short, climate compensation refers to the phenomenon of paying for a reduction of emissions elsewhere, in order to make up for emissions caused by one's own actions. The measures can take many forms, such as donations to projects planting forests, investments in renewable energy or purchases of emission permits, that are subsequently "destroyed". Emission permits are basically rights that companies receive and trade with and allow the owner certain levels of emissions. Thus, the idea behind buying these permits as a form of climate compensation is to increase permit prices and make it less attractive to emit greenhouse gases. The effect of the climate compensation does not have to be immediate, but rather tends to be the result of a more long-term reduction of emissions.

The cost of climate compensating can vary, depending on from whom you purchase the service, what kind of project you wish to support and in which country it is carried out. For example, if I were to go on a round-trip home to Finland by plane, the cost to compensate for the 0.26 tonnes of CO2 -emissions caused by air travel would lie between approximately 59 and 94 SEK. This according to one of the Swedish companies that offer climate compensation for individuals.[1]

With awareness of climate change spreading like wildfire, it is no wonder that companies and individuals alike, at an increasing rate are turning to measures like climate compensation to minimize their negative impact on the climate. It is a relatively carefree way of buying a good conscience and it is not even that expensive, compared to the cost of a flight.

Nonetheless, climate compensation is not a perfect solution. There are potential difficulties with matching the emission you wish to compensate for, with the expected reduction in emissions caused by investments in renewable energy, and forests planted to bind carbon dioxide could be cut down in the future, unless they receive sufficient protection.[2] In these cases, there is a risk that the purchased compensation does not deliver on the promised emission reduction. From a social perspective, tree-planting projects could also have a negative impact on the local economy or food supply, if placed on farmland. Emission permit systems, on the other hand, have been criticized for allowing way too abundant numbers of permits, almost entirely eliminating the positive effects of climate compensating.

These mentioned shortcomings have been acknowledged and partly addressed through increased transparency and certification systems, such as the Gold Standard for climate compensation projects. With increased interest in these kind of services, companies acting on this popularity have been able to invest in projects beyond demand and are now being able to sell compensation where the offsetting is already recorded.[2] As the accumulation of greenhouse gases in the atmosphere is continuous, it is crucial to halt emissions now, rather than waiting for it to happen in the future.[7] Selling already offset emissions as compensation, thus avoids the problem of having to predict the effects of reductions in the future and matching it with the effects of emissions today.

In the end, one does well in remembering that climate compensation is more of a rectification than an act of a saint.

In the end, one does well in remembering that climate compensation is more of a rectification than an act of a saint. With regards to the utmost goal of climate compensation, preventing climate change, the world will not be a better place because I compensated for that flight home. Instead, I could have decided not to fly at all, reduced my emissions, and allowed for that carbon offset to be used elsewhere. While there will probably always be situations where there will be a need for consumption or other emission-causing activities, a big part of our carbon footprint today is created by unnecessary consumption. These consumption patterns are in no way sustainable and paying extra money for climate compensation is not necessarily the best way of getting to the root of the problems. Climate compensation risks playing the role of justification for consumption, in order to achieve peace of mind. The solution closest to hand should not be compensating for caused emissions, it should be preventing them from occurring in the first place.

[1] Klimatkompensera.se

[2] The Guardian, *A complete guide to carbon offsetting*

NATURE'S CALLING

TEXT // LINN CERVELL
PHOTO // FANNY LUNDVALL
DESIGN // LOUISE RIBRANT

> ” Maybe people are not capable of living in an environment that is too focused on productivity, surrounded by too much concrete and too much of the city, for **too long**.”

She is standing in what seems to be the middle of nowhere. On top of a hill, with her arms open wide, she is facing the sun and the stunning mountain view. Or, she is sitting by a lake, the water clear enough to allow you to see the bottom, far away from civilization. As if she had jumped into a Bob Ross painting and decided to just sit there for a while.

The comments on the posts on instagram accounts posting these romanticized pictures of nature, are just as dreamy as the perfectly curated feed. “Would love to live there”, “Let’s move here”, “So relaxing”, “This is my dream”. People, who from the looks of their profiles, live busy city lives, are going crazy over open fields, a simple cabin in the forest or a bridge over a lake. It seems almost like they crave nature, and instagram is a way to satisfy that craving. Looking back 200 hundred years ago, 90 percent of Sweden’s population lived on the countryside. And today, 85 percent of us live in dense communities. Has nature, and a “simple life” become too distant?

Maybe. In Finland the term counterurbanization has been used, to describe the demographic and social process in which people move from urban areas to rural areas. Some people have chosen to move permanently, but above all, more and more Finnish people are buying and using summerhouses as a “second home”. Summerhouses in Finland have tripled since the 1970’s, and the numbers are still growing, turning heads of researchers and scientists. Today, over 40 % of Finland’s population have a ‘stuga’ that they use regularly. The definition of ‘counterurbanization’ in this case might therefore not mean the exact opposite of urbanization, but can at least be interpreted as a growing number of people looking to spend more time outside of the dense cities. Why? Rural researcher Kenneth Nordberg said in an interview with Svenska Yle, “There has since long existed a romanticized picture of the countryside and what it represents. The first big green wave happened during the 1970’s in a lot of western countries, which probably has to do with wanting to connect with nature again,”

Many are concerned that a busy city life will lead to a higher degree of stress. And it is true that mental health problems such as stress, anxiety and depression is a growing issue in today’s society. One of the things that doctors and psychologists recommend as a treatment, is in fact spending time in nature. Physical activity, fresh air, and mindfulness can improve both mental and physical health. Exercising in nature, enjoying the silence, the sunlight, time for reflection - the positive effects are endless.
So maybe it should not come as much of a surprise, that we are drawn back to nature. A hectic city life filled with noise, pollution and violence is basically the opposite of what we need. Question is, how much of it can we take before we pack our bags, and move out into the wilderness? Urbanization was great, seen from a productivity and efficiency point of view, but our biology stems from a completely different world. And at times, it seems to hinder us from becoming as productive and effective as we can be. Our flaws - clearer now than ever when we compare ourselves to artificial intelligence, already outwitting humans in several categories. Our hundreds of thousands year old homo sapiens brain causes distractions, stress, tiredness, lack of motivation, and sickness. And in some ways, signs of this can be seen in a “busy” life. You do not have time to sleep because of too much work, even if your body is begging you to. You are constantly stressed in a way similar to being chased by a dangerous animal- only difference is that when that was an actual threat, stress was crucial for survival. Maybe people are not capable of living in an environment that is too focused on productivity, surrounded by too much concrete and too much of the city, for too long.

The odds that one would leave everything behind, become self-sufficient and never use a piece of technology again are low. But maybe there is a limit to how far we can distance ourselves from nature. Could it be that mental health problems are partially caused by the loss of that connection? Would we feel better if spent more time in nature? And perhaps we should see the growing crave for a greener surrounding and a calmer life (whether it be on instagram or through Finnish summerhouses) as a sign of just that.

THE GLOBAL PLASTIC WASTE MARKET

TEXT & DESIGN // CARLOTA FERNÁNDEZ

We all know plastic; it is a malleable material that is widely used in the production and packaging of products all over the world. It is everywhere around us, in the cars we drive, the pens we use and even wrapped around the food we eat. Plastic is cheap and easy to manufacture; it is made from petroleum through a process that renders it non-biodegradable. Once it is produced, it can take up to 500 years, or even forever, to disappear.[1] We use plastic every single day, and then we throw it away (hopefully into the recycling bin).

But do you know what happens after that? Do you know that there is a global plastic waste market where firms all around the world buy and sell bales of plastic scraps?

Short history of plastic

Plastic has not been around forever. It was not until after World War II that large-scale production of plastic took off, increasing by 3,233.33% between 1950 and 1976 from 1.5 million tonnes to 50 million tonnes produced per year.[2] It was difficult for countries to keep up with the amount of plastic that was being produced and thrown away, and by the time that recycling schemes had been set up and governments had introduced legislation, we had already been dumping plastic in the oceans for years.

But during the 90s, something changed. China had been undergoing a heavy industrialization process for years, and was increasingly producing the majority of all the goods sold in industrialized countries. In order to meet its production demands, China's need for raw materials increased, and a market for plastic waste emerged. Scrap firms in China and other Asian countries started buying plastic waste from countries with lots of it, in order to recycle it and obtain raw materials to produce more plastic products.

The plastic waste market

The following decades, most of the recyclable plastic waste that was being collected through local recycling systems in high income countries, got packed into huge bales and shipped to China and other Asian countries, where scrap firms sorted and recycled it to sell it as raw materials. Because of this arrangement, high income countries did not have incentives to develop strong recycling schemes or to build recycling facilities that could process all the wasted plastic being generated domestically.

By 2016, China was importing over 7.3 million tonnes of plastic waste from all over the world, of the biggest exporters being Japan, the US and Germany.

The end of an era

After many years importing around a cumulative half of the world's plastic waste, China has had time to experience the environmental effects of sorting high amounts of plastic scraps mixed with food waste and other pollutants. Starting in 2018, China banned the import of waste of many different kinds, including "dirty plastic" (plastic with more than 0.5% of pollutants), a move that completely disrupted the market and which is expected to displace around 111 million tonnes of plastic waste by 2030. Other Asian countries are following suit and are either prohibiting or restricting the imports of plastic waste, in order to curb pollution.[3]

So, what happens now? China still produces the majority of the plastic globally, and after this ban, more virgin plastic will have to be produced from petroleum in order to meet the demand for this raw material. On the other hand, countries that earlier sent their collected plastic to China, are struggling to cope with the amounts of plastic waste being produced, and with plastic trash piling up, recycling plants are being forced to burn it or send it to landfill sites.

What can you do?

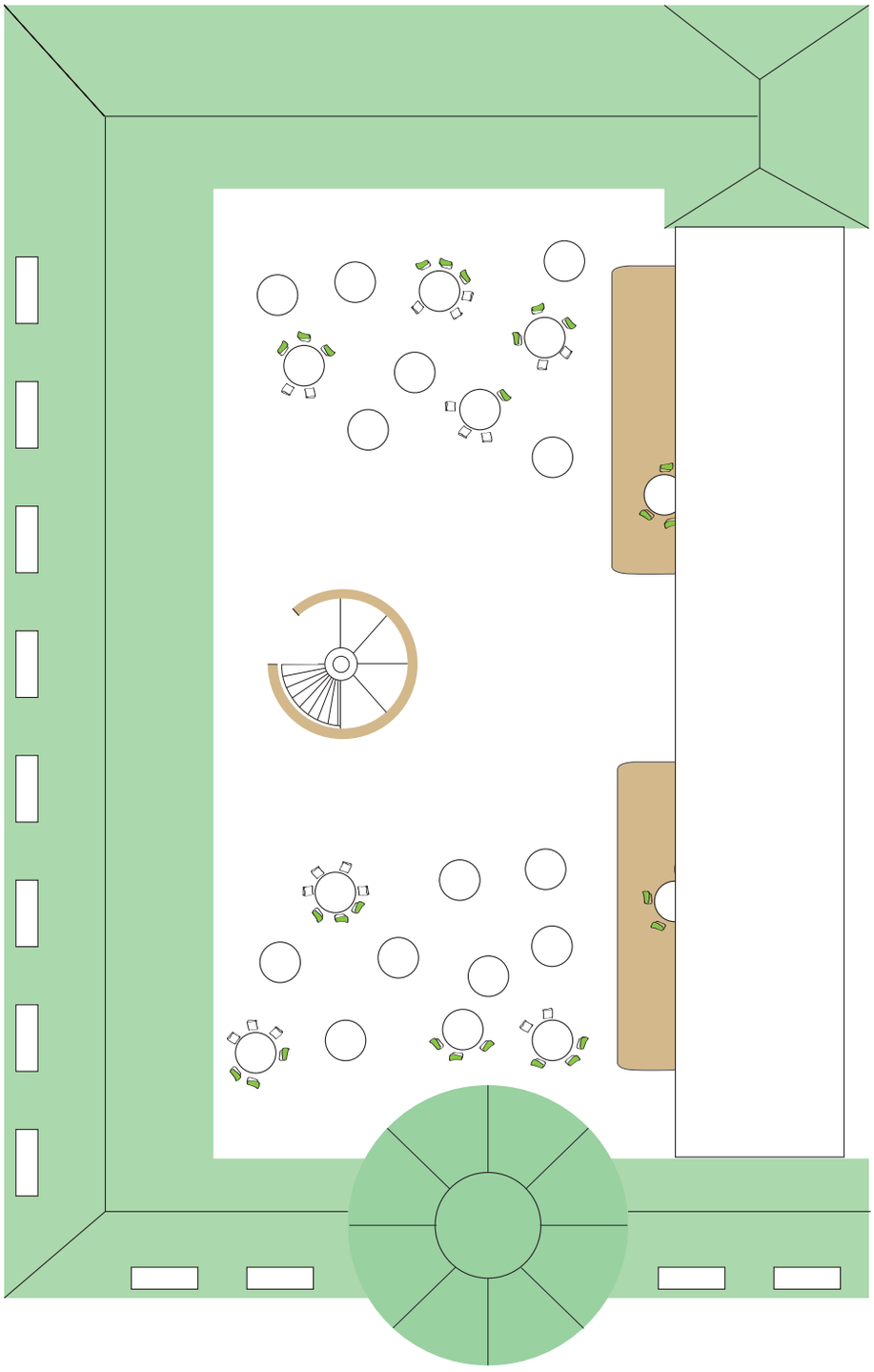
The magnitude of the problem makes it difficult for us to make a difference with solely our individual actions, but here are some useful tips:

- Be mindful of which products contain plastic. And it is not just about the plastic bags at the supermarket! Ever heard of polyester? Most fast-fashion clothes are made of plastic fibers.
- Refuse, Reduce, Reuse, Repurpose: considering that we cannot really trust the "Recycle" part, it is important to take into account the other four R's. Say "no" to plastic, and reduce your consumption of plastic products as much as possible, reusing and repurposing what you can.
- Buy locally-made products: less transport also means less wrapping, fewer intermediaries and, in general, less plastic!

[1] Wolchover, *Why Doesn't Plastic Biodegrade?*

[2] Statista, *Global plastic production from 1950 to 2017*

[4] National Geographic, *Plastic Recycling Is Broken. Here's How to Fix It*



STAY INSIDE THE BOX

DESIGN | LOUISE RIBRANT

THANK YOU & GOODBYE

As this is our last issue for the year, The Editorial Team of 2018/2019 wants to say thank you and goodbye. We appreciate you having read our four issues, having reached out with your opinions and let us be part of your student life. For us, this has been a fun year and we have had a blast together. It has been hard work getting these issues together, and we have spent many late nights fixing color schemes, setting deadlines, editing photos and writing texts. But, it has been worth it, as we have, along the way, learned so much, met with, and interviewed so many inspiring people and had the opportunity to do something fun and inspiring. Minimax has truly allowed for us to be creative, deepen our personal interests, follow our passion and hang out with nice people. Thank you for this year.

Love,
The Minimax Editorial Team of 2018/2019

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