



Content

AI: how to encourage investments and ensure trust? By Barbara Domicelj	2
Five actions for a stronger EU industrial policy by Joe Kaeser	3
Creating legacy for a sustainable mobility society by Gregor Mauko	4
5G and 5 essentials for victory by Matjaž Beričič, Janez Anžič and Metod Platiše	6
Leader's food for thought: Cultivating the Homo sapiens inside us by Janez Škrabec	8
Smart energy systems for a sustainable future by Uroš Salobir	9
New agenda of costs and opportunities of the climate crisis by Ana Struna Bregar	10
Leaders on plan(et) B by Ludger Ramme and Saša Mrak	11
Gastronomic rainbow of tastes in Slovenia	12

Bled Strategic Times
Official Gazette of the Bled Strategic Forum
Issue date: 2 September 2019
Publisher: Ministry of Foreign Affairs of the Republic of Slovenia, Prešernova cesta 25, 1000 Ljubljana, Slovenia, and Centre for European Perspective, Grajska cesta 1, 1234 Loka pri Mengšu, Slovenia
Editor-in-Chief: Katja Geršak
Editor of Business BST: Saša Mrak
Design: David Fartek
DTP and Prepress: Premedia, Andrej Juvan
Printing: Grafične ideje, Alenka Potočnik
Circulation: 2000 copies

f t i M v #BSF2019

www.bledstrategicforum.org

Leaders on plan(et) B As responsible and conscious members of society, managers know that, for economic growth to be ensured, stronger attention must be given to social "contribution".

/ By Ludger Ramme, President, CEC European Managers. Saša Mrak, Executive Director, Managers Association of Slovenia

According to some researchers, the first occurrence of the word "sustainability" can be traced in a book of a German forestry expert, Carl von Carlowitz, written in 1713. In its Treaty on Forestry, Mr. von Carlowitz defended the idea that timber should be exploited in a way compatible to its "perpetual" use, as a scarce resource that should be managed so as to make sure it could still serve the needs of future generations.

The concept has evolved since, virtually becoming a reference point in every single aspect of our life, but its foundations have remained the same: how to ensure that exploiting a resource, in a given context "fenced" by external limits and boundaries, happens to the benefit of current generations without jeopardizing the right to its use of future ones. Over the past 30 years, the environmental profile of the term has been "enriched" by reflections on its social, human, inter-relational, political and global drivers.

The closest thing the Earth has to a strategy

More recently, the UN have contributed enormously to the need to operationalize this principle thanks to the Sustainable Development Goals (SDGs), which have then become a powerful global benchmarking tool and the main catalyst for sustainability mainstreaming worldwide. These goals associated with 169 targets have been adopted in 2015 by the 193 member states and supposed to be reached until 2030. Some have called them "the closest thing the Earth has to a strategy."

Leader's food for thought: cultivating the homo sapiens inside us

If there is no philosopher inside leaders, that is, the one who thinks and gives meaning to our actions, we are condemned to a narrow, unreflected action.

/ By Janez Škrabec, CEO, Riko Ltd.

In his book *The Liquid Modernity*, the insightful observer and cult interpreter of our reality, sociologist Zygmund Baumann, defined our reality as fluid, constantly changing, fleeting and inconstant in comparison to the characteristics of a solid modernity, which is lasting, stable and secure. And it's true, the world has never been changing as fast as it does now. Despite the constant change and replacement of social, political and economic paradigms, there is one that should always withstand the wind of change: the ethical paradigm. For this reason, it must present an essential part of the sustainable development agenda in any planning or implementation of business practices.

Global engineering for the happiness of the people

In the present times, it is mandatory to invest in social, humanistic, educational, philanthropic and green contents and to integrate them into primary business processes that stimulate broader development. If we only asked questions about our own existence and what benefits it, without benefiting the society as a whole, we would be condemned to a single-layer operation. Therefore, I consider that socially responsible operation is an ultimate goal also of my company Riko, the roots of which stretch back to the 19th century. As an engineering company operating in the markets of the former Yugoslavia and the former Soviet Union, we always integrate green processes and green technologies into our technological solutions. We create our business perspectives not only with a narrowly defined business strategy, references and experience, but also with our own value system, putting our employees first, enabling them to grow and play a constructive

Continued on page 11

Continued on page 6

AI: How to encourage investments and ensure trust?

To foster innovation in AI and the implementation of AI capabilities, governments should create legal and policy frameworks that enable access to data, encourage investments in AI technologies and ensure that AI technologies are trusted.

/ By Barbara Domicelj, General Manager, Microsoft Slovenia



The ability of artificial intelligence (AI) to make ethically sound decisions is a hot topic. As machines take over more decisions from humans, new questions about fairness, ethics, and morality arise. With great power comes great responsibility – and AI technology is getting much more powerful. Done well, AI can amplify human ingenuity. Done badly, however, it can create a plethora of new problems.

Popular culture is awash with cautionary tales of technological creations revolting against humans, as well as portrayals of the promise of AI. Many prominent minds have sent chilling warnings about AI and where it may lead us. Elon Musk, founder and CEO of Tesla and SpaceX, called AI “an immortal dictator” and believes that without oversight, it could be an existential threat. Stephen Hawking spent the last years of his life warning about AI, which he believed would spread inequity in society.

In 2018 report *The Malicious Use of Artificial Intelligence* a group of researchers and policymakers found that affordable AI technologies could, and likely will, be used for malicious purposes. For instance, AI systems are increasingly adept at generating believable audio and video on their own, with “Deepfakes” a prime example, a technology that provides a simple way of grafting anyone’s head into a video and putting words in their mouth.

There is a significant counter view that thinks the ideas of doomsayers are focused on the wrong potential threats. Futurist Ray Kurzweil believes that the singularity will create a fundamental shift in humanity’s understanding of the universe and its place within it and is the next step in human evolution. He predicts that we will evolve to be cyborgs by the 2030s, with nanobots the size of blood cells connecting us to synthetic neocortices in the cloud, giving us access to virtual reality and augmented reality from within our own nervous systems and curing diseases and healing our bodies from the inside.

What is good and what is right are questions usually reserved for philosophers and

religious or cultural leaders, however there is agreement that the analysis and understanding of AI should not be limited to its technical capabilities. To ensure that the dystopic futures portrayed in science fiction do not become reality, these systems must be introduced in a manner that encourages trust and respects human rights.

Regulations for development and use of AI are almost as certain as the further development of AI.

What’s keeping AI experts up at night?

Several contentious themes emerge about AI’s risks, which fuel the debate about ethics. In 2016, the World Economic Forum summarized these top 9 ethical issues and conversations keeping AI experts up at night, forming a basis for current areas of discussion:

Unemployment. A widely cited 2013 research paper by the Oxford Martin School estimated that roughly 47% of total US jobs are at risk of computerization or automation.

Inequality. How do we distribute the wealth created by machines?

Humanity. How do machines affect our behaviour and interaction? When used right, this could evolve into an opportunity to nudge society towards more beneficial behaviour, however in the wrong hands it could prove detrimental.

Artificial “stupidity.” It must be ensured that machines perform as planned and that people can’t overpower them to use for their own ends.

Racist robots. How do we eliminate AI bias? Researchers have found that image-processing algorithms both learned and amplified gender and racial stereotypes.

Security. How do we keep AI safe from adversaries?

“Evil genies.” How do we protect against unintended results? AI may misinterpret human instructions due to its inherent lack of context.

Singularity. How do we stay in control? Just “pulling the plug” is not reliable, because a sufficiently advanced machine may anticipate this move and defend itself.

Robot rights. How do we define the humane treatment of AI?

Regulations for development and use of AI are almost as certain as the further development of AI. Numerous efforts to research the ethical challenges of machine learning and AI have sprung up in academia and industry. Companies are also taking individual action to build safeguards around their technology. In close cooperation with analysts, civil-rights groups, and social scientists, they are developing ethical standards in the field of AI. Concurrently, governments are taking up the ethical debate.

Six principles for AI conversations

Microsoft is thinking very deeply about the ethics of AI and feels a responsibility to take a principled approach to guide the systems it designs to assist humans and earn trust. In June 2016, Satya Nadella described six principles for AI which we use as the foundation for this conversation:

- AI must be designed to assist humanity.
- AI must maximize efficiencies without destroying the dignity of people.
- AI must be transparent.
- AI must have accountability so that humans can undo unintended harm.
- AI must have intelligent privacy.
- AI must guard against bias

We believe that, when designed with people at the centre, AI can extend people’s capabilities, free them up for more creative and strategic endeavours, and help them and their organizations achieve more. AI will enable breakthrough advances in areas like

healthcare, agriculture, education and transportation. It’s already happening in impressive ways. But it’s also important that this is built upon an ethical foundation.

To foster innovation in AI and the implementation of AI capabilities, governments should create legal and policy frameworks that enable access to data, encourage investments in AI technologies and ensure that AI technologies are trusted.

What we believe policymakers should do?

- **Continue to convene broad dialogues** among government, business, researchers, civil society and other interested stakeholders on how AI can be shaped to maximize its potential and mitigate its risks, including adoption of practical guiding principles to encourage development of human-centered AI
- **Stimulate the development and deployment of AI** across all sectors and businesses of all sizes, including application of AI to address public and societal challenges, such as empowering underserved communities and those with disabilities, and adoption of AI in the public sector
- **Develop privacy laws** with a view toward enabling the benefits of AI while preserving privacy
- **Invest in skills development training initiatives** for people at all stages of the job continuum
- Encourage sharing of best practices in development and deployment of human-centred AI, through industry-led organizations such as Partnership on AI (PAI)
- Fund short-and long-term multidisciplinary research and development of human-centred AI technologies and ways to use AI to provide insights into its potential socioeconomic impact
- **Develop shared public data sets and environment** for AI training and testing to enable broader experimentation with AI and comparisons of alternative solutions to address ethical concerns.

Responsible parents

AI challenges are sometimes hard to master, but the debate won’t wait. The “genie” is out of the bottle. Whether or not true AI is out there or is actually a threat to our existence, there’s no stopping its evolution and its rise, and it will be important for the development of ethics surrounding the technology to keep up. There seems to be more questions than answers, but the discussion is ongoing and advancing.

In a May 2018 LinkedIn article, Microsoft EVP of AI & Research Harry Shum explains that AI is still in its infancy, but just as a young child learns from and is shaped by the actions of those around them, AI is learning from us. So, we, the parents who are “raising” AI, must ensure that we instil values and ethics into AI products and services that reflect and respect the world around us. ●

Five actions for a stronger EU industrial policy

There is a lot to do, but I believe five actions are urgently needed to make Europe stronger and to prevent it from further falling behind in a very active global economic and political environment.

/ By Joe Kaeser, President and CEO, Siemens AG

Europe has so much to offer: diverse cultures, excellent educational systems, a highly skilled workforce, leading research institutes, a strong industrial base, democratic political stability for the most part, reliable law enforcement and the world's largest single market. Yet, reaching agreements can often be a tedious and time-consuming process in Brussels, if it happens at all. Too often, we Europeans have lost valuable time in this process. And that has been a disadvantage for European companies and, subsequently, the economies of member states – a disadvantage we can and should no longer afford in the competition with leading economies. The new legislative term and a new leadership are an opportunity for Europe and its policymakers to change that – an opportunity to stand up for multilateralism and reciprocity and to do so with one voice. In order to achieve this in a global manner, we need to build bridges and not hunt witches. Reliable partnerships evolve based on trust, inclusion and win-win scenarios rather than nationalism and protectionism.

There is a lot to do, but I believe five actions are urgently needed to make Europe stronger and to prevent it from further falling behind in a very active global economic and political environment.

1. Turn the fight against climate change into an industrial opportunity

No doubt, climate change is the biggest challenge humanity faces. It is good to see that the “next generation” understands this to be a matter at heart for them. While a sense of urgency and the right diagnostic is an important starting point, the right therapy and subsequent prevention will change matters for the better in our complicated ecosystem. So, why not see it as an opportunity for Europe's industry to be the global leader in environmental technologies? We need these technologies to meet our own climate targets. Renewable sources of energy must be integrated in the economy as a whole – not just in the area of mobility, but also in buildings and industry. One of the best way to do that is through Power-to-X technologies. They facilitate a smooth tran-

sition to renewable sources of energy in all sectors. **To achieve a substantial reduction in CO₂ emissions, the Power-to-X capacity must amount to 15 gigawatts by 2024.**

If we really want to achieve EU climate neutrality by 2050, it takes more than debating about how many flights we ought to cancel or what the percentage of e-cars ought to be at a certain time. We must unlock the full potential of sectoral integration, since we live in a connected global ecosystem. All sectors must work together closely to develop solutions that make sense economically and improve competitiveness. This means that regulations and state aid must match our goal of becoming carbon neutral.

Over the last five years, Europe has been focusing on “energy efficiency first.” I say we go one step further and focus on “system efficiency first.” Taking the lead in environmental technologies is a huge opportunity for Europe. Not to mention that a convincing climate policy will also increase Europe's credibility in the world, especially among the young generation, whom we owe a good future.

2. Speak with one, strong voice

Many nations have an “Economic development plan.” For example, China has “Made in China 2025,” India has “Make in India” and Saudi Arabia is pursuing “Vision 2030.” And the United States is taking action, too. All these countries and many more have national economic strategies in place. And Europe? It plays defensively, if at all. We need a plan for Europe and start speaking with one, strong voice. Then other economies will be more likely to agree to a level playing field and to reciprocal trade deals. All EU member states will benefit from that. That's why I call for **setting up a one-stop shop that coordinates foreign economic diplomacy and trade policy by the end of 2020.** This “shop” would be run by the European Commission and the External Action Service and would install a European foreign trade policy that supports European companies in their export efforts.

Why not try a new approach? Together, we are powerful. And yes, we can assert our interests. So, why not pursue a value-based economic diplomacy that effectively provides EU support for those projects of European companies that significantly contribute to meeting the UN Sustainable Development Goals (SDGs).

Let's aim for making sure that 50 percent of Europe's industrial workforce has a good understanding of AI applications as well as advanced digital skills.

3. Invest in future technologies

Today, innovative power determines the well-being of societies, and it creates and secures jobs and even leadership in geopolitics and geo-economics. If we Europeans want to be able to compete internationally, we must invest much more in new technologies – and do so in a much more strategic way. Holding on to and even funding sectors of yesterdays' future may save a few votes for now, but not the future of Europe and its people.

Europe currently lags far behind in the area of Artificial Intelligence (AI) compared to the U.S. and China; both are investing significantly more. The same applies to the deployment of AI – less than ten percent of German industrial companies use AI in business operations. This is alarming. **Clearly, the private sector must invest much more into AI. The target should be €15 billion by 2024 – that's an increase of 30 to 40 percent per year.**

4. Modernize the regulatory framework

It is safe to say that Europe is one of the most attractive markets in the world. But that is unfortunately only half the truth. If we look at the regulatory framework, the downsides quickly become apparent. Several sectors have been falling behind and others are in danger of losing sight in international comparison. European companies are in competition with non-European companies that receive considerable and in parts decisive support from their states, particularly

the U.S. and China. This is where we need to act. We need to modernize the competition rules – as quickly as possible. And this should not be driven by more blocking but by creating level playing fields for fair and open trade based on transparency and common rules, such as Environmental Health and Safety Management Systems, among others.

Modernization is also necessary because digitalization is changing entire business models. It's about data-based platforms and their logic and impact on research and development. We have no


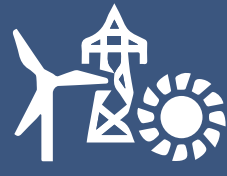



shortage of excellent research, but we find it difficult to try out and implement. This requires decisive action from politics, business and society. We need more experimental space and the courage to try things out. Sandboxing, for example, can be an extremely valuable tool for temporarily exempting new applications from existing regulations. Cutting red regulatory tape must therefore become a strong focus of the new EU commission. My call is therefore: **Let us create a modernized framework for EU competition law by 2022 – a framework that takes all these points into account. And let us implement it across Europe by 2024 at the latest.**

5. Prepare citizens for the digital world

Digital skills are vital for Europe's future. However, as good as our educational systems are, the notion that learning must be lifelong hasn't really been addressed yet, and certainly not on a broad scale. On top of that, academic degrees and vocational training certificates cannot always be transferred from one EU member state to another. Another self-imposed obstacle no one needs. Instead, European member states should jointly develop a master plan for academic education and vocational training that meets future demand for skills, especially in the fields of science, technology, engineering and math (STEM). And we should see to it that our educational systems uphold common standards so that academic achievements and training certificates are recognized throughout Europe. Finally, we should increase collaboration between the private and public sectors. Here's the target: **Let's aim for making sure that 50 percent of Europe's industrial workforce has a good understanding of AI applications as well as advanced digital skills.**

The company I work for employs more than 200,000 people directly and about another 400,000 indirectly, and generates an annual revenue of €30 billion in the EU thanks to a sophisticated global value chain. Europe matters to Siemens, and Europe matters all over the world. Yet, as Jean Monnet, one of the founding fathers of the European Community, once aptly said, “Europe is never done, it is always in the process of becoming.” The becoming of Europe is in our hands. Let's join hands and make Europe stronger. And let's do that now! ●

Read more in our 5-point-program for EU industrial policy: www.siemens.com/EU2020

<p>How can the energy transformation succeed and become an industrial policy opportunity for Europe?</p>  <p>Advanced digital skills by 2024</p> <p>By 2024, 50% of European industrial workforce must have a good understanding of AI applications and advanced digital skills.</p>	<p>How can we drive massive investments in future technologies?</p>  <p>What specifically needs to happen?</p> <p>15 GW by 2024</p> <p>To reduce CO₂ emissions a significant increase in Power-to-X usage is required.</p>	<p>What is important to include in a legal framework that promotes the development of new technologies for Europe's future?</p>  <p>One-stop shop to come into effect by the end of 2020</p> <p>To support European business we need a one-stop shop for coordinating foreign diplomacy and an active foreign trade policy.</p>	<p>What would an active European foreign trade policy look like?</p>  <p>Modern framework by 2022</p> <p>A forward-looking and modernized framework for EU competition law needs to be put in place by 2022. This should enter into force by 2024 in order to ensure the competitiveness of European companies.</p>	<p>How can we prepare Europe for the digital age?</p>  <p>€15 billion/year private investments by 2024</p> <p>To remain globally competitive much higher private sector investments in AI are imperative. But only with increased public investments will the private investment target be achievable by 2024.</p>
--	---	---	--	--



Creating legacy for a sustainable mobility society

In what way will Toyota help tackling these challenges of mobility such as traffic congestion, air pollution, traffic accidents and access for people with impairments?

/ By Gregor Mauko, Commercial Director, Toyota Adria

Back in 1997, Toyota introduced the first generation of the Prius, which is considered to be the first mass-produced hybrid car the world. This bold move, which few believed in at the time, proved visionary. Over the next two decades, Toyota produced more than 11 million hybrid-powered cars, with hybrids now considered one of the most popular alternative power options. Thanks to hybrid vehicles, there are 60 million tonnes less of carbon dioxide in the atmosphere. In this short time, Toyota became a global leader in developing hybrid power technologies. At the beginning of the year Toyota released no less than 24,000 patents allowing the development of hybrid-powered cars. It will offer technical assistance and support to other manufacturers interested in using its engines, batteries, and other system technologies to enable vehicle electrification. By releasing patent rights and providing technical support for the use of its electrification systems, Toyota promotes the widespread use of electrified vehicles to help governments, automotive manufacturers and society as a whole in combating climate change.

Environmental Challenge 2050

In recent years, global warming has started threatening the lives of people in many regions around the world. As the President of Toyota, Akio Toyoda, said, if each of us does not address this issue head-on, the sustainable development of humankind will not be possible. Countries around the world are finally taking action to balance emissions and absorption of CO₂ and greenhouse gases. On the other hand, the automobiles that we produce and nearly all activities of human being generate CO₂ emissions.

Toyota has continuously undertaken the challenges of car manufacturing for the smiles of future generations which means taking the environment into constant consideration in our car manufacturing in addition to safety, security, and waku-doki (excitement and exhilaration that wows you). The accumulated efforts of our predecessors have become assets to those living today. Such efforts include development of catalysts to address emission matters, and electrification of motor vehicles including hybrid electric vehicles, plug-in hybrid electric vehicles, battery electric vehicles, and fuel cell electric vehicles to raise energy efficiency and adopt fuel diversification.

In addition to this the Toyota Environmental Challenge 2050 was established and

has been taking action not just to contribute to keeping global warming below 2° through zero CO₂ emissions, but also to have a positive impact on the Earth, striving to reduce the environmental burden attributed to automobiles to as close to zero as possible.

The challenge consists of six tasks

1. A 90% reduction in CO₂ emissions of new vehicles compared to 2010 levels.

2. Elimination of life cycle emissions resulting from production and use of cars and of all carbon dioxide emissions produced when manufacturing cars and their components.

3. Zero emission factories which can be achieved with the introduction of modern technologies and renewable energy sources.

4. Reduction and optimization of water consumption in its manufacturing processes. Toyota will make sure to recycle water and collect rainwater and will strive to minimize consumption at all levels.

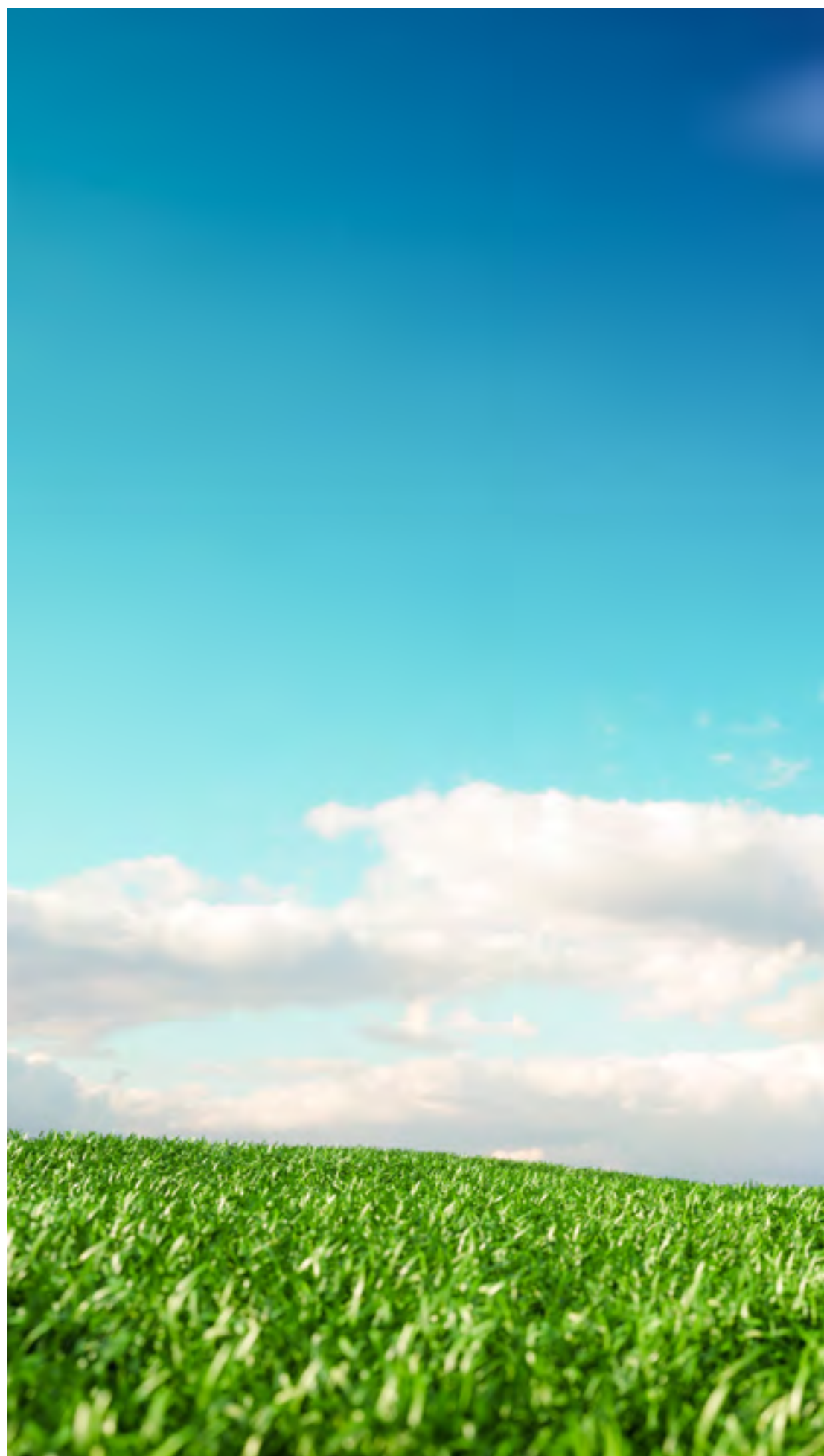
5. Creating a recycling-first company by using eco-friendly materials, designing products with a longer lifespan, developing more efficient technologies, and regenerating and reusing used components. This way Toyota will set a good example that will underpin a society aware of the importance of recycling.

6. Being one with nature - with a universal environmental approach, Toyota will care for nature, its resources, its beauty and its wonders at all levels. Only then will our descendants experience our planet in all its charm just as we can.

Support in three main areas

For several years, Toyota has been in the transformation phase from an automotive manufacturer to a global provider of sustainable mobility, seeking ways to provide transport capabilities for everyone, including people with different physical disabilities. In this context, the Mobility For All initiative was created.

Toyota became the first worldwide mobility partner of the IOC and the IPC in 2015 with the aim to contribute towards “creating a peaceful society without discrimination through sports” and “a commitment to creating a sustainable society through mobility”. Additionally, from last year, Toyota launched its first global corporate initiative, “Start Your Impossible,” to bring people together and contribute to a society where all people can challenge what is possible. At Tokyo 2020, Toyota’s support will be deployed in three main areas:





1. Mobility for All

Taking on the challenge to provide the freedom to move to everyone including those with impairments through the Tokyo 2020 games, Toyota will:

- Showcase the future of automated driving as the ultimate “mobility for all”, demonstrating how automated vehicles could one day offer the freedom to move everyone. Verification testing and demonstrations using SAE Level 4* automation, where all driving functions are performed by the vehicle in certain well-defined areas of operation, will take place in the Tokyo Water Front City and Haneda areas in Tokyo;
- Introduce a new type of moving experience through a demonstration of “TOYOTA Concept-i,” a car that recognizes drivers’ emotions and preferences and can make conversation using artificial intelligence (AI);
- Support transportation services for ath-

letes and affiliated guests around the Athlete’s Village with e-Palette, the next generation battery electric vehicle specially designed for Mobility as a Service (MaaS);

- Provide its existing assistive vehicles line-up, WelCab, as well as new personal mobility devices and support for last-mile mobility needs. Toyota also hopes its new JPN Taxi, introduced in October 2017, will be popular around Tokyo to welcome visitors from around the world, including people using wheelchairs.

- Provide personal mobility solutions such as the Toyota i-ROAD as well as a standing-riding device to support working staff at the Games, such as security officers.

2. Sustainability, centered on the realization of a hydrogen society

Toyota plans to contribute to sustainable Games by providing a fleet of over 3,000 passenger vehicles for official use and others, equipped with the latest environmental and safety technologies to minimize environmental burden and traffic accidents.

- In order to make Tokyo 2020 a turning point in realizing a hydrogen society, Toyota will support the Games and their legacy with a large number of zero-emission hydrogen fuel cell electric vehicles (FCEV) such as the Mirai sedan for official use.
- In addition to FCEV, the latest Hybrid Electric/Plug-In Hybrid Electric Vehicles

(HEV/PHEV) from the Toyota and Lexus line-ups, as well as new Battery Electric Vehicles (BEV), will mainly compose the rest of the fleet. In total, the company and the Games’ organisers aim to achieve the lowest emissions target level of any offi-

Thanks to hybrid vehicles, there are 60 million tonnes less of carbon dioxide in the atmosphere.

cial vehicle fleet used at the Olympic and Paralympic Games with the use of these official vehicles.

- Vehicles for official use will be equipped with the latest active safety technology packages such as Toyota Safety Sense (TSS) and Lexus Safety System+ (LSS+), as well as Parking Support Brake (PKSB), a technology to help prevent collisions that primarily occur in parking lots and garages.

In addition to official vehicles above, some vehicles will feature Highway Teammate, an automated driving safety function that allows hands-off driving on highways (SAE Level 2* automation).

3. Enabling most efficient cities for urban mobility

It is estimated that 15 million visitors will join Tokyo’s 15 million citizens during the Games period. While the Tokyo Metropoli-

tan Area will surely live up to its reputation as one of the most efficient cities for urban mobility, Toyota will support the Tokyo 2020 Organising Committee to help ensure a safe and effective transportation between venues for those using the official fleet. To do this,

the company will provide the knowledge it has garnered over years of experience applying the Toyota Production System.

- Toyota will also support the movement of official staff and athletes to and from events with the latest information and connected technologies, such as vehicle Data Communication Modules connected to its Mobility Service Platform, to provide safe, secure, and smooth transportation of people and freight during the games.

- Toyota will also support on-the-ground vehicle dispatching and transportation operations from an efficiency standpoint.

Cities around the world currently face challenges surrounding mobility, having to solve issues ranging from traffic congestion to air pollution, traffic accidents, and access for people with impairments. Starting from Tokyo 2020 and through Beijing 2022 and Paris 2024, Toyota is hoping to help tackle these challenges in collaboration with stakeholders around the world, and contribute to creating legacy to realize a sustainable mobility society. ●





5G and 5 essentials for victory

5G is one of key technologies of the coming decade and it is going to be much more capable than 4G – focusing on digitalization of all verticals based on advanced IoT

/ By Matjaž Beričič, Director, ICT and Network Services; Janez Anžič, Director Service Operations Center; Metod Platiše, Product Manager Cyber Security, B2B, Telekom Slovenije

S In a high-risk business environment that demands business continuity and must follow the highest IT security standards and compliance, cyber security assurance can only be a successful when it is the result of systematic and strategic planning. Any cyber security assurance process must include the following 5 essential activities in order to prevent, detect, respond and recover from threats. Size and variety of risks is increasing with time, and the emerging 5G era is going to further boost these risks.

5G is bringing new dimensions of digitalization to 5 key verticals: energy, healthcare, transport, manufacturing and also public protection and disaster relief. If there are 4 essentials for 5G deployment (new spectrum and antennas, network and IT transformation to 5G cloud, sales transformation to support “use case-driven network” for the verticals, new terminal equipment) the 5th essential is preparedness – the capacity and competence to assure cyber security – and strong telcos have that capabilities.

The current secure 4G converged ICT

solutions include permanent risk management run by key telcos in highly dynamic and complex ICT environments. They need to provide the e2e view on cyber security, need to be competent to manage the whole chain from end-point-devices to international connectivity and process driven organization with 24/7/365 operations, involving critical mass of personnel with established people training and competence built programs. Telekom Slovenije is one of such telcos and it holds the ISO27001 and ISO 22301 certificates, proving its capability and commitment to security.

4G mobile technology was introduced seven years ago and at the moment more than 60% of the global population is using it. Telekom Slovenije 4G+ (LTE-A) network provides high performance and is the leading mobile network in Slovenia. It provides highly competitive coverage and capacities to and highest possible mobile data speeds despite increasing traffic demand and is – it is best network, proven by independent international benchmark tests and the only one

in the country that supports VoLTE. (Voice over LTE). All this makes it best prepared for the 5G chapter. 4G already provides capability for fixed wireless access temporary solution and IoT solutions for different business verticals. However, 5G will support that to an even greater degree. 5G is one of key technologies of the coming decade and it is going to be much more capable than 4G – focusing on digitalization of all verticals based on advanced IoT.

We envisage an open 5G infrastructure that can support various virtual dedicated networks, achieving economies of scale with critical mass to cope with all the challenges. 5G technology is highly complex, and consequently it is essential to have highly educated and trained experts who are already experienced in 4G technology and security. 5G requires managing a full set of technologies – antenna systems, base stations, fronthaul/backhaul transport systems, aggregation, core network, service network and the terminals. Countries like Slovenia need a smart 5G strategy to support a smooth and

sustainable deployment with efficient utilization of spectrum. 5G can only be built as an upgrade to existing 4G, but even this requires significant investments to establish the 5G core system functions and upgrade the base stations.

Additionally, the trend of mobile revenues coupled with a lack of clear 5G business cases are not conducive to appealing market development scenarios. 5G has also prompted a global information warfare related to health concerns of 5G radio signal. Analysts see this side attack on 5G as geopolitically motivated. Some of the players try to undermine others and tie them up in fights over 5G’s environmental and health hazards fears. Consequently, 5G infrastructures will also have higher physical security risks. Nevertheless, stakeholders have to assure safe levels of total emitted radio signal energy, especially where numerous 4G/5G infrastructures per country would be deployed.

The first phase of 5G is the pure upgrade of 4G according to 3GPP (3rd generation Partnership project) Release 15 . Initial user



Close EU-wide cooperation is essential both for achieving strong cybersecurity and for reaping the full benefits of everything that 5G will have to offer

experience is not fantastic, but it will evolve and overtake 4G in the coming months, especially when 3GPP Release 16 comes after 2020. With all built-in security measures and well-managed 4G/5G, all types of security risks are reduced significantly.

Abuses in ICT come as sophisticated, covert and innovative. Cyber security is based on active involvement of experts, technology and processes. Recently, IoT has presented new challenge in application of security. Telcos have to perform strict verification of security communication protocols, authentication, code and system hardening of application servers. Preparation and protection is mandatory, but telcos also have to deploy strong detection capabilities. Analyzing tons of security monitoring data from all the sources, including the 5G network, combining it with external threat information in real-time is the main capability of Telekom Slovenije Cyber Security Operations Center that is running 24/7/365, which also provides services to business customers. It will be one of the main trusted anchors for 5G as well.

5G capabilities like network slicing, capacity, availability and security will be game changers in mobile data services. This is especially important for critical services that require guaranteed communication. These technologies will be able to provide strictly separated communication services for different entities with different SLA (Service Level Agreement) parameters and the highest security level based the virtualization of network functions. Since the environment and the society cannot sustain too many physical 5G infrastructures due to limitations such as the lack of cell tower space, frequency spectrum and technical experts to manage the technology safely, this concept will help to maintain adequate level of competition and flexibility.

5G security includes many aspects, e.g., application security, network device security, deployment security, operation security etc., and there are different scenarios based on variety of network architecture, network elements and several mechanisms. Common recommendations and requirements for 5G Cyber security consist of standardized security solutions (GSMA/3GPP) and certification of equipment at the EU level by a independent verifying entity.

From the perspective of security, the whole 5G network follows a layered & domain-separated model, defined by the ISO 19249 standard.

The 5G ecosystem includes application/ service providers (application layer), user device (IoT/Smartphone), vendor (User domain), network vendor and operator (network domain). For the security certification of assurance, the GSMA (GSM Association) has defined a set of standards jointly with 3GPP on it, i.e. NESAS (Network Equipment Security Assurance Scheme) & SCAS (Security Assurance Certification).

Close EU-wide cooperation is essential both for achieving strong cybersecurity and for reaping the full benefits of everything that 5G will have to offer. National risk assessments include an overview of main threats and actors affecting 5G networks, the degree of sensitivity of 5G network components and functions as well as other assets and various types of technical and non-technical vulnerabilities, including those potentially arising from the 5G supply chain. Based on the information received through the national reports, member states, and together with the Commission and the EU Agency for Cyber Security (ENISA), will prepare a coordinated EU-wide risk assessment by 1 October 2019. ENISA is analyzing the 5G threat landscape in parallel as an additional input. By 31 December 2019, the EU Network and Information Security directive (NIS) Cooperation Group, which leads the cooperation efforts together with the Commission, will outline a toolbox of mitigating measures to address the risks identified. By 1 October 2020, member states will need to evaluate the effects of measures implemented to assess whether further intervention is required. After the implementation of the Cybersecurity Act, Commission and the EU Agency for Cybersecurity will set up an EU-wide certification framework covering 5G networks and equipment.

Any norm related to 5G security should comply with the following 5 essential requirements:


- Harmonization at the EU level
- Support of security standardized approaches (GSMA/3GPP)
- Coordination with additional security initiatives (GDPR, NIS)
- Equipment certification
- Efficiency in costs with minimal impact in Time-To-Market



Cyber Security Operations Center of Telekom Slovenije



If there is no philosopher inside us, that is, the one who thinks and gives meaning to our actions, we are condemned to a narrow, unreflected action.

 Continued from page 1

role. We respect and develop local potentials in foreign markets in a consistent manner, employ and educate local people and provide new incentives for growth and development. Why is that necessary?

I believe in active involvement by supporting social, cultural and other segments relevant to comprehensive development and a rich life in all respects. We need to be constantly aware of the fact that we are not alone in this world; we continuously participate in a rich and lively interaction with many stakeholders. In order to nurture performance in a sustainable way, we must act for the benefit of the entire community. I made sure that our slogan reflects this – we work for happiness, or to put it better, for the satisfaction of the people. Our business goals are strongly intertwined with our mission in this direction.

Modernity through the prism of humanism and art

Globalization, post-feminism and post-colonialism, bio-ethics, political and green activism, dehumanization, terrorism, fake news, migrations, data era, populism, human rights ... – all these subjects define our contemporary dilemmas that the economy must also confront directly or indirectly. Riko strategically supports all the initiatives that enable different cognitive processes reflecting our reality. For this reason, we nurture a stimulating attitude towards culture, art and humanities. Although these practices and knowledge cannot be used in practice and put to a utilitarian purpose, they play an essential role in the cultivation of the spirit and in the civilizational and cultural growth of humanity, as emphasized in the brilliant essay “The Usefulness of the Useless” written by Nuccio Ordine. And it is true – culture, art and humanism enable formation of thoughts about the new, different, not yet seen, not yet experienced, not yet grasped.

Being in touch with these contents, concepts and issues strengthens tolerance, creativity, empathy, respect for others and for the ones different from us. It fosters innovation, nurtures multiculturalism, enhances values, challenges the established spiritual, mental and social patterns, nourishes critical thought, cultivates the Homo sapiens inside

us, empowers us towards critical insights and opens broader horizons of thought. Is that not something modern society is striving for?

I cannot imagine shaping my worldview and business visions without analysing social phenomena in the light of existing material conditions and of the broader historical framework. If there is no philosopher inside us, that is, the one who thinks and gives meaning to our actions, we are condemned to a narrow, unreflected action. Accumulation of this can lead to anomaly, deregulation and apathy. That is why we support contemporary artists and regularly buy and exhibit their works in our Riko Art Collection. This was also one of the reasons for founding and developing the Friar Stanislav Škrabec Association, which supports linguistic studies and scientific research related to the language. That is why we are also developing and nurturing the museum and cultural venue – the Škrabec homestead in Hrovača, where humanists, artists and writers meet at monthly debates. That is why we regularly support

many cultural, artistic and research institutions that foster the existence of “useful useless things”, as Nuccio Ordine called the contents without any practical value, whose absence would nevertheless make the world a poorer place.

Culture and art - without them, we are just a community that knows how to “own” as a consumer”, but forgets how to “live” to the fullest extent.

Why is it important to support culture and arts?

Not because it would be a topical and increasingly popular social commitment “engaging” in which would increase the number of “likes” and “shares” in both the digital and the analogue world. The likes and the shares are of course a great side effect. But our motives lie elsewhere. Investing in culture admittedly has value. However, as we know, value is something that can be

measured financially or by any other means of rational weighing. Nevertheless, culture and art are not only instruments that would serve immediate economic, social or political ends. Culture and art are also represented as autonomous creative play, as gifts given and gifts returned. They present a value that

cannot in any way be translated into the accounting columns of a closing balance sheet. They are also unsuitable for pragmatic or everyday use, but create the cultural oxygen that indirectly benefits everyone. Without them, we are just a community that knows

how to “own as a consumer”, but forgets how to “live” to the fullest extent”, once wrote Dr. Aleš Debeljak, a distinguished Slovenian cultural critic, poet, and essayist. Therefore, we nurture, encourage, protect, and consolidate culture and art (as individuals and society) – in order not to lose our spirit, ethics and sustainable direction. Even in the pursuit of stability. ●



The investment in art, be it in the field of painting, literature or theater, is not only material investment. Cultural development has a great impact on the otherwise economic development and on people's confidence, were the words of Uršula Cetinski, President of the National Council for Culture of Slovenia at the opening of the exhibition in December 2018 of the deceased painter Metka Krašovec who passed away the same year. She was one of the key authors of the new image painting in Slovenia and one of the key painters of the last quarter of the last century. She was a painter, defined as a world traveler through the vast expanses of the globe and the depths of the human psyche. Or, as Riko's CEO Janez Škrabec said: “Modern managers need to understand this world, and without art this is impossible.” The Riko Art Collection comprises more than 300 paintings and sculptures from the end of the 19th century to the present. (photo by: Riko)

Smart energy systems for a sustainable future

Due to the rising electrification in all sectors and fast growth of e-mobility the dependence of society on electricity will only deepen. Therefore, energy companies must start to intensively cooperate also with other sectors. ELES, Slovenian electricity transmission system operator, cooperates in numerous international projects, where partners are trying to find solutions for the greatest challenges in the electric power industry.

/ By Uroš Salobir, Director of the Strategic Innovation Department, ELES, Nadja Novak, Marketing Communication Specialist, ELES



Our society is changing. Every day we are increasingly aware that the path of development, that does not take into account the environmental and social costs, is not the right one. And we know that actions are needed to tackle climate change. Therefore international organizations, states, cities and companies are adopting strategies and action plans for sustainable development and lowering greenhouse gas emissions.

Consequently, there are many changes taking place also in the power sector. We are reducing the production of energy from fossil fuels and increasing the production from renewable energy sources. Renewables are not as reliable and flexible as traditional coal power plants or big hydro power plants, because their production depends on sunlight and wind. Consumers, who were traditionally only users of electricity, can nowadays produce electricity and are able to increase or decrease their load. They are therefore becoming active consumers in a true sense of the word. Requirements for more efficient use of energy and electrification of transport are going to spur transformative changes in this sector. The electricity system must therefore adapt to the new situation and find alternative solutions.

Innovation and cooperation is urgent also in the power sector

If power companies want to successfully address challenges arising from the changing environment, they must place innovation at the core of their corporate strategy and operation. The same applies also for transmission system operators, because strategic innova-

tion radically intervenes with the operation of the transmission network due to increased production based on renewable sources. It strengthens the connection of distribution and transmission networks of several countries, emphasises the role of consumers in the

A few years ago, ELES became very active in developing smart grids and exploring the possibilities of integrating active consumers, because they will play an important role in the future electric power system.

operation of the electric power system and increases the development of ICT solutions in the electric power industry. Innovation also necessitates the development of new services and focuses the company's operation in areas that will be of key importance for the success and viability of the company. Rapid development of technologies, legislative changes and the need to manage long-term risks are three key factors which lead to strategic innovations. Strategic innovation is closely connected to daily operations, investment decisions and transmission network assets management. But innovation is not enough. As the power sector is highly interconnected and interdependent, companies must form partnerships and cooperate.

ELES, Slovenian electricity transmission system operator, which is responsible for safe and reliable transmission of electricity, is aware of the importance of international cooperation and innovations in the field of

electric power industry. It is the first regulated power company in Slovenia that has placed innovation activity at the centre of its operation and enabled the highest possible level of further development in this area. One of our most important objectives is to additionally strengthen collaboration with companies in Slovenia and abroad. Therefore, ELES cooperates in numerous international projects, where project partners are trying to find solutions for the greatest challenges in the electric power industry.

Here are the smart grid projects

A few years ago, ELES became very active in developing smart grids and exploring the possibilities of integrating active consumers, because they will play an important role in the future electric power system. Combination of smart grids and active participation of consumers can lower greenhouse gas

Combination of smart grids and active participation of consumers can lower greenhouse gas emissions and have a positive effect on economy and society.

emissions and have a positive effect on the economy and society. ELES therefore started forming or taking part in international consortia and acquiring European funds for innovative projects. Examples of the most important current innovation projects are:

1. The Slovenian-Japanese partnership – the NEDO Project – is formally a partnership

between the Japanese agency NEDO and the Slovenian transmission system operator, but otherwise is a national project. It is connecting transmission and distribution companies, local communities, consumers, solution providers and research organizations. Instead of investing in grid expansion, the use of advanced secondary equipment, information and communication technologies and cloud solutions will enable better exploitation of the existing grid. Part of ELES's system services, which are primarily provided by coal and gas-fired power plants, will be provided from electricity storage systems. Consumers will receive a higher quality of electricity supply and the option of actively participating in electricity markets and system services.

2. SINCRO.GRID is responding to the challenges of the electricity grid in Slovenia and Croatia. Innovative integration of mature technologies, such as compensation devices for reactive power control and battery electricity storage systems, will enable greater integration of renewable energy sources in the transmission and distribution grids and lead to more efficient use of existing infrastructure. At the end of the project, the Slovenian and Croatian transmission network would be able to transmit larger quantities of energy from renewable sources installed in South-East Europe to other key European markets.

3. FutureFlow project brings together 100 real prosumers (i.e. active energy consumers who can produce electricity or are in a short period of time able to increase or decrease their consumption of electricity) from Austria, Hungary, Romania and Slovenia which took part in real-time cross-border pilot tests. Tests showed that prosumers can deliver high quality flexibility services to transmission system operators at international level. By developing adequate business models, prosumers will get an opportunity to sell their flexibility to the most valuable market, reducing their electricity bills.

The need to find new technological solutions

The fact is that the electricity power system will play increasingly important role in the future. Due to the rising electrification in all sectors and a fast growth of e-mobility the dependence of society on electricity will only deepen. Therefore, energy companies must start to intensively cooperate also with other sectors – transport, industry, IT... and boldly look for and test new solutions. Sustainable development, towards which we strive, will not allow for the level profits that were expected in "traditional" development, which did not take into account external costs in the price of goods and services. Electricity of the future does not offer simple solutions. Sophisticated and innovative solutions will be needed. ●

New agenda of costs and opportunities of the climate crisis

Companies often underestimate the costs caused by climate changes, including the comprehensive value chain, which they depend on. They should have various efficient resilience scenarios.

/ By Ana Struna Bregar, Executive Director at the Centre of Energy Efficient Solutions



Source: ©United Nations / UN Actions portfolios - <https://www.un.org/en/climatechange/un-climate-summit-2019.shtml>

This year, we have faced record temperatures everywhere around the world. Weather disasters have been the cause of several deaths and major material damage.

Today, in the new geological Epoch - the Anthropocene - the age of our time when a man started influencing geology and natural processes, not a day goes by without news warning us of a climate crisis. Either related to natural disasters and their consequences, or in terms of activities related to the fight against the climate crisis. Both political as well as scientific reports clearly show that climate changes are happening - and what follows may even get worse, unless urgent international systemic political measures are adopted. The consequences of the past political and economic inactivity related to environmental protection have now become evident.

Based on the report from an influential non-government organisation CDP, the climate crisis will most likely cause 1 trillion USD of damage to the largest global corporations in the next five years.¹ Since 1980, the number of registered losses from weather conditions has tripled. Losses due to insurance cases have increased from an annual average of 10 billion USD in the 1980s to approx. 50 billion USD in the last decade.² Costs of disastrous climate crisis consequences are on the rise, which applies to real estate, infrastructure, the hindrance of business operations, and in threats to national health. The climate crisis also addresses critical geostrategic issues, where the probability of war and social upheaval cannot be excluded. Clean air, water, soil, food, and healthy people, are becoming the most valuable assets.

Ambition and stability of politics

The consequences of the climate crisis do not end on the border of one country, therefore global measures and common goals are necessary. Two significant international documents were adopted in 2015, namely, the UN 2030 Agenda - Sustainable Development Goals and the Paris (climate) Agreement, which was the first universal and legally binding global climate agreement, setting the goals to limit the increase of global warming. More than 190 countries signed this ambitious agreement. It pledged to include rules for achieving a reduction of global warming into the countries' national legal systems. The approach of countries to setting the rules for reducing greenhouse gas emissions varies, since measures are drastically inter-

fering with the performance of their economies. The most ambitious countries have already amended their legislations by entering commitments for carbon or climate neutrality (Norway 2030, Sweden 2045, UK 2050, France 20150), two countries have already declared carbon neutrality (Bhutan and Suriname), many countries are still discussing the commitments, and many more cities, companies, and individuals are also adopting the carbon neutrality commitment.³

Europe should be the first Climate-Neutral continent in the world. — Ursula von der Leyen, EU Commission President

Opportunity of a climate-neutral economy

Due to the climate crisis, and major pollution of the environment, we are witnessing dramatic global changes in every single sector of the economy. The pressure from clients, competitors, employees, courts, investors, and society as a whole, for restructuring

Based on the report from an influential non-government organisation CDP, the climate crisis will most likely cause USD 1 trillion of damage to the largest global corporations in the next five years.

of politics and the economy, is increasing.

We are facing new disruptive innovations, which are implementing new market and value rules. They are significantly changing the way companies and industries operate, as well as altering the consumer habits. These challenges are putting societal stability at risk but at the same time creating new opportunities.

The transition to a climate-neutral and circular economy is the only option for the future, and is the largest project of our society. Every human activity needs to reduce the consumption of natural resources, emissions, and waste, and has to be energy efficient. The emissions must carry a price that will have an impact on our behaviour. It is urgent to restructure policies into more stable and ambitious ones: the restructuring of companies and organisations into less environmentally burdensome entities. And finally, we as individuals need to change our habits.

New, environmentally less burdensome technologies are necessary (services, products, and processes) along with the shift of

assets into the development of a green economy. Following the UN Environment Programme Finance Initiative assessment, an-

Following the UN Environment Programme Finance Initiative assessment, annual costs of adjusting to the climate crisis would amount to 140-300 USD trillion by 2030, and 280-500 USD trillion by 2050.

nual costs of adjusting to the climate crisis would amount to 140-300 USD trillion by 2030, and 280-500 USD trillion by 2050.⁴

Accelerating a climate-neutral economy

Accelerating the development of a climate-neutral or circular economy, which will be responsive, smart, and balanced, requires applying appropriate incentives in various areas (appropriate regulatory environment, green tax reforms, green finances, innovation, technologies, business models, efficient reporting and measurement of impacts, changes to the educational system, etc.).

The EU is intensively assessing possibilities of including the sustainability aspects into its financial policy framework in order to mobilise assets required for sustainable growth. In order to achieve the 2030 EU goals, as agreed in the Paris Agreement, which includes a 40 percent reduction

of greenhouse gas emissions, it has been estimated that a total of 180 billion EUR of investments will have to be made on annual basis.⁵

Many companies have already identified benefits and advantages when they transitioned to an environmentally neutral economy (financial, environmental, commercial, knowledge, experience, and brand). The biggest achievements in reducing greenhouse gas emissions and improving energy efficiency

are most evident in sectors with the greatest power-intensive processes (energy, mobility, construction, agriculture, and manufacturing).

This is primarily the consequence of the following factors:

- the tendency to become independent from fossil fuels
- the increase of energy prices and the prices of the CO₂ emissions,
- increased subsidies for new green technologies
- and often because of the public pressure.

New companies working in the areas of renewable energy sources and other clean technologies (water, alternative energy sources, emissions, waste, etc.) are on the rise globally. However, a climate neutral economy is not restricted only to the sectors mentioned above. Every single company and organisation should act in a more sustainable way (environmentally, socially and economically).

All "green, clean, environmental, low-carbon, etc." technologies (services, products,

A new agenda for Europe: Business priorities to deliver a prosperous, climate neutral economy

The briefing highlights five priorities to ensure Europe's resilience from the impacts of climate change and seize the economic and social opportunities in a climate neutral economy:

- 1. AMBITION:** Aim for climate neutrality and commit to step up the pace of action
- 2. ENERGY:** Create a smart and integrated approach to energy, mobility and buildings
- 3. INDUSTRY:** Build a modern, clean and circular industrial strategy
- 4. LAND:** Transform Europe's food, agriculture and land use systems
- 5. INVESTMENT:** Mobilise investment in the clean economy

University of Cambridge Institute for Sustainability Leadership (ISL); The Prince of Wales's Corporate Leaders Group (2019), Cambridge, UK

and processes) have one common characteristic, which is to help protect the environment, increase standards, and ensure a higher quality of life. They create new, greener and fairer workplaces and demand new competencies and urgent changes to educational systems. Green technologies are becoming more attractive for capital investors and funds, which will only accelerate their further development.

The data from the Global Cleantech Innovation Index 2017⁶ shows that the leaders in development of clean technologies are Denmark, Finland and Sweden. In these countries, there is a significant increase of investment funds, especially pension funds, investing in clean technologies. In addition, these countries are also the leaders in investment and revenue gained from innovations in the area of clean technologies and commercialisation of clean technologies. They also have the highest number of public companies in the area of clean technologies. Clean technologies are rapidly developing

also in China and India. However, we cannot overlook that investments in the development of green technologies are still the largest in the US, despite their political disapproval.

There are a number of factors which could influence the speed of transition to a low carbon economy including public policy, technology, investor preferences and physical events.

— *Mark Carney - Governor of the Bank of England in Chairman of the Financial Stability Board FSB*

Transparent reporting of companies - financial stability of companies

Companies often underestimate the costs caused by climate changes, including the comprehensive value chain, which they depend on. They should have various efficient resilience scenarios. After all, a company's financial stability, which depends on climate

changes, is crucial for investors who are assessing the company's long-term viability.⁷

In order to prevent misleading practices or "greenwashing," the importance of transparent reporting by companies regarding successful implementation of sustainability goals is becoming more significant. There are various guidelines and standards that are being developed for sustainable - climate resistant business. Investors and companies are actively promoting them because they have realised that they are positively changing ways of reporting, operating, and comparability of companies. ●

"Increasing transparency makes markets more efficient, and economies more stable and resilient."

— *Michael R. Bloomberg, The FSB Task Force on Climate-related Financial Disclosures (TCFD) Chair⁸ American businessman, politician, author, and philanthropist*

ENDNOTES

- 1 Climate change will cost companies \$1 trillion, 2019 <https://edition.cnn.com/2019/06/04/business/climate-change-cost-companies/index.html>
- 2 Mark Carney, Governor of the Bank of England and Chairman of the Financial Stability Board "Breaking the Tragedy of the Horizon - climate change and financial stability", 2015 <https://www.youtube.com/watch?v=V5c-eqNxeSQ&t=199s>
- 3 https://en.wikipedia.org/wiki/Carbon_neutrality
- 4 <https://www.unepfi.org/news/themes/climate-change/unep-fi-launches-paper-on-adaptation-finance-for-the-global-commission-on-adaptation/>
- 5 https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en
- 6 <https://www.cleantech.com/2017-global-cleantech-innovation-index-a-look-at-where-entrepreneurial-clean-technology-companies-are-most-likely-to-emerge-from-over-the-next-10-years-and-why/>
- 7 Mark Carney, Governor of the Bank of England and Chairman of the Financial Stability Board "A new Horizon - 2019" <https://www.bankofengland.co.uk/speech/2019/mark-carney-speech-at-europe>
- 8 The FSB - Task Force on Climate-related Financial Disclosures (TCFD) an-commission-high-level-conference-brussels

Continued from page 1

Businesses in particular have a fundamental role in delivering on the SDGs, including by creating jobs, innovating new technologies, and a better use of resources like energy and water. This responsibility is also reflected in the 10 principles of the United Nations Global Compact, the world's largest initiative on corporate responsibility. The latter constitute a useful tool for businesses on how to achieve the SDGs.

Competitive advantage from two megatrends

The society's response to the biggest pollutants and energy consumers has become very critical. Furthermore, it can even be reflected in negative consumer decisions. On the other hand, new trends are emerging in the direction of responsible environmental stewardship and low energy consumption. This is an opportunity for companies to get a competitive advantage from two megatrends - digitalisation and sustainable development. Both will have a tremendous impact on our lives. So, this is first and foremost a responsibility to the environment and to the next generations, but secondly also to economic benefits.

It is probably fair to say that the global community - at least its business environment and at civil society level - has reached a strong consensus on the need to embrace sustainability. And even if from a political point of view not all governments on Earth share this concern, there is a growing consciousness about the risks climate emergencies are posing to our economies and societies and the resulting need to intervene. Some of the developed parts of the world, like Central and Nordic countries, are already taking action in this direction. Finland is among the most active and innovative in Europe.

But how significantly this awareness translates into concrete practices by companies? And what instruments can support the industry - in all its sectors and levels - in the necessary changes to make sustainability a pillar of every business culture and strategy?

One of responses lies in leaders and managers and their awareness, skills, knowledge and responsibility that they have in companies and broader - in the society. We should acknowledge that as bridge-builders and as actors for change, good managers are key actors for the strategic development of their companies. Furthermore, they are obliged to help to define the best strategy to face the specific challenges as the sustainable transition is and to develop the right policies and implement them.

There is no doubt that managers and leaders - if equipped with the right tools - can be the drivers for the "sustainable rev-

olution" of our economies. As responsible and conscious members of the societies they live in, managers know the value of ensuring that economic growth cannot do (anymore) without a strong attention to the wider social "contribution" that derive from it. Now, as environmental crises grow bigger and represent more and more clearly a real threat to the continuation of our economic structures, we are "forced" to take up the challenge to drive our societies towards a more sustainable future in which humankind won't be swept away by its own mistakes.

The green economy and sustainability are not separate from our daily lives or from the strategy and company development. There are and should be an integral part. Any company can incorporate them into their business model. Just as digitalization will touch just about everyone, so can sustainability in all its aspects. However, changes are happening too slowly despite the fact that companies have been more active than ever in pursuing sustainability to align with values and engage stakeholders, as a McKinsey Global Survey from 2017 shows. A larger share of respondents than ever before say the top reason for implementing a sustainability agenda is better alignment between an organization's practices and its goals, missions, or values. Nearly six in ten respondents say that their organizations are more engaged with sustainability than they were two years ago—and just 9 percent that engagement has declined.

#ManagersforFuture

In July the widest group of CEOs ever mobilised in Europe announced that on 1st November they will be knocking on the doors of Ursula von der Leyen, Charles Michel, and David Maria Sassoli, newly elected Presidents of the European Commission, Council of the European Union, and European Parliament, to implement an overarching strategy for a Sustainable Europe by 2030. Around 200 CEOs have joined this call, which is still open.

To raise awareness on the role of management in the sustainability transition and to discuss common challenges, CEC, the European Network of more than 1 million managers, is launching its #Managersfor-

As we in business know, there can always be a plan B, but too many people are forgetting - there is no planet B.

Future campaign. The campaign aims at discussing the evolving cornerstones of the managerial profession and the best practices to help companies adopt a future-proof

Dimension and principles

Social

Ensuring decent working conditions
Involvement in social environment
Ethical foundation

Contribution to SDGs*



Economic

Financial robustness
Future orientation
Embeddedness in economic structures



Environmental

Protection of the biosphere
Improved resource management
Design for life cycles



Procedural

Connected leadership
Transparency
Inclusion & participation
Innovation
Diversity
Precaution



Personal

Mindfulness
Adaptability & flexibility
Sense of responsibility & ethics
Taking multiple perspectives
Continuous learning

Inner dimension

Understanding social setting
Facilitating
Team building
Formulating vision
Building networks & trust

Social dimension

Source: Sustainable Development Goals of the United Nations and CEC - European Managers

management model - from skills over structure to sustainable impacts. Its aim is to raise awareness on the role management plays in shaping the sustainability transition. At the same time, it will spark debate on the purpose and vision of the managerial profession.

Because of power that business, its leaders and managers have, it is a must that a critical mass of business society understands how some goods, such as fossil fuels, free lands, metals and mineral reserves are mostly limited, while renewable resources such as water

and recyclable materials are commonly mismanaged.

To conclude, if business, politics and society have started calling for some serious action, how close are we to break-even point of achieving long known triple bottom line - People, Planet, Profit? As we in business know, there can always be a plan B, but too many people are forgetting - there is no planet B. ●

Gastronomic rainbow of tastes in Slovenia

I FEEL SLOVENIA



Photo: Ciril Jazbec



Photo: Ciril Jazbec

Slovenia captivates with the diversity of its landscape. Its location at the crossroads of the Alpine, Pannonian and Mediterranean worlds is reflected in its glorious gastronomy. Slovenia is small, yet it has 24 gastronomic regions and three wine-growing areas with 14 wine-growing districts. If someone wanted to taste the most recognisable dishes and beverages from all of these regions, they could taste something different each day of the year.

Slovenian cuisine is distinguished by locally produced ingredients, which are utilised by top Slovenian chefs as they whip up their culinary masterpieces. On account of the richness of tastes, high-quality ingredi-

ents, gastronomic masterpieces and commitment to sustainable development, Slovenia became a European Region of Gastronomy 2021. In March 2019, Slovenia will host the European Food Summit, which will bring great culinary, artistic and media minds together in one place.

Taste of Slovenian tradition

If you ask Slovenians about a typical Sunday lunch, most of them will say: beef soup, **roast potatoes** and beef from the soup. For holidays, such as **Easter**, **St Martin's Day**, **Christmas**, there are different dishes on the table, and **potica**, a characteristic Slovenian dessert, is a must. Every day of the year, you

can enjoy **characteristic Slovenian tastes**, from various types of cheese, meat, honey, oils, salt to traditional Slovenian dishes representing individual gastronomic regions. Some are **protected with geographical designations and designation of origin**.

Cheers!

A glass of excellent wine goes perfectly with typical Slovenian dishes. Every Slovenian wine-growing region and district has its own **characteristic wines** - no less than 52 vine varieties are grown here. Ruby Karst Teran and **Cviček** from Dolenjska are among the most recognisable and, due to their structure, are deemed special wines. The **Vipava Valley** is home to the most autochthonous wine varieties; its special wines include Zelén, Pinela and Klarnica. A special vine grows in Maribor - the 450-year-old **Žametovka** or **Modra Kavčina**, which is believed to be **the oldest vine in the world!** In addition to wine, you should also treat yourself to a **jug of beer** or two. Particularly if you pour it from the first **beer fountain** in the world, located in Žalec. Slovenia is a land of healthy waters, and you can pour yourself a glass of water straight from the tap. Unique **mineral waters** have special powers.

Fresh and home-grown on the plate

The advantage of Slovenian cuisine is that most ingredients are **produced locally**. You can taste genuine home-grown and fresh ingredients or buy them at tourist farms, the farmers' markets found in all large Slovenian towns, in mountain huts and specialised stores. Even the best **Slovenian chefs** abide

by the 'garden to table' principle. You can learn about various tastes of Slovenia and other countries at numerous gastronomic events and festivals. An ordinary lunch or dinner may become an **unforgettable gastronomic experience**.

Treasures of modern Slovenian gastronomy

People who enjoy seeking out the combination of local ingredients and modern creativity will certainly enjoy a restaurant recommended by the **Gault&Millau** global gastronomic guide. Hiša Franko near Kobariid, where the World's Best Female Chef in 2017 Ana Roš creates her masterpieces, and Gostilna pri Lojzetu at the Zemono Manor with the most innovative European chef of 2017 Tomaž Kavčič are the highest ranked. Galut&Millau awarded four toques to Strelec Restaurant at Ljubljana Castle with chef Igor Jagodic, Chef of the Year 2019, Mak Restaurant in Maribor with chef David Vračko who was selected Chef of the Future, Hiša Denk from Zgornja Kungota and Oštarija Debeluh from Brežice.

Gourmets will enjoy visiting JB Restaurant in Ljubljana, which is included on the list of San Pellegrino's Top 100 World's Best Restaurants, and where you can taste the masterpieces of chef Janez Bratovž. Slovenia also boasts a chef who is a Michelin star holder. It is Andrej Kuhar, who brings his gastronomic creativity to life at Villa Herbertstein in Velenje. ●

#ifeelsLOVEnia

www.slovenia.info