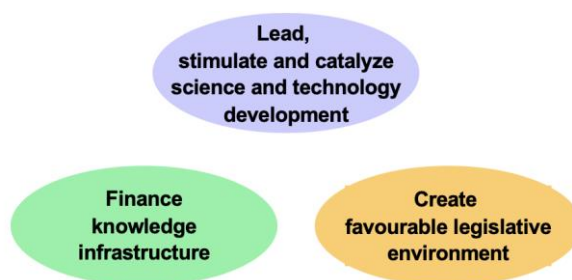


International Conference “DEVELOPMENT PROSPECTS FOR THE FUTURES  
ECOSYSTEM IN LITHUANIA

Markku Markkula:

## EXPERIENCES FROM THE COMMITTEE FOR THE FUTURE OF THE PARLIAMENT OF FINLAND IN THE LIGHT OF EU TODAY

The following text is an analytical summary of my experiences as an MP (1995-2003) and after my membership in the work of the Committee for the Future in the Finnish Parliament. This text is also based on my experiences as the President of the European Committee of the Regions (2015-2017) and my presentations at international conferences during the years 1997-2024. My messages and conclusions are focused on supporting Lithuania and other parliaments in defining their role in their countries.



**Figure 1: The role of parliaments and governments in creating favourable conditions for welfare and sustainable growth.**

Several key analytical lessons can be learned from the Finnish experience. Simplified Figure 1 describes the main tasks of parliaments in creating favourable conditions for the desired progress. These lessons can be sources of reflection and inspiration for other countries and regions of the world. I will come back in this text to the concept and experiences of the Finnish Parliament’s Committee for the Future later on.

### Forward-looking thinking & systemic change management

In today's world, major global trends are influencing all nations and most policy-making domains, necessitating a fresh culture of forward-looking thinking. Predicting trends to shape future visions has become increasingly complex with traditional methods no longer sufficient.

Foreseeing the development of technology and society is an essential asset for all actors in the national innovation system. Both the private and public sectors need to look ahead reactively (What is likely to happen and what should we do about it?) and proactively (What can we do to make it happen or to avoid it?). The importance of foresight studies in the realm of innovation policy is dual. On one hand, foresight is a tool to create policy recommendations; this is often illustrated in case reports, which present numerous policy recommendations, and evaluations of these exercises typically focus on this outcome. On

the other hand, the process of foresight is a policy measure in its own right, contributing to the shaping and informing of policymaking.

Recent challenges can be, in brief, summed up with the following two policy guidelines and action lists for the EU and its Member States. In this presentation, I will analyze some action points which are relevant for MSs such as Lithuania – and to regional and local policymaking. However, since the CoR and others have stated that the targets of the EU are on the right ambitious level, but the activities are not enough to reach the targets. So, what is needed, thinking about the theme of your conference.

To reach the EU political targets of SDGs and Green Transition:

1. The EU should and can support much more than so far evidence-based policy at all levels backed up by a solid body of scientific research or derived from objective evidence.
2. Foresight and a systemic approach to tackling the grand societal challenges are essential for policymakers on all levels of decision-making.
3. The CoR has a lot of evidence to stress the importance of accelerating the targeted transformation by increasing investments in human capital and regional innovation ecosystems.
4. The EU Missions can and should be a significant positive transformation, “a bottom-up movement” in increasing the appreciation and respect of RDI and knowledge as the only way to well-being and sustainable growth.
5. These policy guidelines require decisions and activities by the MSs governments and parliaments.

My experience within the Finnish Parliament’s Committee for the Future and the EU Committee of the Regions highlights the following:

1. We don’t have the necessary scientific and technological knowledge needed for green transition. The industry plays a crucial role in RDI.
2. The EU urgently needs pioneering cities & regions and industries to showcase how to accelerate the systemic transformation for societal innovations and green sustainable growth.
3. The industry should engage its activities with the EU Mission Cities: 1) Joint Roadmaps, 2) Climate City Contracts and 3) Action Plans Focusing on Potential Breakthrough Initiatives (including RDI & infra investments).
4. Systemic transformation happens both top-down and bottom-up. Regional forerunner activities are so far missing. Implementing transformation requires active industrial contributions. To lead the way, start with multi-dimensional and multi-actor energy grids based on data and monitoring.
5. Lessons learnt: The EU needs to upgrade the role of innovation. Keep the ambitious targets and use the latest evidence-assisted knowledge in orchestrated transformation processes throughout Europe.

### **Committee for the Future**

A few older messages are still valid. I will quote what we learnt in the work of the Committee for the Future at the turn of the millennium. Professor Manuel Castells has, through an extensive analytical study, concluded: “Finland stands in sharp contrast to the Silicon Valley model. ... This means that the welfare state and cooperation between business and labour, mediated by the government, allow the development of work flexibility within a stable system of industrial relations. In the case of Finland, the state has played and

continues to play a major role in guiding economic growth and building the information society in Finland.”

The Finnish model is based on high-level basic education and a strong commitment of all citizens to lifelong learning. The state has used incentives, strategic planning and participatory mechanisms. The combination of deregulation and the effectiveness of providing and facilitating the public infrastructure has stimulated growth. The state has acted as a promoter of technological and social innovations, as a public venture capitalist, and producer of knowledge labour, thus creating the conditions under which Finnish business could restructure itself and compete globally.

### **Parliamentarians need a systemic approach to global challenges and wicked problems**

The Parliament of Finland assumed in the 1990s an active role in the discourse on the future of the nation. Parliament has obliged the Government regularly to submit a report on the future of the country over a time span of 5-15 years. The Parliament has established a special Committee for the Future which consists of 17 members of the Parliament. It was established for the first time in 1993 and it got permanent status in 2000.

The main task of the Committee for the Future is to evaluate and reply to the Government’s report. Parliament deliberates the Committee’s report in plenary session and adopts it with possible amendments, whereupon it becomes a resolution of Parliament binding on the Government. Another original main task was to organise the parliamentary technology assessment activities in Finland. In a broader scope of societal challenges and progress, the Committee has taken an active role as an initiator, catalyst and proponent of technology in the Parliament and, more generally, in the Finnish society at large. The working methods emphasise that the TA and other studies are carried out not only *for* the MPs but *by* the MPs who have taken an active part in the scoping, management and dissemination of several TA studies.

The globalising economy demands tough competition and a high level of expertise. The nation must ensure its ability to cope with competition. Knowledge and using the best global knowledge are among the key success factors in this. Welfare cannot be maintained without sufficient economic resources. But welfare is not just economic success. It is a broader concept. In order to succeed, individuals and society must fresh-mindedly make forward-oriented choices. They must strive to be in the vanguard of development in sectors where they possess strengths. One of the outcomes of the Committee in 1997-2000 which has received the most international recognition can be summed in the following figure 3 taking the knowledge management perspective to the work of the parliament. The main elements were described in the book “Developing and Implementing Knowledge Management in the Finnish Parliament” (Figure 2) – our work at that time was inspired by Professor Ikujiro Nonaka.

### **Developing and Implementing Knowledge Management** in the Parliament of Finland



Riitta Suurla • Markku Markkula • Olli Mustajärvi

PARLIAMENT OF FINLAND  
COMMITTEE FOR THE FUTURE

Reviewing the Figure 3 global development in 2000-2020, some lessons to learn – which are still very valid – can be drawn from the Committee’s report *“Painspots in the future work”*. The message from this can be summed, in brief: Finns appreciate schooling and education. That is because for them education has long been the most important channel for upward social mobility. From the perspective of society, education has strengthened the national consensus. It is the foundation of motivation to work and engage in enterprise and thereby a guarantee of Finnish prosperity. However, a good basic education is not enough. The abilities of people who will succeed in the 21st century need to ensure that they can absorb new knowledge and very quickly acquire the skills that changing work patterns call for. There is a need for competence, creativity and vision. People must be able to learn and work together with others because many tasks are performed as group work in which all have their own share to contribute.



Other main messages which are still extremely valid today in the 2020s from that report are:

In the new kind of knowledge economy, the attitude to knowledge is different from what it was earlier. Knowledge is capital, which need not and must not be saved. Knowledge is like joy: it increases when it is shared and is replenished only when squandered. In the past, knowledge was power, which could be "kept under the mattress" or used only to achieve one's own purposes and dominate others. Power belonged to the few and the smaller that oligarchy was the more of it they had. Advocates of the ideology of knowledge management argue that thinking about knowledge must be altered in such a way that people understand that the distribution of knowledge is power, power that belongs to us all. Corporate

executives and consultants emphasize that active networking is a precondition for international success.

One of the important aims of knowledge work is to create new knowledge rather than merely to distribute or store what already exists. People's subjective interpretations are more and more important in knowledge work. Something that must be seriously taken as a subject of research is how the human mind works. If only threats are seen everywhere and the atmosphere is pessimistic, the will to achieve agreed goals will also suffer from a lack of faith. The key mentality is to boost positive thinking and promote respect for creating new things and ideas.

### **UNESCO Round Table messages for parliaments**

Already in 2003, the outcomes of the UNESCO Round Table which convened in Helsinki yielded profound observations for a systemic approach at the Parliament level to society's future and the urgency for societal innovations. The discourse held at the Round Table illuminated the imperative for comprehensive reform in national and global policies relating to STI (science, technology, and innovation). A pivotal realization is that societal innovation must be considered an urgent priority to navigate and thrive in the evolving landscape of knowledge-based economies.

Especially the following factors having a strong impact on developing knowledge-based economies were the focus of the discussions:

- 1) Creativity and innovativeness are the driving forces,
- 2) Effective networking is a way of life in creating a shared knowledge reality among both individuals and organizations,
- 3) Increasing human capital is the most important value base of societies and work organizations,
- 4) Knowledge management and encouraging systematic lifelong learning are basis on building a concept of a learning society and learning organization.
- 5) The future of economic success is more and more build on national innovation system with special emphasis on well-targeted regional and local innovation policy,
- 6) Increasing the investments in education and in research and development play a crucial role in governmental policy.


In my capacity as the rapporteur of the discussions, I summed up the Round Table's recommendations for the parliamentary future policy to be considered and taken into action by the parliaments around the world:

1. To have progress in welfare and societal development policymakers need to set ambitious targets for lifelong learning and research and development.
2. The foremost priority in the internal development of the innovation system is to continually enhance quality, efficiency and relevance.
3. The interaction of the innovation system with other policy sectors must be deepened.
4. The conditions for basic research should be strengthened in national policies.
5. In education and research multidisciplinary collaboration should be extended and improved.
6. In-depth national and local collaboration of companies, universities and research centres should be expanded to all businesses.
7. Global perspective and increasing cooperation in STI policy are important.

8. A deeper understanding of innovation and the innovation processes in society is needed.
9. Future workforce competencies should be developed to increase the supply of knowledge-intensive services.
10. Parliaments should further develop their own concepts dealing with the STI policy.

### An example of the work of the Committee for the Future


I have included here Figure 4 showing some potential technology developments based on the work of the Finnish Committee for the Future.



**PARLIAMENT OF FINLAND**

**Committee for the Future in the Parliament of Finland**

- A permanent part of the Parliaments decision-making
- 17 MPs for a four-year term
- 1-2 meetings / weeks
- Deep dialogue once per term between Government & Parliament
- Expert hearings and public dialogues
- Technology assessment reports



**EPTA**  
European Parliamentary Technology Assessment

→ We need to take the knowledge in active political use and organise systemic deep-diving thinking

*Further analysis & sources detailed in Parliamentary reports*

## Key transformations!

1. Energy production
2. Energy storage
3. Transportation
4. Industry/materials
5. Buildings/heating
6. Agriculture/food

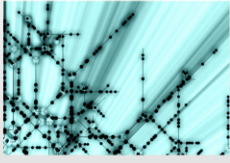
& other anticipated radical technologies

Source: Parliament of Finland, Committee for the Future - Research leader [Risto Linturi](#): "Jointly these transformations lead to a carbon neutral world."

**SOCIETAL TRANSFORMATION 2018-2037**

100 ANTICIPATED RADICAL TECHNOLOGIES, 20 REGIONS, CASE FINLAND


**2018**



**TOWARDS A BETTER FUTURE**

Technological opportunities and threats to the promotion of sustainable development

**2021**



### What do these mean today, in 2024?

Creativity and innovation are not merely catalysts but the engines driving systemic transformation. Effective networking transcends being a facilitative tool and becomes a lifeline for fostering shared knowledge realities that cut across the fabric of individuals and collectives. Moreover, the paramount importance of human capital investment is redefined as the bedrock upon which societies and organizational structures must be reshaped.

Managing knowledge and endorsing a culture of systematic lifelong learning are not optional but essential steps towards building learning societies and organizations that are resilient and adaptive. It's increasingly apparent that economic success in the future will be predicated on a robust national innovation system, which demands an intensified focus on regional and local innovation policies that are well-aligned with this systemic transformation.

The UNESCO Round Table's deliberations in 2003 advocated a pressing need for parliaments worldwide to adopt and act upon policies that elevate the significance of STI policies on the city level, along with their industries. Recent two decades show that cities need place-based innovation ecosystems as sites for experimentation, testing and prototyping to run global forefront activities in renewal, charged with setting ambitious sustainable growth objectives to be reached by learning and research, with ensuring dedicated funding to these focusing on the strategic targets of urban development.

National innovation systems should no longer be monitored based on the success of mere incremental processes but as a continuous drive toward high-quality, efficient, and relevant enhancements that support systemic progress. This entails a strengthened interplay between innovation systems and other policy sectors, alongside bolstered support for fundamental research, and a broader implementation of interdisciplinary and multidisciplinary approaches in education and research.

A global perspective is crucial in policymaking, particularly with innovations needed to reach the SDGs by increasing global cooperation in integrating new and old economies. A deeper understanding of innovation processes is essential. Parliaments are called upon to redefine the national strategies concerning science, technology, and innovation policy to echo the urgency of societal innovation and the centrality of cities in this grand transformation. The Finnish Parliament's Committee for the Future stands as a beacon of how permanent institutional structures can be established to guide these shifts, complemented by networking exemplified by the European Parliamentary Technology Assessment (EPTA).

In an era that calls for swift and decisive action, these insights and recommendations serve as a clarion call to elevate systemic transformation and societal innovation to the forefront of legislative and industrial agendas, affirming the role of cities as pioneers in the vanguard of global renewal.

Another role or even duty of parliaments is to foster the conditions necessary for innovation and sustainable growth within knowledge-based economies across the globe.

### **Conclusions on the EU Scale**

Considering your conference theme, I want, in brief, to highlight my few European-wide messages. Commissioner Mariya Gabriel stressed during her term several times that the EU needs an upgraded role for innovation to be based on the crucial role of place-based innovation ecosystems and the EU-wide networking of these ecosystems. In brief, the European Committee of the Regions (CoR) has answered this challenge with its opinions highlighting the following points:

1. CoR underlines closing the knowledge and innovation divide in Europe and the innovation gap between Europe and the US.
2. CoR reaffirms that the challenges are complex, and only part of the necessary scientific and technological knowledge exists. Reaching the targets is possible with extensive foresight activities, increasing R&D investments, real-world prototyping, experimenting, and scaling up the results.
3. CoR highlights that the key questions are how the cities and regions learn to orchestrate necessary activities and how the activities attract private industrial and other investments.
4. CoR wants to mobilise active forerunner cities and regions to showcase how to co-create successful concepts for platforms and test beds in the new economy of sustainable growth serving the citizens. These offer all European cities and regions real-life practical and innovative solutions for making the desired green & digital transformation happen at an accelerated speed.

The EU needs new systemic innovation solutions to solve particularly the climate and energy crisis. The necessary transformation can be implemented through the systematic, creative cooperation of cities, companies, and research institutions.

The key problems of several cities and regions are that the green and digital transition is being implemented as separate projects and that businesses, new knowledge, and technology are not sufficiently involved. In addition, EU funding has been arranged too much to operate in silos and as separate project funding. However, climate change, with its subsequent impacts and interconnections, forms a large systemic societal whole. Therefore, developing innovative solutions requires systemic actions at all levels of governance and orchestration of a broad whole.

In the EU, there is a growing understanding that the necessary changes require collectively developed and adopted practices as well as systemic implementation at all levels of administration. Multilevel Governance thus means systemic cooperation at the EU, national, regional, and local levels, as well as inside every city and other organization. The commitment of individuals at all levels of governance to joint action is essential.

The frame as a national mission for all this can and should be set by national parliaments.