North Macedonia 2021-2041
National Development Strategy

Outline of the **Methodological Approach**

MAY **2021**

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Preparation of the methodology

The methodological and governance framework will provide a **long-term vision and roadmap** for North Macedonia's economic, social, cultural, and environmental development.

A primary focus has been to **create the capabilities and societal resilience to deal with increasing uncertainty and risk** in our interconnected world, as well as deep trends such as climate change and digital transformation. The National Development Strategy ("NDS") is also being prepared against a backdrop where European countries are dealing with the health, economic and social crisis presented by the Covid-19 pandemic to lay the foundations to "build back better", in a way that delivers a healthy future for everyone.

Key aspects that the NDS needs to take into account include:

Long-termism. The NDS will need be as effective in 20 years. Failure to do so is why many strategies quickly become outdated or fail to be properly implemented. We need to extend our temporal frame of reference and **develop strategic and critical responses that orient deep structural transformations towards *long-termism***

Systems approach. The challenges are too complex and interconnected, and actions taken in one area will impact others

Embed adaptability. It is impossible to accurately predict the required policy responses to all future challenges. Flexibility needs to be at the heart of NDS

From funding to financing. National, and international donor landscape including the private sector.

An age of interdependencies

We are living in a global age of long, interlinked emergencies. Climate change, biodiversity loss, pandemics, antibiotic resistance, migration and human development are some of the interconnected challenges faced by all actors in society (government, academia, industry and civil society). The dynamic and linked nature of these emergencies will require governments to become enablers for society to work together, building horizontal strategies and collaborative capabilities.

Due to these interdependencies, **the change needed will evolve as our living systems are transitioning**. What is known and knowable today will be distorted by uncertain events and unknowable cascading risks over time. **How can the systems in which we operate learn how to learn and adapt in relation to this?**

At the same time, **the transition requires sustained efforts over a long period of time**. How we decide to use our land and resources today has long-term implications, yet our current systems are struggling to make sense of decisions that impact across multiple time horizons (whether political cycles, fiscal budgets and paychecks). We must break the tragedy of the horizon, as Mark Carney puts it.

This is the age of interdependencies. Bringing humanity between the social floors and the planetary boundaries and towards its full development potential requires structural reforms, bringing about Statecraft 3.0.

Photo: New York Library, Unsplash

What is the current Government landscape?

Existing national development frameworks and best practice

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Photo: Bojan Bogdanovski - Unsplash

Current Policy Sufficiency

A key attribute of the process to draft the methodology has been **evidence based analysis** of policy sufficiency

Current Policy Sufficiency

In order to implement a new NDS, it will be key to learn from past, present and future strategies across multiple policy themes.

Two main problems have been identified, **poor coordination** in the creation of public policies and their **implementation**.

"Commonly found problems in the implementation of strategies are: (i) excessive generalisation of the main recommendations, particularly when the strategies are not followed by action plans; (ii) lack of clear responsibilities and ineffective coordination among key stakeholders; (iii) little attention to policy costing and available funding; and (iv) very limited policy attention to ex ante analysis and ex post evaluation of their effects, to inform the next cycle of the policymaking process."

Report on aligning Local and Regional with National Development Strategies: In Search of Synergies

Typical Challenges in national strategies:

Overlapping strategies: Coordination of and the intersectionality lens within public policies is weak leading to overlapping strategies and functions between actors;

Lack of coordination: the implementation of many policies lacks coordination because many of the sectoral strategies in Government ministries are made separately and incoherently;

Lack of "success" monitoring: Government monitoring tend to focus primarily on results rather than achievements in terms of objectives.

Financial resources are not properly accounted for: Sectoral and horizontal strategies are developed in an incoherent way and do not consider financial resources

Evidence base is weak: The framework for developing strategies, public policies and laws is often not evidence-based..

What if:

To see full list of interventions, please see local consultants' report

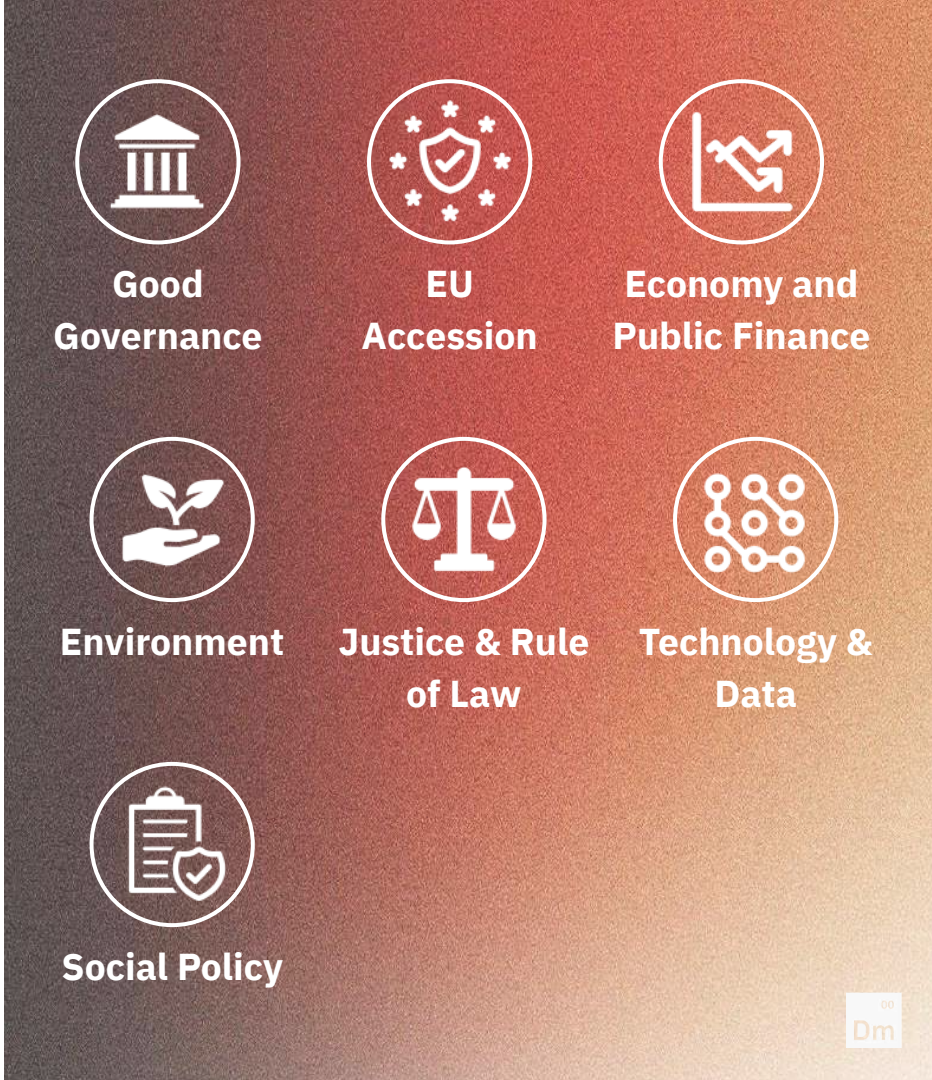
- Develop an inter-ministerial framework/mechanism for cross-sectoral alignment of the national strategic processes
- Create a methodology for improved cooperation and coordination between relevant stakeholders in the process of the preparation and implementation of strategic planning documents
- Involve citizens in the processes for monitoring and evaluation of the implementation of strategic plans and develop smart platforms for open data and progress monitoring
- Allocate sufficient funds and resources for successful implementation of the adopted strategies.
- Create a decision making process for the NDS that is transparent and communicates clearly as to which evidence decisions are being taken.

Current Key Priorities

A key attribute of the process to draft the methodology has been **evidence based analysis** of what the main Governmental priorities have been (and what changes might be coming) across national, regional and EU wide policies

Strategic Priorities of the Government

The Government had defined multiple key strategic priorities, objectives and processes across multiple thematic areas including:



Good Governance Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Strengthening the rule of law through impartial and non-discriminatory enforcement of laws, building independent institutions and a functioning system of local self-government

Full implementation of the Ohrid Framework Agreement and building a civil state and ethnic cohesion on the principles of mutual tolerance and respect

Documents & Processes

Public Administration Reform Strategy: This relates to the overall operation of the administration and has been repeatedly developed since 1999.

SIGMA/OECD Principles for public administrations: These define detailed requirements for a well-functioning public administration in each of the 6 core areas: (1) the strategic framework for public administration reform; (2) policy development and coordination; (3) public service and human resource management; (4) accountability; (5) service delivery; (6) public financial management.

Open Government Partnership: North Macedonia joined the Open Government Partnership in 2011 to bring together government reforms and civil society to create action plans that make Government more inclusive, responsive and accountable. Previous action plans cover access to information, fiscal transparency, open data, and improving openness at the local level. Such priorities need to be reflected in the NDS.

National Strategy for Cooperation of the Government with the Civil Society 2018–2020: a new version of this strategy was announced in the draft NPAA Стратегија со Акциски план за периодот 2021-2023.

EU Accession Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Successful accession negotiations with the European Union

Documents & Processes

The Government needs to take into consideration the recommendations provided by the European Commission and address them in the NDS.

- **National Programme for Adoption of the Acquis Communautaire (NPAA):** This is a comprehensive long-term document that defines the dynamic of the adoption of the "Acquis Communautaire" i.e strategic guidelines, policies, reforms, structures, resources and deadlines to be adopted by North Macedonia to fulfil the requirements for EU membership.
- **EU Accession progress reports and requirements:** Each year the European Commission prepares annual reports, assessing the implementation of fundamental reforms in the Western Balkans and Turkey, which are presented together with clear and precise recommendations and guidance on next steps.
- **New revised methodology for European enlargement:** defines revised accession process that will be more credible, with a stronger political steer, more dynamic and more predictable. The key novelty in the revised methodology is that the current negotiating chapters are now grouped into six dynamic thematic clusters.

Economy and Public Finance Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Development of the economy, increase of productive employment and raising the living standard of the citizens

Reforms in the education system and investment in innovation and information technology

Documents & Processes

- **Public finance management reform program**: This sets the groundwork for the adoption of a new budgetary law and development of new integrated IFMIS system, which completely changes the PFM system in the country.
- **Fiscal strategy**: This is the overall fiscal framework, affecting debt management and annual budget planning.
- **Economic and Investment Plan for the Western Balkans (adopted by the European Commission):** This identifies 10 investment flagship policies to support long-term economy recovery, acceleration of a green and digital transition, and fostering regional cooperation and convergence with the EU. It needs to be taken into account when drafting the NDS.
- **Multiannual financial framework 2021-2027 and Next Generation EU:** This framework divides the priorities of an EU country in terms of funding and projects into 7 specific areas: Single Market, Innovation and Digital; Cohesion, Resilience and Values; Natural Resources and Environment; Mitigation and Border Management; Security and Defense; Neighborhood and the World; and European Public Adamini ***(to see full list please refer to local consultants' report).***

Environment Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Reduction of air pollution

Documents & Processes

- **National strategy for sustainable development 2009-2030/ Sustainable development goals (SDGs):** North Macedonia has committed to fast-track progress and pledged to "leave no-one behind". Development must balance social, economic and environmental sustainability and these goals should be addressed in the NDS.
- **Strategy for energy development of the Republic of North Macedonia until 2040:** The strategy integrates climate and environmental aspects of the energy sector, while proposing affordable, reliable and sustainable energy for the future. This is still not prepared.
- **National Transport Strategy:** This was presented before the Assembly on 17.10.2020 and aims to develop a harmonised transport sector that is internationally compatible and integrated into the TEN-T system stimulating the economic and social development of the country and seeks to preserve the environment and needs of future generations.
- **Long-term Strategy on Climate Action:** This is being prepared and will come before Government in December 2021. There are also **Enhanced Nationally Determined Contributions 2020–2030** (adopted in April 2021)

Justice and rule of law Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Full membership of North Macedonia in **NATO**

Decisive and indiscriminate **action against organised crime and corruption**

Documents & Processes

National Strategy for Prevention of Corruption and Conflict of Interests 2021-2025: This document is the first of its kind to be adopted by the Assembly and stands out as it applies a cross-sectoral approach (reflected in its activities).

Technology & Data Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Improve data and statistical capacity to improve governance by increasing transparency, openness, integrity and public participation

Documents & Processes

Service delivery: International standards have been adopted from both Eurostat and IFRS (high-quality, internationally recognised set of accounting standards). This is helping the country in comparison of financial and accounting data.

Transparency Strategy 2019-2021 (builds upon the Open Data Strategy 2018-2020): These documents set new standards for transparency and the publication of data by Government. The Open Data Strategy also envisages a strategy for deployment of a central government open data portal (https://opendata.mk), as well as development of a methodology for a data inventory, the introduction of a licensing model for data, the establishment of a management structure and the development of guidelines to facilitate the release of datasets. Both of these documents are correlated with the ICT Strategy, which has been under preparation for the last couple of years in the MISA, to be adopted in 2021.

Social Policy Priorities

To see full list of please refer to local consultants' report

Strategic Priorities

Identify ways of reducing inequalities and improving cohesion between different social groups.

Documents & Processes

- National strategy for poverty reduction and social exclusion in the Republic of Macedonia 2010-2020: This was a multi-sectoral strategy covering the following five areas: (i) Employment and strengthening of entrepreneurship; (ii) Adapting education to the labour market; (iii) Social and child protection, construction of a new social model; and (iv) Promoting health care and long-term care; and (v)Transport, Communications and Housing. Whilst the Government says there will be a new poverty alleviation and social exclusion policy, this will be likely published after the NDS.

- Government Work Program 2020-2024: This covers all the elements of the social policy sector.

Climate change is missing in both key framework strategies as a separate area that has as evidenced in the doughnut model (which has a strong social policy dimension in terms of disability, gender, persons living in rural and remote areas, age and other types of social vulnerability)..

Strategic Gaps

A strategy is a living thing, it needs to be constantly monitored and measured to ensure that everything is on track. Therefore, periodically it should be revised to check that everything is in place to enable informed decisions and changes without ignore what has come before.

For example, the energy sector is regulated by EU guidelines but it does not use doughnut model and are still experimenting with different ways towards transition. Therefore, this is a gap in our national strategic planning.

Therefore, the NDS needs to work like an umbrella strategy.

To see full list of please refer to local consultants' report

Strategic Themes	Missing Priorities
Government & Policy	**Political voice** (Community and citizenship) **Communication and mobility** (transport sector) major source of discrepancies strategic planning framework in the city
Environment	Ocean acidification Chemical pollution Nitrogen and phosphorus loading Freshwater withdrawals Land conversion Biodiversity loss Ozone Layer depletion
Justice and rule of law	Food security Water Housing and land Social equity Health

How have others implemented long-term development plans?

Learning from elsewhere

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Photo: Tristan Neidigh, Pixels

Learning from elsewhere on how to create a NDS

The process of writing a national strategy can take numerous forms. Yet traditionally national governments tend to go through the process of:

1) Creating an analytical basis;
2) Identifying the vision, strategic development areas, goals and associated indicators;
3) Hosting public dialogue [*sometimes happens after drafting, allowing very little public input*];
4) Drafting the strategy;
5) Making formal decisions about the strategy and its goals;
6) Ratifying the strategy through Parliament to offer it democratic legitimacy;
7) Implementing the strategy through policy design;
8) Monitoring and evaluating the progress [*usually through static milestones and no redress functionality*].

What can we learn from this process in order to develop the processes for North Macedonia? The comparative review outlined a number of design questions (see following pages) and will form the basis of the process for creating North Macedonia's NDS.

Design questions for North Macedonia

Slovenia and Croatia were used as regional examples given the relatively similar developmental stage, institutional structure and size (in the case of Slovenia); the common objectives of the NDS; and their recent creation. Other countries were chosen for key lessons across certain themes.

How can we...

Slovenia

- Offer deep cross departmental and **cross** party **collaboration**, but **engage citizens** earlier?
- **Enable policy coherence** in terms of horizontal collaboration?
- Plan for **transformational**, rather than incremental, **change**?
- Focus on **internal skill** development?
- **Embrace complexity & uncertainty** and use appropriate analytic models?
- Note: Unfortunately, the Slovenian 2030 Strategy was considered as inappropriate soon after its completion and was neglected entirely by policy makers. It was not used at all in the Slovenian programming exercise for the use of EU funds available for 2021-2027.

Croatia

- Use writing of NDS as a moment to establish new **institutional structures**?
- Use a **participatory** approach to build a new social consensus?
- Prioritise sensemaking, collaboration, and managing systemic risk **capabilities**?
- Incorporate **plural** forms of ownership into the NDS?

Amsterdam

- Identify and **connect** visionary change agents in big and small organisations?
- Redefine what **value and good growth** looks like in the 21st century?

Learning from elsewhere

Design questions for North Macedonia

How can we...

Germany

- Make climate a **core part** of industrial strategy, not an add on?
- Build structures in government that can work **horizontally**?
- Ensure **social equity** in climate policies?

United Kingdom

- Explore **resilience building mechanisms** and **embed adaptedness** in the NDS?
- **Transform the institutions and systems** that underpin our engagements with nature?
- Use the NDS to make North Macedonia a **South Eastern Europe model for transition**?

Estonia

- Explore possibilities of **co-delivery** and network governance?
- Build on **assets in the country**?
- Take on some '**big risks**'?
- **Build skills across the population**?

Vietnam

- Design for the margins to **deliver for all**?
- Build up local and regional government ability to **understand their populations**?
- **Invest in upstream** services for social programmes?
- **Analyse cascading risks** at the system level?

What does the transition look like through the doughnut?

The doughnut as the "guard rails" on our journey

Photo: Nikola Mihajloski - Unsplash

Methodological approach

Introduction to Doughnut Economics

The Doughnut is a visual “safe and just space” framework created by Kate Raworth. This framework combines the concept of planetary boundaries that was originally proposed by Johan Rockström and colleagues, with the complementary concept of social boundaries added by Raworth.

The core of the doughnut theory is that there are 9 planetary boundaries that we can’t go beyond if we want to keep the planet in a benevolent state for us to thrive in; climate change, ocean acidification, chemical pollution, nitrogen/phosphorus loading, freshwater withdrawals, land conversion, biodiversity loss, air pollution, ozone layer depletion.

The doughnut theory also advocates that human well-being requires 12 key resources; water, food, health, education, income & work, peace & justice, political voice, social equality, gender equality, housing, networks and energy.

!

We have already exceeded 3 of the boundaries; Biodiversity loss (eco-system collapse, breaking down of the food-web in our eco-systems), climate change (greenhouse gases), Nitrogen/phosphorus overload (eutrophication in lake systems and oceans)

Methodological approach

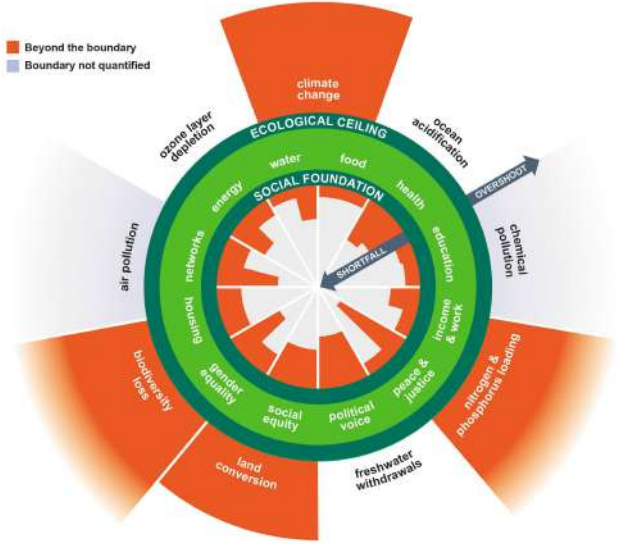
Applying Raworth's Doughnut

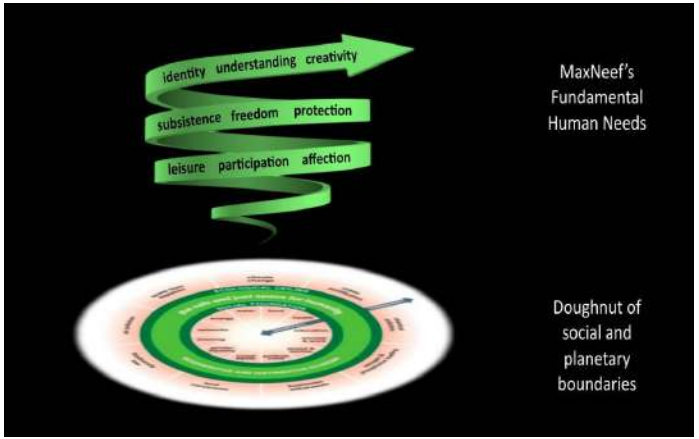
We propose using the Doughnut model framework to identify the risks and potentials over a time horizon and build resilience capabilities to deal with uncertainty.

Risk- The Doughnut's "safe and just" framework (top right diagram) helps us to manage known risks; it is an evaluation tool or framework from which human, machine and ecological development can emerge.

Potential- The model was further developed by Raworth in the form of the doughnut spiral (bottom right diagram) that showed the elements that are then needed for development, taking from Max Neef's matrix of fundamental human needs.

Uncertainty - In applying the doughnut to a nation state for the first time in North Macedonia, we need to further layer this framework and build capabilities for resilience and to deal with uncertainty. As seen from our comparative review (Deliverable 1), national development plans or strategic reviews must address the issue of uncertainty in an increasingly interconnected global system.





Methodological approach

Evolving principles for a safe and just development space

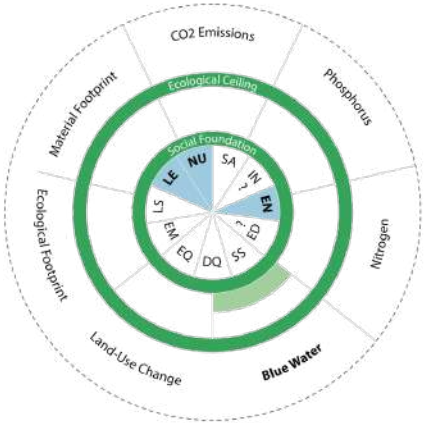
The Doughnut Model is **not a set of policies and institutions**, but rather **principles** for humanity to thrive in the 21st century:

- Recognises that the economy is embedded within, and dependent upon, society and the living world;
- Sees the big picture and recognises that it will take more than the state to transform economies;
- Recognises that human behaviour can be nurtured to be cooperative and caring;
    - *Elements*: Promoting diversity, participation, collaboration and reciprocity;
- Recognises that economies, societies, and the rest of the living world, are complex, interdependent systems, and applies systems thinking;
    - *Elements*: Experiment, learn, adapt, evolve and aim for continuous improvement; Be alert to dynamic effects, feedback loops and tipping points;
- Calls for a regenerative and a more distributive economy;
- Changes the goal from endless GDP growth to thriving in the doughnut where everyone's needs are met.

In Doughnut Economics, Raworth states that even these principles will **"keep on evolving" because "we have only just began drawing their pictures, sensing their patterns, and understanding their interplay" (p. 287).**

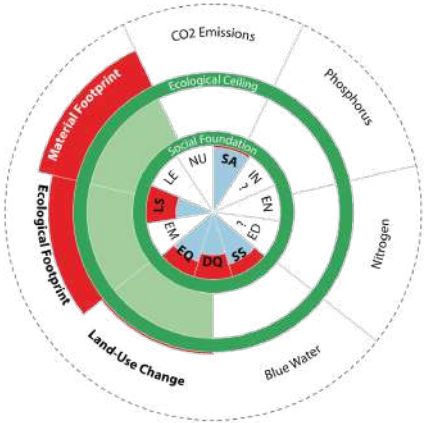
Where is North Macedonia on the Doughnut today?

The Nation's targets in each of these areas are accompanied by illustrative statistics that give a snapshot of the nation's current status, based on data drawn from University of Leeds: A Good Life For All Within Planetary Boundaries sources. **One illustrative statistic evidently cannot do justice to the full diversity and complexity of social and environmental life, nor to the richness (or absence) of data available.** The data included here, therefore, is a tool to spark a discussion and create a space for deeper reflection on interconnections between social and ecological boundaries. **These diagrams will also be checked for up-to-date accuracy with some of the UNCT agencies.**



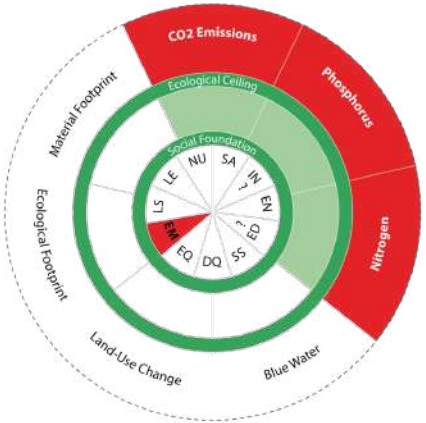
Doing well

Ecological: *Blue water |* ***Social:*** *Healthy Life Expectancy, Nutrition, Access to Energy*



Failing to control

Ecological: *Material Footprint, Ecological Footprint, Land-Use change |* ***Social:*** *Life Satisfaction, Democratic Quality, Equality, Social support, Sanitation*



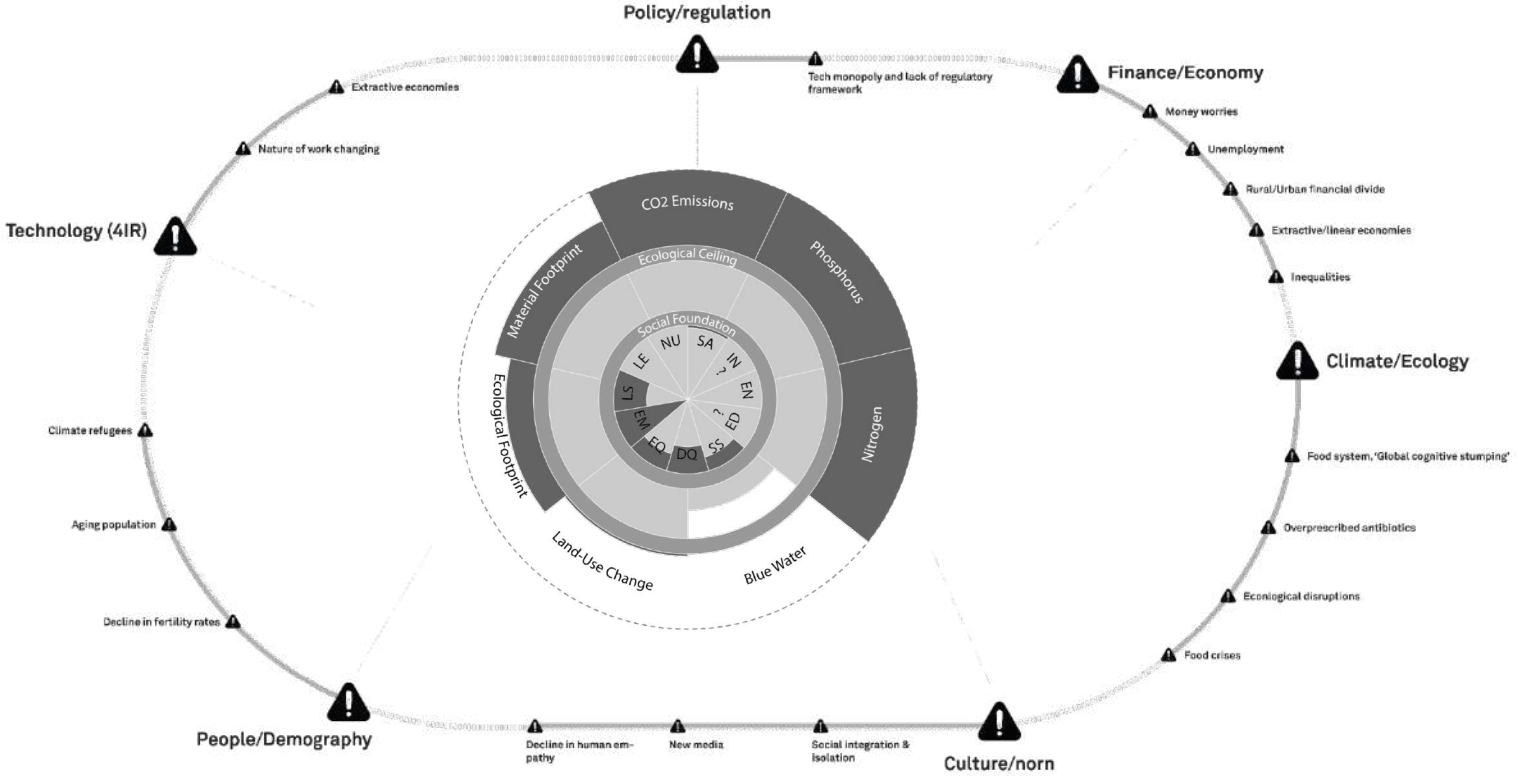
Reached Max Overshoot

Ecological: *C02 Emissions, Phosphorus, Nitrogen |* ***Social:*** *Employment*

Data Source - University of Leeds: A Good Life For All Within Planetary Boundaries

Methodological approach

What are the deep & emergent trends?



Deep Trends & Emergent Risks		Strategic Ecological Risk	Strategic Social Risk	Doughnut impact	Development Potential Impact
Technology Trends	**Automation** *Other trends include:* Bio-tech, Gene Therapy, Open source, Personalisation, Data Brokering	Raise greenhouse gas emissions, **Exploitation of rare metals**, New challenges for recycling and waste management, etc.	Worker displacement, Displaced geographically, **Mental health, Unemployment, High capital expenditure, Privacy invasion**, etc.	Health, Education, Income & Work, Climate change, Biodiversity loss, air pollution	Identity, **understanding, creativity**, subsistence, freedom, protection, **leisure, participation**, affection
Physical Trends	**Urbanisation, Counter-urbanisation, Hyper-localisation, Land-use change**	Deforestation, habitat destruction, Greenhouse gases, Soil erosion, Strain on natural resources, **Loss of biologically diverse ecosystems**, Water pollution, flash flooding, loss of tree cover etc.	**Pollution with significant impact on human health**, Greater poverty, Strain on services, etc.	Climate change, Chemical pollution, Nitrogen loading, freshwater withdrawals, Land conversion, Biodiversity loss, Air pollution, Health, Housing, Energy	Identity, **understanding, creativity, subsistence,** freedom, **protection**, leisure, participation, affection
Demog-raphic Trends	**Demographic slowdown** *Other trends include: Ageing population, Emerging adulthood, Gender equality, Career mobility, Increasing lifespans*	**Unequal emissions**, **pressures on bio-diverse agricultural production**, soil erosion & invasions by pests & weeds could lead to reduction of biodiversity, Soil degradation, increased forest fires, less use of resources, etc.	Decreased level of support - emotional & financial, Unemployment, **Decreased tax base, Higher taxation**, Resource withdrawal from rural areas, Youth migration, Slower economic growth, Potential housing crises, etc.	Health, Income and work, Education, Social equality, Energy, Networks, Climate change, Biodiversity loss, Air Pollution	**Identity, understanding, creativity,** subsistence, **freedom**, protection, leisure, participation, **affection**
Environ-mental Trends	**Temperature rise (3 degrees)** *Other trends include: Biodiversity loss, Climate Change, Circularity, Deforestation, Permaculture, Local production*	**Loss of species & extinction,** Invasive species, Extreme weather, biome shifts, Sea level rise, Deforestation & wildfires, etc.	Heat-related illness & mortality, Vector-borne diseases, **Food security, Economic impacts**, Electricity consumption increase & blackouts, Displacement, Tax increase, etc.	Climate change, Land conversion, Biodiversity loss, Housing, Energy, Health	**Identity,** understanding, creativity, **subsistence, freedom, protection**, leisure, participation, affection

How do we apply the Doughnut at a national level in an age of uncertainty?

The doughnut as the "guard rails" on our journey

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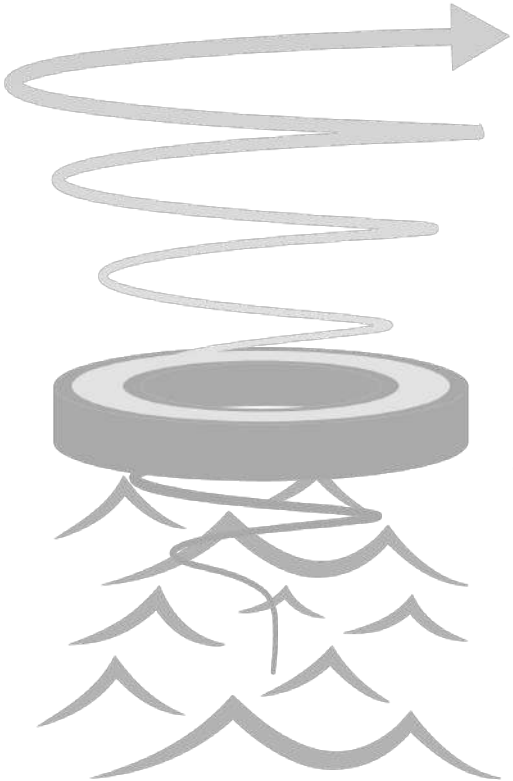
Photo: Aperture Vintage - Unsplash

The Doughnut in **an age of complexity**



Potential

Developing the full human, machine and ecological development potential

Risks (+/-)

Developing the safe and just space for humanity

Uncertainty

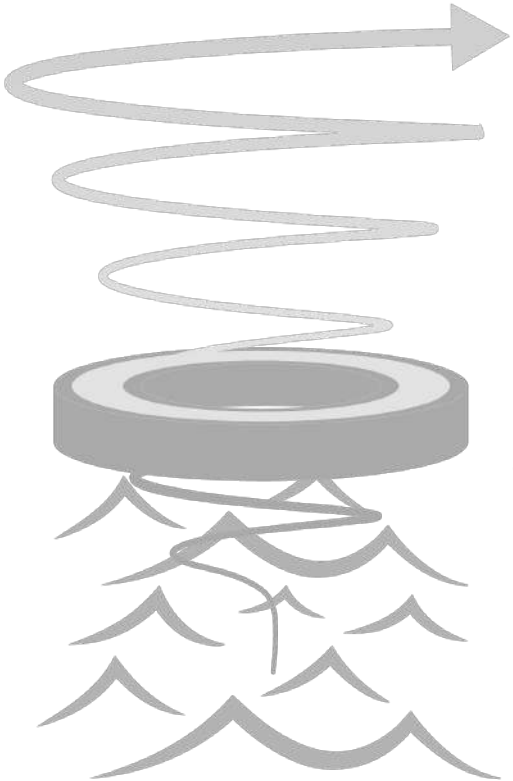
Building the foundation for humanity's antifragile development

We live in an increasingly complex world and as described in the first chapter, the Doughnut is an ever evolving model requiring adaptation to the specific context. One context is not the same as another and every context is evolving near real time; often in uncertain ways. This creates the need to clearly address this **uncertainty and contextuality**.

Therefore, we are introducing another development layer, adding focus on a foundation that will shape long-term development to create a more antifragile system. The model adds the **currents of uncertainty** and a **foundation spiral** aiming at bringing everyone on the same plane and thereby enabling participation across society.

***Antifragility**: the ability to absorb shocks and bounce back stronger*

Deployment framework



Potential

Developing the full human, machine and ecological development potential

Risks (+/-)

Developing the safe and just space for humanity

Uncertainty

Building the foundation for humanity's antifragile development

The following chapters will further unfold 1.1-3.2

Learning & Automating

3.2
Human, machine, ecological development
Scaffolding the nation system's full development potential

Cornerstone Indicators

3.1
Seeing deep growth as human/machine/ecological development
Recognising the nation system's full development potential

Deep Code Transformation

Capabilities Building

2.2
Statecraft 3.0
Building society's distributed capabilities and agency to transition

Evaluation Framework

2.1
Seeing the systems through the doughnut
Recognising the social floors and planetary boundaries of the nation system

Transition Income Investment

1.2
Foundational Security
Enabling all actors in the system to be a part of driving the transition

Language & Taxonomy

1.1
Seeing the nation as a system
Recognising the nation as an entangled system of lows

Nation as a system

Language and taxonomy for the entangled system of flows
Transition Income Investment

Entangled system of flows

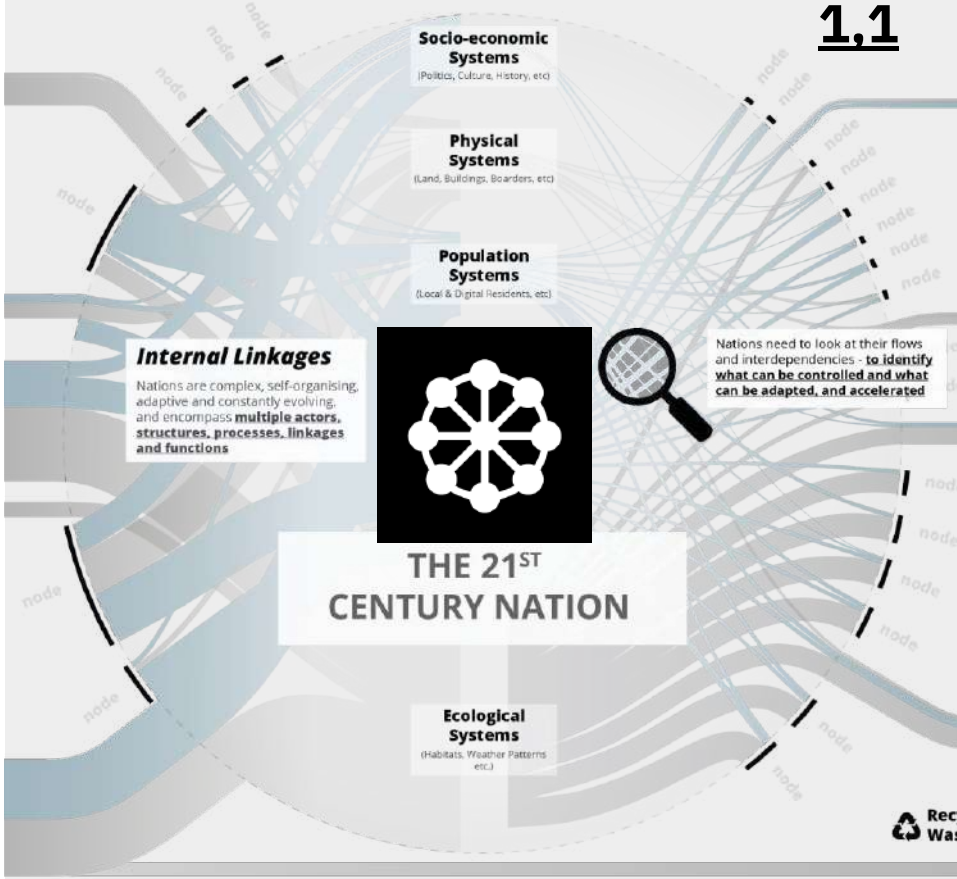
We are going from seeing the nation as a bounded territory to seeing the nation as a knotted system of flows impacted by transnational behaviours.

As a result, the nation system holds inherent uncertainty as when you change something in one space, you will be creating cascading impacts throughout the system and so:

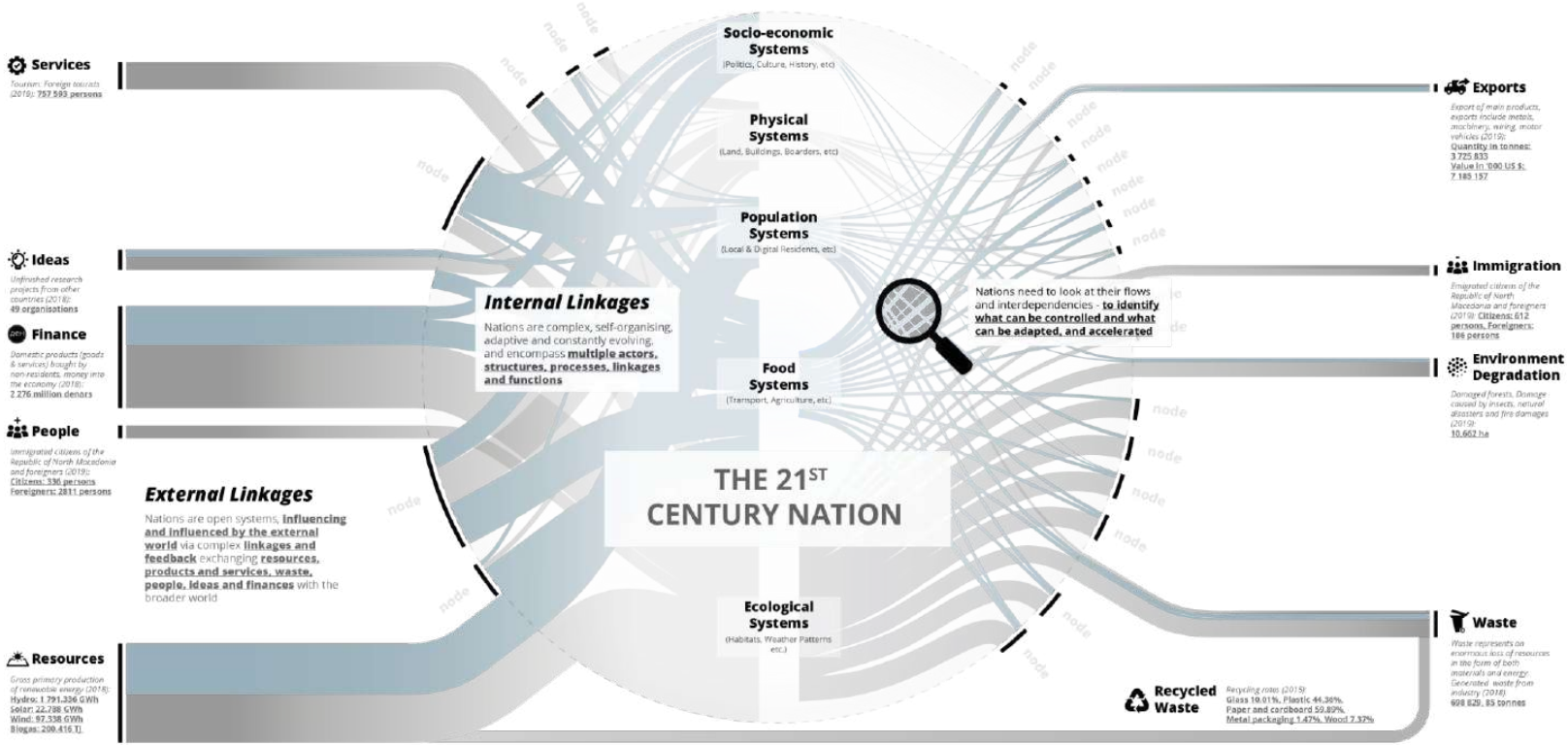
- Increased uncertainty has led to **different approaches to development strategies**. We can no longer have a one-to-one, "action – reaction" response to deal with strategic risks, but rather a network approach consisting of a number of parallel processes involving multiple actors;
- Alongside any strategic plan, **agility and review need to be built into any process.**

It will be crucial for North Macedonia to create a mind shift in the NDS process to build shared systems, focused language and taxonomy. Moreover, given the expected technological advancements in the next 20 years, the NDS will need to be more than just a document. It needs to be seen as a facility, an autonomous institution in itself - with real time data and real time feedback and adjustment.

Examples: Covid-19, 2016 Flooding, Forest Fires



The 21st century nation as an entangled system



Data Source - Statistical Yearbook of Republic of North Macedonia

Interconnected vulnerability

The pandemic can be understood as a warning sign, a probe into the structural weaknesses of our existing systems. It shows how futile it is to insist on facing 21st century challenges with the institutions and methods of 20th century global governance.

It will not be enough to simply respond to cascading crises, we need to scaffold the transition to a new human contract with the world around us.

Our collective strategy of renewal, to “build back better” from the pandemic, ought to be premised on a systemic response built on emergent, discursive, contingent processes of perpetual learning and self-renewal, that build resilience and hope, and acknowledge the interconnectedness and types of risks that we face, as well as their unmeasurable uncertainty.

1,1

“A more open global community, more complex technological systems, the dependency on electronic information and communications systems, intertwined systems for the production and delivery of food, the influence of climate change, global transportation systems, privatisation of services and a business community in continual and rapid change – all of these give rise to new and constantly changing manifestations of interconnected vulnerability.”

NATO CCMS Short Term Project, Final Report, Oslo, October 2002

Nation as a system

Transition Income Investment

- The transition of a nation's systems will require all actors to partake.
- As Raworth's Doughnut makes clear, equity is needed in the system. When one's basic needs are not fulfilled, that individual will not only be unable to fully partake in the system but will also create points of vulnerability where needs are not being met. In this situation, considering uncertainty, the assessing of and planning for risks and potential becomes difficult.
- Therefore the transition will need to begin by investing in the foundational ability of all actors' to partake.
- We suggest investing in transition incomes so that there is a common threshold from which all actors can act together. In North Macedonia, there has already been a proposal to reform the social assistance structure and introduce a form of guaranteed minimum income (GMI) to cover 7% of the population that would "improve poverty outcomes without creating disincentives to work"(Mojsoska-Blazevski, Petreski and Öztas, National Research on Low Female Labour Market Participation, Skopje, UN Women (2017)).

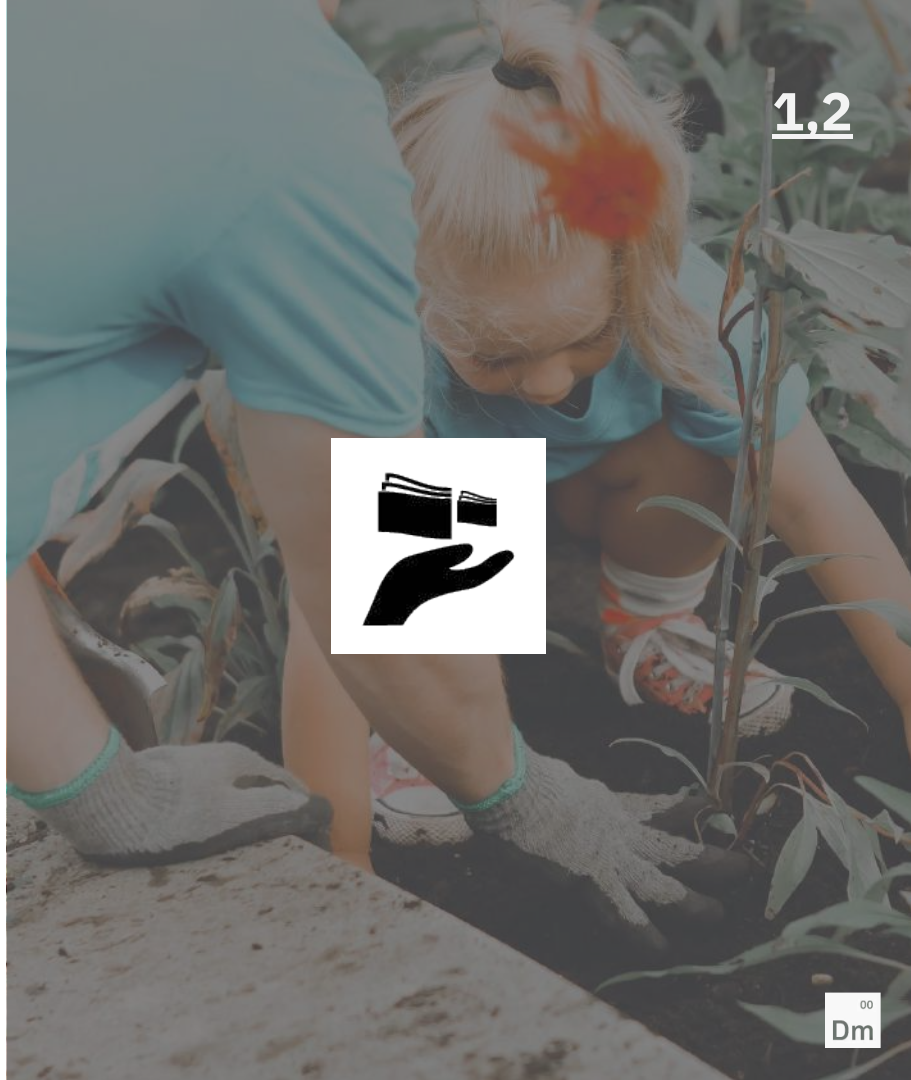
Other examples:

South Korea UBI experiments

Finland UBI experiment

Kenya UBI experiment

Spain UBI experiment

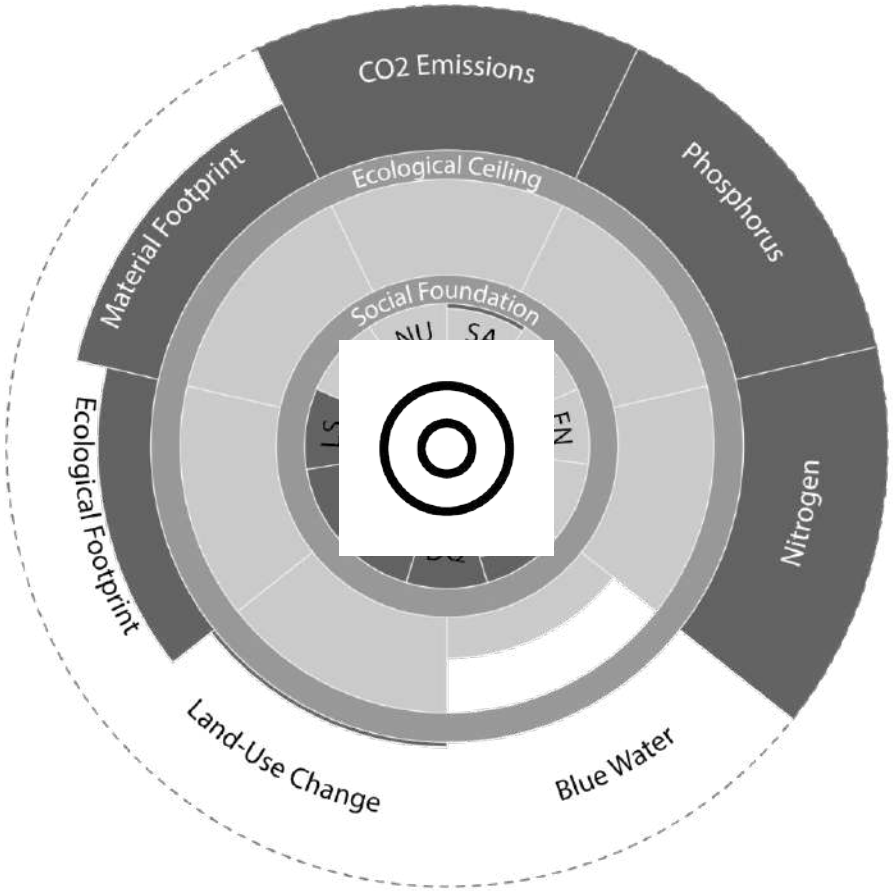


Statecraft 3.0

Horizontal Collaborative Capabilities
Deep Code Transformation

2.1

The nation through the Doughnut



1. We need to recognise the social and planetary boundaries of the nation's systems.
2. These boundaries identify known and knowable risks and value potentials in the systems.
3. There are both known (immediate) and knowable (cascading) risks.
4. Seeing the nation's systems through the Doughnut helps us evaluate what these risks might be.

Doughnut evaluation framework

An evaluation framework using the Doughnut allows actors to understand their direction and progress in relation to boundaries and potentials described by the Doughnut. The framework combines the continuous capacity of machines with deliberative human reflection at key moments.

Examples: citizens assemblies, real-time digital evaluation interface, etc.

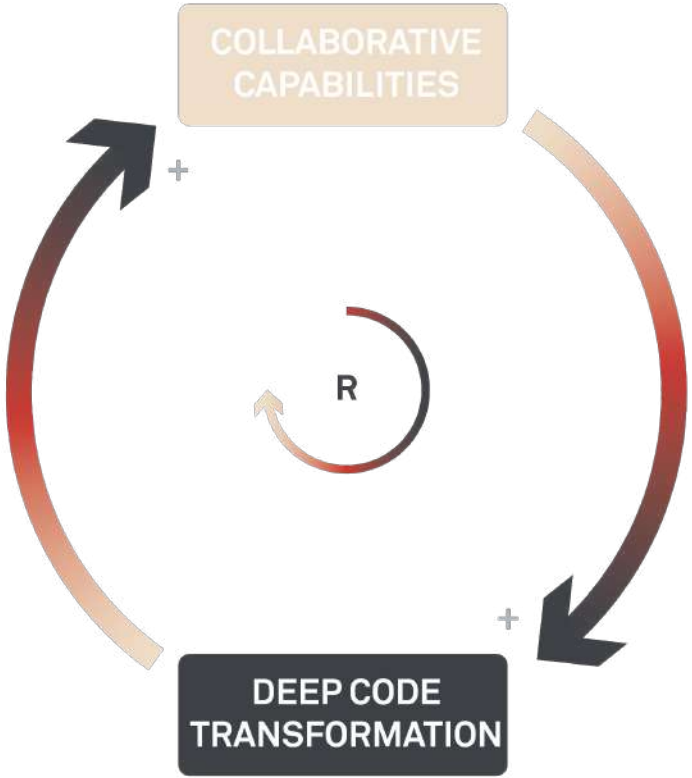
Principles: open, continuous, collaborative, etc.

Innovation across society: Deep code transformation

Deep code transformation focuses on (re)creating the underlying structures required to make the transition. It is in direct support of the systems' capabilities building and is directly dependent on these capabilities; creating a reinforcing feedback loop between the two.

The necessary transformation across society is identified, tested and scaled through the process described in the Horizontal Collaborative Capabilities chapter.

Innovation across society occurs predominantly via the mechanisms of the Quadruple Helix Council and the Dream Labs. *Please see separate slidedeck on the institutional structure.*



2.2

Horizontal and vertical collaborative capabilities

1. To mobilise systems change, we need to build **distributed collaborative capabilities** to drive the transition across systems.
2. The capability building needs to span horizontally across society. A key mindset change needed for the NDS process will be to see the state as an enabler to encourage and provide the scaffolding for distributed collaborative capabilities.
3. The necessary capabilities can unlock the transition through deep code transformation, whole value chain innovation, and local action.

The following slides will unfold the nature and potential of building horizontal collaborative capabilities.

Horizontal and vertical collaborative capabilities

2.2

Building the systems capabilities to respond to positive and negative risks in the nation’s systems

Horizontal and vertical collaborative capabilities

2.2 Sense Making

Sense making creates: 1) awareness of the wider system; 2) awareness of impact and externalities of current behaviours and patterns; and 3) relationships between the actors involved. It informs a shared understanding of a complex system and allows a group to see things from new viewpoints, assimilate complex concepts, and address real-world problems and opportunities. ***Crucially, in the transition to net zero, you need to build societal capacity to understand because every actor in the system is both a consumer and a producer, and so they each need to know how they can positively contribute.***

Principles: Collaborative, Real-time and evidence based

There needs to be a whole of society approach in getting those across the state administration, key stakeholders and the public to understand the NDS process and build legitimacy by securing collective buy-in.

Spaces

Government	**Anchor Institutions**	**Businesses**	**Civic Associations**
Different departments undertake sensemaking in collaboration with others through a horizontal coordination group	Local anchor institutions such as schools and care homes undertake sensemaking in collaboration with its different actors.	Businesses undertake sensemaking in collaboration with their whole value chain and/or in collaboration with a business consortium.	Associations such as housing associations or civic organisations undertake sensemaking as single units or in networks.

National: Building frameworks that enable sharing across spaces to inform a national level understanding.

S1 **System**
Metabolic flow mapping
Systems mapping

S2 **Trends**
Emerging drivers
Trends and deep trends mapping

S3 **Risks**
Risk mapping
Cascading risks narrative strings

S4 **New value potential**
Mapping trends against whole value chains

Horizontal and vertical collaborative capabilities

2.2 Future Imagining

It is impossible to accurately predict the future, but we can develop a shared sense of possibilities, and the principles and values that can guide us in navigating them. ***This can help build the collective, societal muscle to deal with risk and uncertainty; so that the future is not one of fear, but of hope and shared possibilities***. It also ensures that all of society is brought along the same process, thereby building cohesion, resilience and legitimacy in the future that society is building towards.

Transporting policy-makers and other actors into the future helps them think more creatively, but also more expansively, profoundly and personally. Speculative design for example helps them to play with different variables - stretching them into possible, probable and plausible portfolios of new possibilities.

Principles: Collaborative, mass participation, transparent and addressing different time horizons.

Spaces

Government	**Anchor Institutions**	**Businesses**	**Civic Associations**
Different departments imagine the future in collaboration with others through a horizontal coordination group	Local anchor institutions such as schools and care homes imagine the future in collaboration with its different actors.	Businesses imagine the future in collaboration with their whole value chain and/or in collaboration with a business consortium.	Associations such as housing associations or civic organisations imagine the future as single units or in networks.

National: Building frameworks that enables the nation to come together to imagine their shared future.

F1 — Responding to immediate risks and trends

1-2-1 risk portfolios

Micro propositional scenarios
Portfolio of options and experimental probes

F2 — Responding to new value potential

Whole value chain potential

Prospected potential
Portfolio of options and experimental probes

F3 — Responding to long-term risks/uncertainty

Strategic maintenance

Long-term propositional scenarios
Portfolio of options and experimental probes

F4 — Responding to cascading risks and value potential

Strategic infrastructures

Strategic directions for portfolios

Horizontal and vertical collaborative capabilities

2.2 Decision Making

The NDS is to be developed with a participatory, bottom up approach (as Croatia did) to create consensus and evidence based national strategy.

Decision making is the ability to commit to specific actions and outcomes. Building the distributed capabilities to make collective decisions creates: 1) shared consent; 2) legitimacy of decisions made; 3) accountability amongst actors involved. It informs commitments to the future, which actors can decide to join.

Principles

Collaborative
Inclusive
Transparent
Feedback based

Spaces

Government	**Anchor Institutions**	**Businesses**	**Civic Associations**
Different departments can make horizontal decisions and collectively they can invite other actors to deliberative decision making processes.	Local anchor institutions such as schools and care homes invite their related actors to deliberative decision making processes.	Individual businesses or consortiums are being invited to participate in deliberative decision making or to make public pledges	Individual citizens or civic associations are invited to participate in deliberative decision making or to make public pledges

National: Building frameworks to make decisions based on collective consent beyond regular voting cycles.

D1
1-2-1 risk portfolios
Conviction voting
Reinforcing feedback loops

D2
Whole value chain potential
Participatory budgeting
Quadratic funding
Crowdfunding

D3
Strategic maintenance
Assemblies
Juries
Inquires

D4
Strategic infrastructures
Sector declarations
Individual commitments

2.2 Experimenting

Building the distributed capabilities to experiment creates: 1) proofs of possibilities; 2) prototypes; and 3) safer space to take on risk. It informs evidence and learning to scale up and build open infrastructures.

Experimenting is the ability to hypothesise, test and iterate. You do not want a 20 year strategy that becomes out of date with costly restructuring and new policies. This is a way of also protecting Government finances and taxpayers money by testing out ideas and creating a dynamic portfolio of linked experiments that can be scaled up and adapted. A portfolio of linked experiments connecting the Government, State Administration and key stakeholders can help bring tangibility, visibility, emotions, empathy, reciprocity, and reflectivity into public processes, and to examine how this impacts our relationship to the future.

Principles: Collaborative, real world based, innovative and iterative

Spaces

Government	**Anchor Institutions**	**Businesses**	**Civic Associations**
Government departments and local authorities work together to do deep code experimenting; transforming society's underlying structures.	Anchor institutions work together with their surrounding community to orchestrate local wellbeing experimentation.	Businesses work together to experiment across the whole value chain by adopting horizontal innovation and investment.	Citizens and local actors come together to experiment in their direct environment with the support from shared tools, facilities and learning.

E1 **Experimenting**
Living labs, civic labs
Sandboxes
Policy, finance, regulatory labs

E2 **Value Chain Coordinating**
Horizontal open innovation
Transnational innovation ecosystems

E3 **Maintenance Innovating**
Repair design labs
Maintenance innovation investment

E4 **Infrastructure Building**
Scaling mechanisms
Long-term collaboration

Horizontal and vertical collaborative capabilities

2.2 Learning & Developing

Building the distributed capabilities to learn and develop creates: 1) continuous potential to improve; 2) scaffolding towards full human development potential; 3) strengthened self-reflective abilities. It informs an evolutionary transition that is able to address uncertainties.

Learning and developing is the ability to identify improvement potential and lead improvement development.

One area that the NDS will need to decide upon are the methods chosen for monitoring and evaluation.

Principles: Collaborative, open, self driven and continuous

Spaces

Government	**Anchor Institutions**	**Businesses**	**Civic Associations**
Transnational and national measuring frameworks to inform continuous learning and development of deep code experiments.	Anchor institutions can communicate back real-time data about current impacts and thereby scaffold the local community's learning.	By forming sector alliances and open protocols businesses can share learning and support each others developing.	Digital and human measuring of local outcomes becomes a foundation informing the next iteration of local experiments.

L1 **Measuring**
Evaluation tools
Metrixes
Indexes

L2 **Shared Learning**
Summits
Open platforms
Alliances

L3 **Iterating**
Next generation
experimenting

Deep code transformation - example portfolio

Democratic, Lean and Digital Planning

Digitising the planning system to enable a data and performance driven system that supports directly democratic planning decisions.

Nesta (2016) “The Future of Planning”

Data Commons

Shared definitions of data entities and resolving keys/identifiers allows data from different sources to be compared; supporting all actors’ sense-making.

US Census Bureau (2021) “Data Commons”

Code as Law

Rewriting legislation as code allows governments to identify gaps between intent and implementation and thereby better deliver the outcome to society

Digital.Gov.Nz (2018) “Better Rules for Government Discovery Report”

Lead Procurement

Lead market procurement enables governments to invest into new markets, driving the direction of supply innovation.

UNDP (2013) “Innovation and Procurement”

Public Deliberation on Budgeting

Inviting a multitude of actors to participate in deliberation on budgeting creates legitimacy for the investments made.

OECD (2020) “Innovative Citizens Participation & New Democratic Institutions”

Co-beneficial Accounting

Accounting for the full impact our behaviours and initiatives have on the planet requires new institutional and corporate accounting frameworks.

P2P Foundation (2020) “Accounting for Planetary Survival”

Collective Outcome Buying Facility

Collective outcomes buying allows governments to buy positive outcomes from community driven initiatives

OECD (2017) “Environmental Fiscal Reform”

Fiscal Incentives

Governments can create fiscal incentives by improving the alignment of revenue from taxes and tax-like instruments between transition damaging choices and transition conscious choices.

UNDP (2013) “Innovation and Procurement”

3

Human, machine, ecological development

Scaffolding the nation’s full development potential

Deep growth as the human, machine and ecological development potential

In his book *The Singularity Is Near*, Ray Kurzweil, futurist and Director of Engineering at Google, has said that in terms of the rate of technological change, we are "**doubling the paradigm-shift rate every decade**."

For policy makers, this means that there is a very real **risk of system failure** if processes are not changed to keep up with technological change.

On the other hand, the likes of Kurzweil see technology advancement as **an opportunity for humankind to improve**. For nations, technology will offer an ever increasing portfolio of options for transformation of the economy and society.

Ray Kurzweil

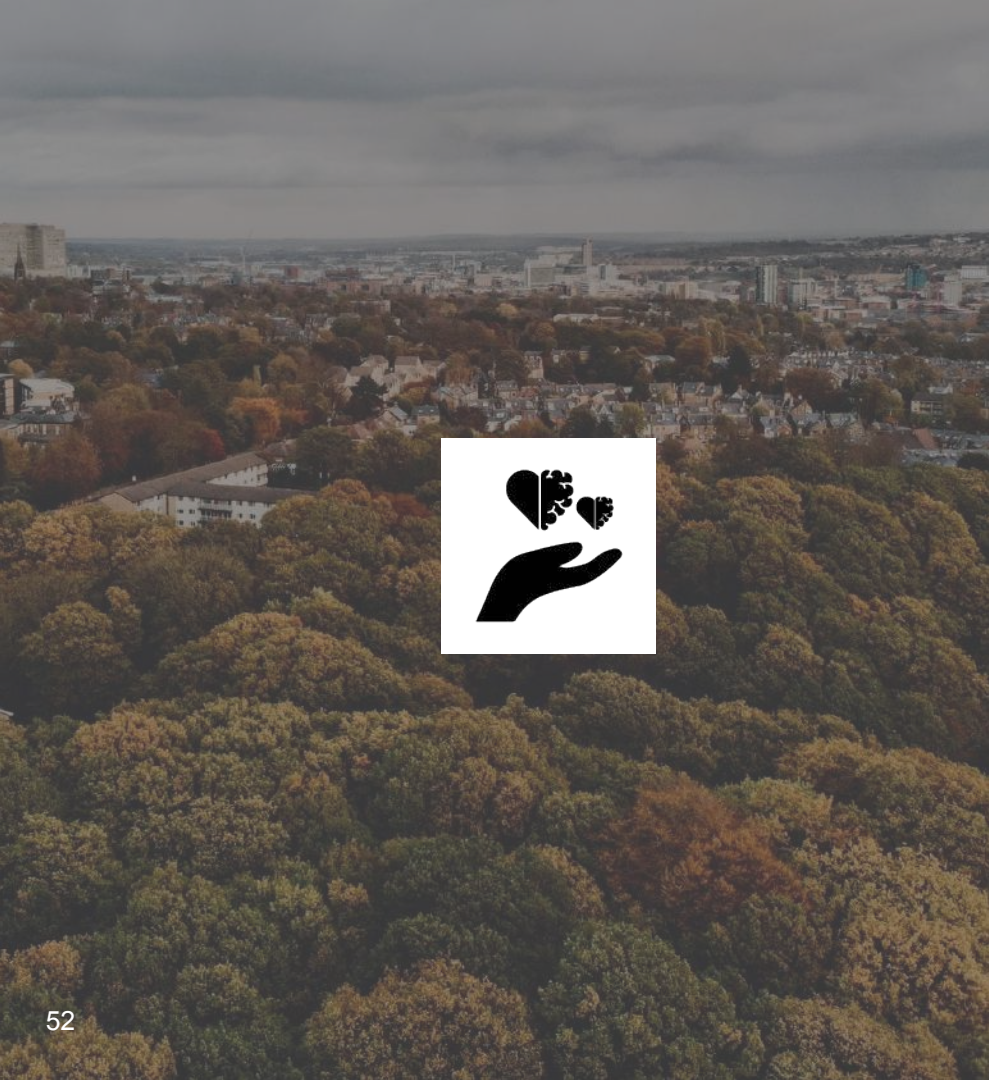
"We won't experience one hundred years of technological advance in the twenty-first century; we will witness on the order of twenty thousand years of progress ... or about one thousand times greater than what was achieved in the twentieth century."

Human, machine, ecological development

Deep growth as the human, machine and ecological development potential

Raworth’s doughnut is agnostic towards growth.

In terms of our thesis for growth for the NDS (see later section below), it will be essential to build a new set of growth metrics focused on the full development potential of humans, machines and ecological systems, allowing the nation to look at growth beyond economics.



Human, machine, ecological development

Full development potential

3.2

As indicated in Slide 50 above, in the 21st century, human, machine and ecological systems will be entangled systems. We will need to scaffold the nation's full development potential to create the conditions for the 21st century "safe and just space". The Human(e) nation will be built on the advanced collective human, machine and ecological intelligence.

Background - Given the rapid pace of technological advancement, Kurzweil has predicted that by 2029, an AI will pass a valid Turing test and therefore achieve human levels of intelligence, and by 2045 we will see 'singularity' achieved i.e. when advances in technology, particularly in AI, will lead to machines that are smarter than human beings (which he says is an opportunity to multiply our effective intelligence). Clearly, machine development will be an ever increasing factor alongside the human and ecological.

How does the nature of the transition inform how the National Development Strategy is being created?

A methodology for a 20 year living process

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Photo: Marten Bjork, Unsplash

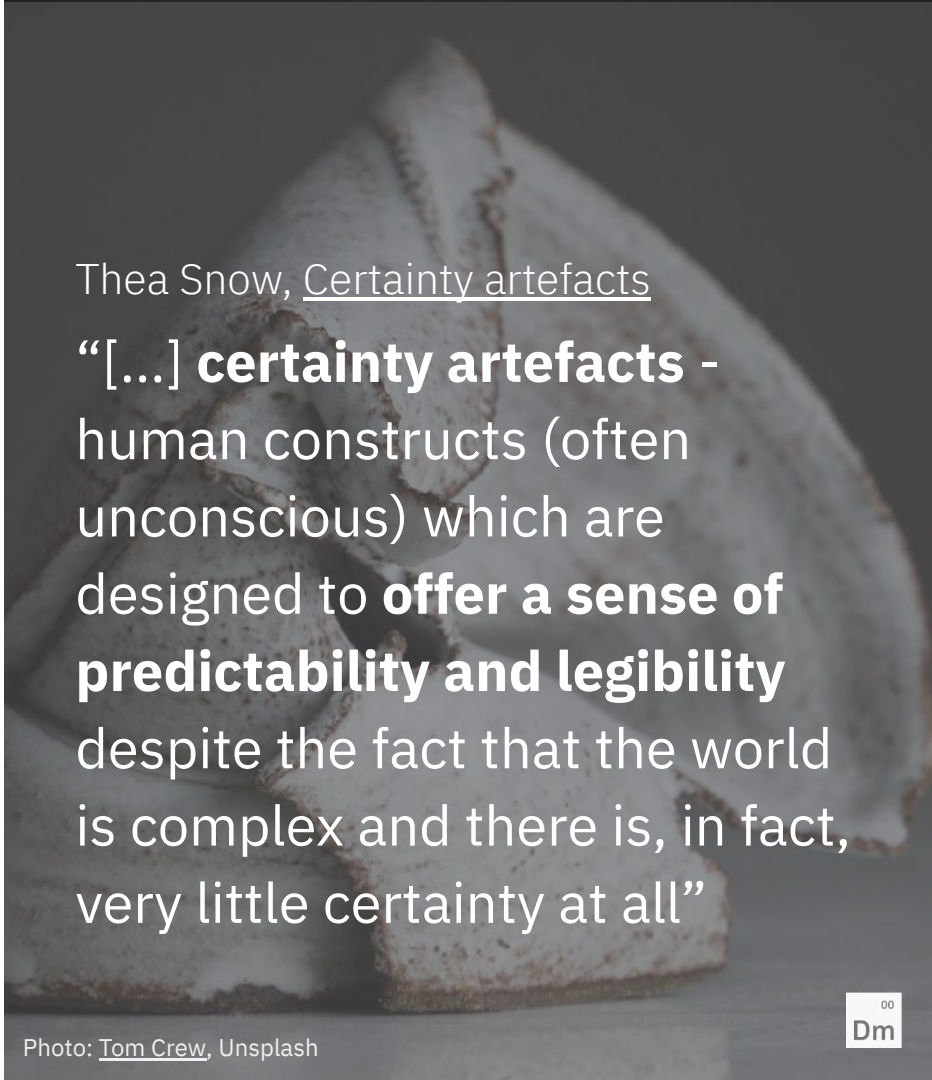
A 20-year living process

Strategy for certainty or uncertainty

In North Macedonia alone there are 33 different strategies - with little linkages - for local and central government to consider. People would have every right to ask *why the country would benefit from yet another strategy*?

From our research on why many strategies are struggling in North Macedonia, commonly found problems centre on their implementation - from excessive generalisation of the main recommendations to scant attention given to policy costing and available funding.

Governments create rules and roadmaps which tell us what will happen, and by when, as a means to provide security, clarity and certainty. However, this doesn't always create certainty - especially long term - because so much of the future is unknown and hard to predict. **So the approach in our strategy needs to change.**



A 20-year living process

Viability of strategies

Inherent uncertainty creates challenges for the viability of strategies, as it doesn't make space for disruptors in a system (such as Covid-19) which then risks knocking the strategy off course (as the Slovenia NDS process found).

A strategy must be designed in a way that enables it to stay relevant and a distributed driver for change over the time period that it is meant to guide. It cannot become outdated in 4/5 years time when there has been a change of Government with new priorities, in 10 years time when an even larger proportion of the population have migrated to the cities (or perhaps back to rural areas), or in 20 years time when the average temperature rise of the planet has created both predictable and additional, unknowable consequences.

To start answering the question about how to create a viable strategy, a set of key principles have been established to inform the design of the NDS. These principles aim to build resilience, capabilities, legitimacy and enable both societal adoption of the strategy and a twenty-year transition using the tool of an NDS.

What **shifts and design changes** will be necessary to transform and innovate the National Development Strategy itself?

Key principles

To start answering the question about how to create a viable strategy, a set of key principles have been established to inform the design of the NDS. These principles aim to build resilience, capabilities, legitimacy and to enable societal adoption of the strategy.

Format	From: **Document**	To: **Living Instrument**
Parameters	From: **Defined Plan**	To: **Strategic aims and flexibility**
Process	From: **Written Once**	To: **Framework for experimenting**
Actors	From: **Government**	To: **Quadruple Helix**
Space	From: **Nation**	To: **Transnational Networks**
Time	From: **Believed possible today**	To: **Enabling unknown future potential**
Indicators	From: **Measure once**	To: **Real-time measuring**

A 20-year living process

Format

From: **Document**

We have become used to writing strategies as fixed documents because of:

- Traditions, informed by old technologies
- Accessibility of the people in Government
- The possibility to simplify reality

This tradition **impedes the ability to update strategic reviews with the latest information** and consequently challenges the enabling of the transition. It also leads to strategic reviews that are soon outdated and need a whole new process of review.

To: **Living Document**

What if... we shifted to seeing the strategy as a living document to create:

- Opportunity to incorporate 21st century technology
- Accessibility and transparency for all
- The possibility to include the complexity of evolving systems
- Documents of this nature become collections of information, indexed and interwoven like an ecosystem?

This has the **potential to inform a long-term strategy**, able to respond to an evolving reality.

Note: However, there are processes that we would need to follow to ensure that a living document retains its original intentionality. For example, without proper context, it can change from its original purpose through multiple uncontrolled edits.

A 20-year living process

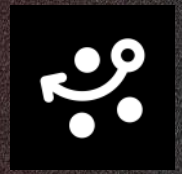
Parameters

From: **Defined Plan**

We have become used to creating defined medium to long-term development plans because it provides:

- A means to set priorities with a view to achieving defined objectives within a given timeframe and thus becomes a tool to measure ‘progress and success’
- A means to manage the economy, with Government agencies needing to plan their budgets and individual projects in advance
- An opportunity for political parties to set a grand strategy for the country, perhaps trying to achieve some level of consistency and hoping to set the groundwork for an extended length of time in power.

This tradition **tries to predicts the future and therefore, doesn’t react to the future and can’t make sense of complexity** and consequently challenges the enabling of the transition.



To: **Strategic aims and flexibility**

What if… we shifted the focus to seeing the strategy through responsive and flexible road maps that creates:

- A strategy with more ambitious objectives that guide the work being done and makes real change
- A way of measuring key results to ensure the strategy is on the right track
- Accountability and regularly and transparently measuring progress uncovers problems earlier to ensure success?

This has the potential **to drive better performance, avoid redundancies and conflicting activities and also allows a mechanism to deal with increasing amount of uncertainty** and thereby enable the transition identified in the NDS.

A 20-year living process

Process

From: **Written Once**

We have become used to focusing on this... because:

- In the pre-internet age, consensus building and effective information distribution meant that it was impossible to get everyone on the same page in a continuous manner.
- Legislative policy making was centralised. Those in the room drafting a policy were far more contained; now stakeholder engagement is essential, there needs to be horizontal collaboration, etc. With increased complexity in the world, the multiple factors that need to be taken into account by policy making only multiples.

This tradition can **result in strategies being far too broad and risk averse and consequently challenges the enabling of the transition**.

To: **Framework for experimenting**

What if... we shifted to a process that focuses on an iterative framework for experimentation that creates:

- A design process that mitigates risks early (the cycles for these processes would need to be decided upon), allowing risks to be validated or refuted before it's too far in the process
- A more efficient and productive environment which treats early failures as an opportunity to learn and build confidence (and onboard the right people)
- An environment where multiple solutions are generated and tested, stepping away for one predetermined solution.

This has the **potential to make the design process more agile and less risky** and thereby enable the transition identified in the NDS.

A 20-year living process

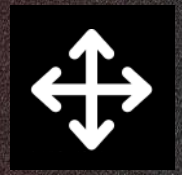
Actors

From: **Government**

We have become used to developing strategies through silo-dominated administrative systems because:

- Historical working relationships and organisational cultures traditionally keep expertise separate
- They provide opportunities for centralised governance and political control over bureaucracy
- Prospect of rapid decision-making and implementation
- Protection of specific policy budgets against competing national priorities

This tradition creates a **lack of effective mechanisms** and lack of **effective horizontal coordination between formal and informal network structures**, limiting systemic impact and consequently challenges the enabling of the transition.



To: **Quadruple Helix**

What if... we shifted the organisational structure to a Quadruple Helix framework that enables:

- Knowledge and know-how that creates and transforms, and circulates inputs and outputs from multiple actors in a holistic way. It harnesses economic opportunities in a knowledge-based economy
- A model that incorporates and highlights the role of society as a major actor, as well as the importance of actively integrating the public into innovation projects
- Provides simultaneous investment in infrastructure, skills, research and innovation, within an integrated approach.
- Wider actor engagement creates a greater sense of legitimacy and also ownership?

This has the potential to create **efficient horizontal coordination between actors** and enable the transition identified in the NDS.

A 20-year living process

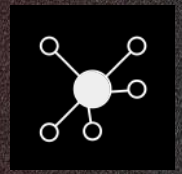
Space

From: **Nation**

We have become used to operating and seeing the nation as an inward-facing political system because:

- 19th century concepts of territorial sovereignty
- The State is used as an instrument of national unity, in economic, social and cultural life
- Administrative territory/zones make it easier to manage and apply policy
- The State is better able to imbue uniform national culture and notions of citizenship within defined boundaries.

This tradition creates the **inability or foresight to withstand countervailing 21st-century forces** and consequently challenges the enabling of the transition.



To: **Transnational Networks**

What if... we shifted to seeing the nation as a knotted system of flows impacted by transnational behaviours that creates:

- A network approach consisting of a number of parallel processes involving and influencing multiple actors
- New prospects and opportunities for trade, innovation, employment, transport and communication technologies
- An understanding that all countries are today embedded in the same system and today's issues are not confined to national borders (for example climate success depends on everyone taking action)?

This stops the reliance on one-to-one, action-reaction responses that cannot deal with systematic uncertainty, and thereby enables the transition identified in the NDS.

A 20-year living process

Time

From: **Believed possible today**

We have become used to focusing on what can be done here and now because:

- Often departments have already built up tried and tested tools and methods that will bring guaranteed results today (not having to deal with the fear of the unknown)
- It is believed to be too risky to base decisions on the unknown future
- Strategies often look at one-to-one solutions which have little risk attached

This tradition **entails making decisions that explicitly cut off possibilities and future options** and consequently challenges the enabling of the transition.

To: **Unknown future potential**

What if... we shifted the focus to enabling strategies that deal with unknown future potential that creates:

- The opportunity to take risks that will lead us to new future potential
- Experimentation which creates content learning and development, reducing the fear of failure
- Risk taking opportunities through experimentation as a base, and it unlocks unknown future potential allowing for people to respond to what's happening in society today?

This has the **potential to empower people to take risks and deal with unknown futures** and thereby enable the transition identified in the NDS.

A 20-year living process

Indicators

From: **Measure once**

We have become used to using static data because:

- Gathering statistical data used to be slow and costly, and compiling it and garnering insight from it was even more so
- Many phenomenon were hard to observe continuously, but people endeavoured to keep track of those they could - weather, star movements, etc.
- Experiments were usually static in time and predicated on linear progressions, thus few measurements were sufficient for extrapolation.

This tradition **contributes to outdated data and creates a "fog of information" that can obscures the real picture** and consequently poses challenges to enabling of the transition.

To: **Real-time measuring**

What if... we shifted the focus to real-time data collection and measuring that creates the opportunity to:

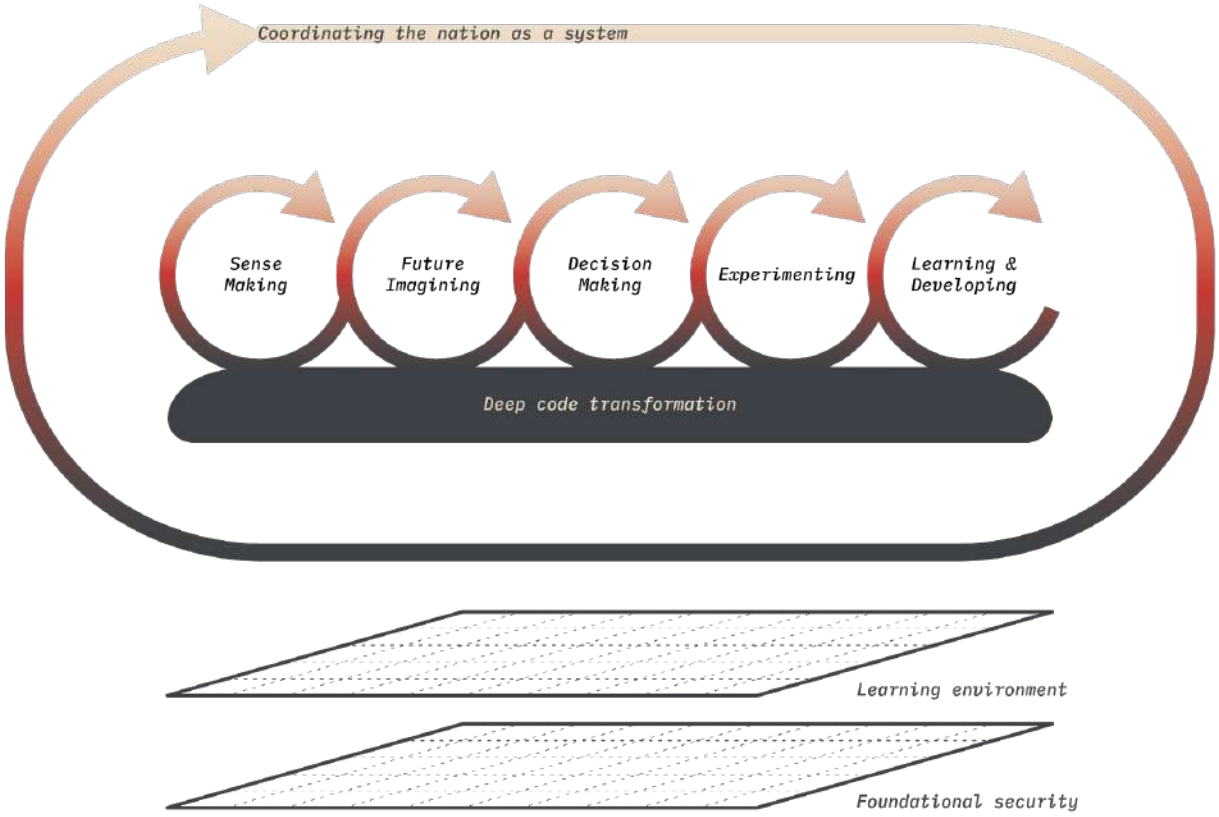
- Identify changes immediately, making it possible to take corrective measures in the short-run and thus minimise possible risks
- Combine and aggregate multiple sources and content into one single system, making access to information easier, faster and more transparent
- Continually change indicators, which maintains integrity
- Gather realistic, representative data that reflects the current situation?

This has the potential to inform not just civil servants, but the whole of society, and thereby enable the transition identified in the NDS.

A 20-year living process

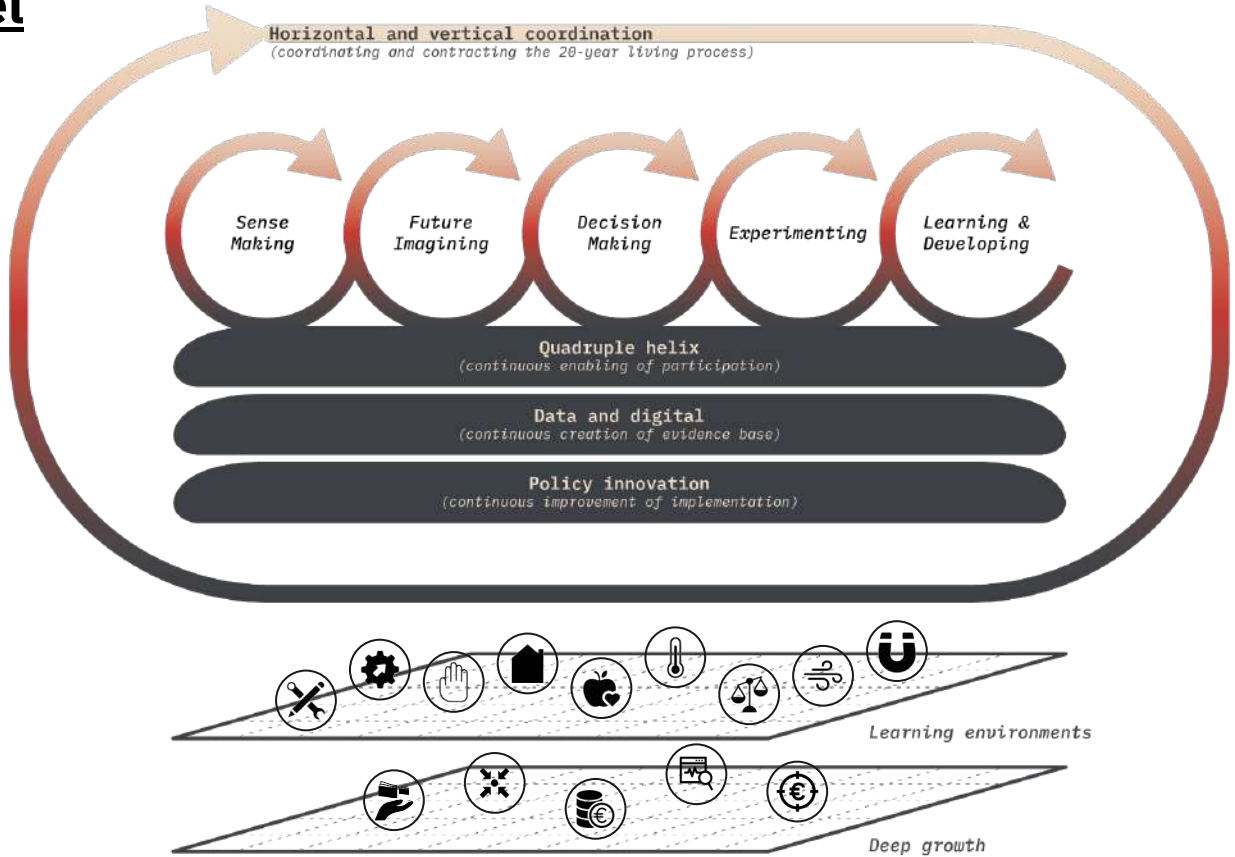
Logic model

Based on the national transition methodology and the key principles for the 20-year living process the following logic model outlines the process of how the NDS can be created continuously over the twenty years.



A 20-year living process

Logic model



How can participation of a system of actors in the 20-year living process create legitimacy?

A methodology for a 20 year living process

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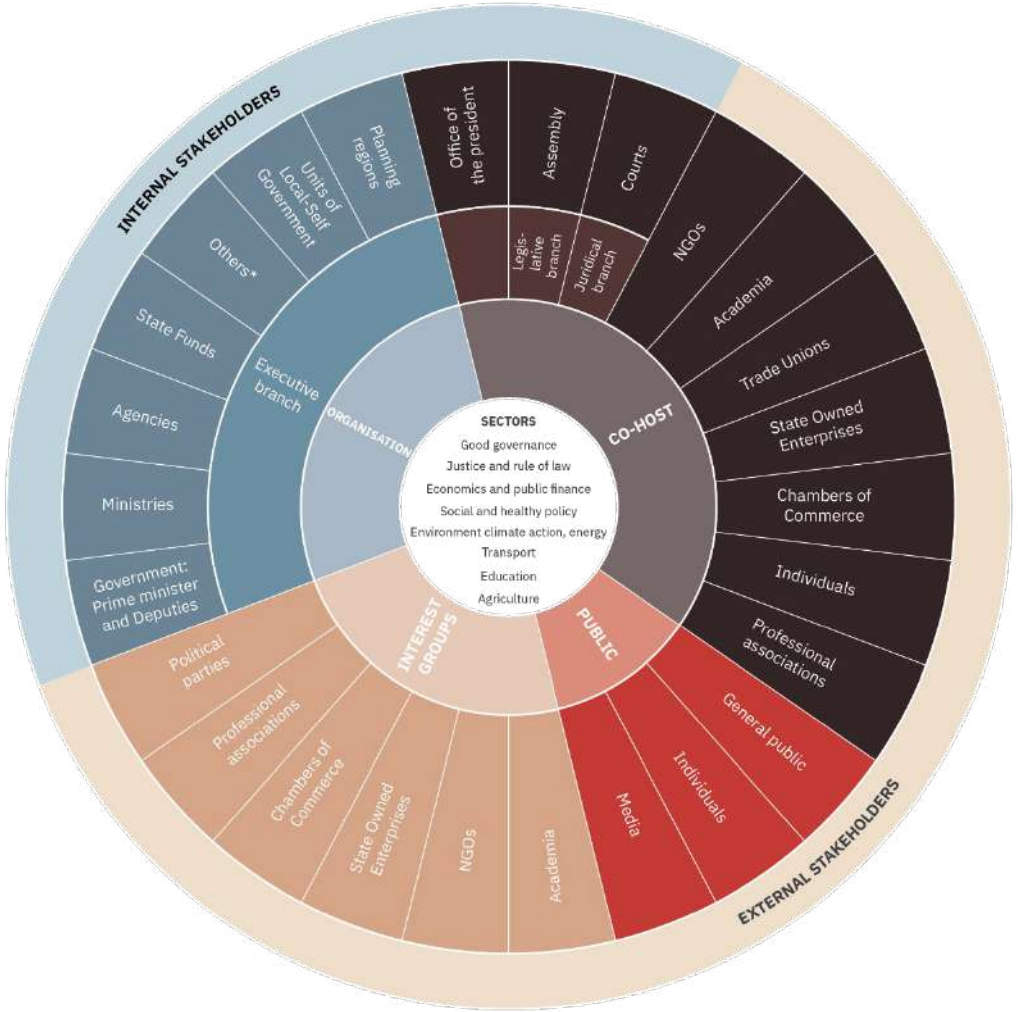
Photo: Vincent van Zalinge, Unsplash

Stakeholder relations

An NDS needs to have a foundation of legitimacy. This should be achieved by political and societal consensus to be able to galvanise the forces required to transition to an antifragile system.



Stakeholder groups

In the process of developing the methodology for the NDS, 13 categories of stakeholders have been identified and will be participating in the creation of the NDS. Their role and responsibilities will be an important part of the initial phase of the creation of the NDS (see further timeline and activities and institutional arrangement).

- State administration
- Local self-government units
- Planning regions
- State-owned enterprises
- Trade Unions
- Chambers of Commerce
- General public
- NGOs
- Academia
- Political Parties
- Professional associations
- Media
- Individuals/thought leaders

Stakeholder details

During the first 3 months of the drafting process of the NDS, conversations with different stakeholders will confirm their engagement and they will be assigned a specific element of participation in particular phases.

We will devise multiple scenarios on how stakeholders can be involved in the NDS, as well as the relevant institutional arrangements to coordinate, draft and implement the NDS, but we have yet to undertake workshops on these.

Please see annex for the detailed spreadsheet.

Type	Name (hyperlink)	Stakeholder type 2	Stakeholder type	Description/Competence	Responsible person	Position	Good governance,	Economics and Public Finance	Social and Health Policy	Environment , Climate Action
state administration	Assembly of the Republic of North Macedonia	assembly	Legislative body	The Assembly of the Republic of Macedonia is a representative body of	/	General Secretary/state	yes	yes	yes	yes
state administration	Ministry of Interior	Ministry	Executive body	The Ministry of Interior performs the	/	Minister	yes			
state administration	Ministry of Defence	Ministry	Executive body	The Ministry of Defense performs the activities related to the realization of	/	Minister	yes			
state administration	Ministry of Justice	Ministry	Executive body	The Ministry of Justice performs	/	Minister	yes			
state administration	Ministry of Foreign Affairs	Ministry	Executive body	The Ministry of Foreign Affairs	/	Minister	yes			
state administration	Ministry of Finance	Ministry	Executive body	The Ministry of Finance performs the	/	Minister	yes	yes		yes
state administration	Ministry of Economy	Ministry	Executive body	The Ministry of Economy performs activities related to monitoring the	/	Minister	yes	yes		yes
state administration	Ministry of Agriculture, Forestry and Water Economy	Ministry	Executive body	The Ministry of Agriculture, Forestry and Water Economy performs activities	/	Minister	yes			
state administration	Ministry of Health	Ministry	Executive body	The Ministry of Health performs activities related to health care and	/	Minister	yes		yes	
state administration	Ministry of Education and Science	Ministry	Executive body	The Ministry of Education and Science performs activities related to	/	Minister	yes			
state administration	Ministry of Labour and Social Policy	Ministry	Executive body	The Ministry of Labour and Social Policy performs activities related to	/	Minister	yes		yes	
state administration	Ministry of Local Self-Governance	Ministry	Executive body	The Ministry of Local Self-Governance performs activities related to	/	Minister	yes			
state administration	Ministry of Culture	Ministry	Executive body	The Ministry of Culture performs activities related to monitoring,	/	Minister	yes			
state administration	Ministry of Political System and Inter-Community Relations	Ministry	Executive body	The Ministry of Political System and Inter-Community Relations performs	/	Minister	yes			
state administration	Ministry of Transport and Communications	Ministry	Executive body	Performs activities related to road traffic and road infrastructure, railway	/	Minister	yes			
state administration	Ministry of Environment and Physical Planning	Ministry	Executive body	The Ministry of Environment and Physical Planning performs activities	/	Minister	yes			yes
state administration	Ministry of Information Society and Administration	Ministry	Executive body	The Ministry of Information Society and Administration performs activities	/	Minister	yes			
state administration	Deputy Prime Minister in charge of fight against	Government	Executive body			Deputy Prime Minister	yes	yes	yes	yes
state administration	Deputy Prime Minister for Economic Affairs	Government	Executive body			Deputy Prime Minister	yes			
state administration	Deputy Prime Minister for European Affairs	Government	Executive body			Deputy Prime Minister	yes			
state administration	General Secretariat of the Government	Other, Secretariat (Coordinative body)	Executive body	The General Secretariat provides	/	General Secretary	yes	yes	yes	yes
state administration	Secretariat of Legislation	Other, Secretariat (Expert body)	Executive body	The Secretariat of Legislation is responsible for ensuring the	/	Secretary	yes	yes	yes	yes
state administration	Secretariat for European Affairs	Other, Secretariat (Expert/coordinative body)	Executive body	The Secretariat for European Affairs	/	Secretary	yes	yes	yes	yes
state administration	President of the Republic of North Macedonia	President	Executive body	The President of the Republic of	/	President	yes			
state administration	Commission for Relations with Religious Communities and	Commission, Independent state body	Executive body	The Commission for Relations with Religious Communities and Religious	/	Director	yes			
state administration	Agency of Youth and Sport	Agency, Independent state body	Executive body	The Agency of Youth and Sport performs the activities related to the	/	Director		yes		
state administration	Agency of Emigration	Agency, Independent state body	Executive body	The Agency of Emigration performs activities related to the position and	/	Director	yes			
state administration	Food and Veterinary Agency	Agency, Independent state body	Executive body	The Agency performs activities within the food and feed safety	/	Director			yes	
	Agency for Financial Support of			The Agency implements the Programs						

+ ≡ State institutions ▾ State Owned Enterprises (SOEs ▾ Parliament ▾ Office of the President of RN

Proposed institutional arrangements

See separate slidedeck on proposed institutional arrangements. This was updated as a separate deliverable, co-produced with local consultants and in consultation with and review by the Steering Committee.

How can the drafting of the NDS become a continuous co-creative process?

A methodology for a 20 year living process

71

Photo: Jeremy Thomas, Unsplash

Timeline and activities

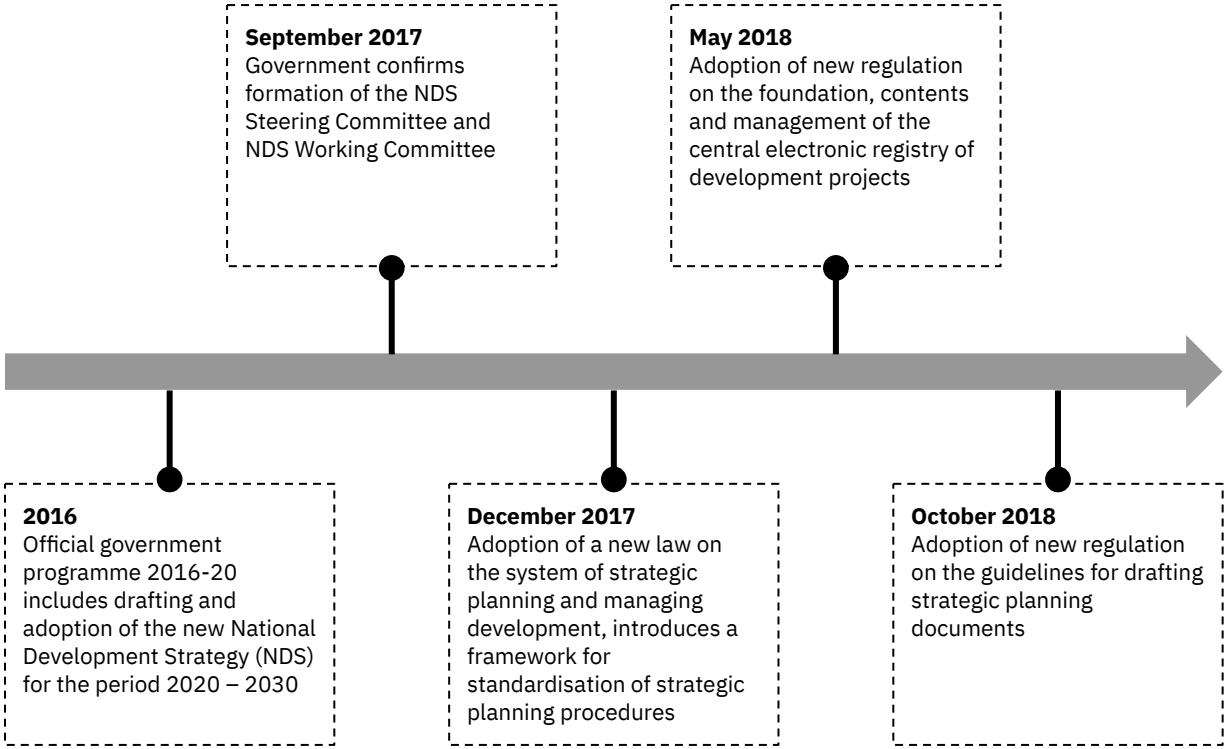
The 20 year NDS is a living process informed by continuous and cyclical activities. These activities are to ensure the strategy's antifragility; making sure that it stays relevant and has high impact until 2041.

Timeline and activities

Building on existing legal framework

The NDS should build upon the existing legal framework that regulates the system for strategy planning and policy making.

However some legislative innovation may be required as the NDS process continues. In the **Croatian NDS process**, the right hand diagram shows the legislative steps were put in place to ensure the smooth process of the NDS.



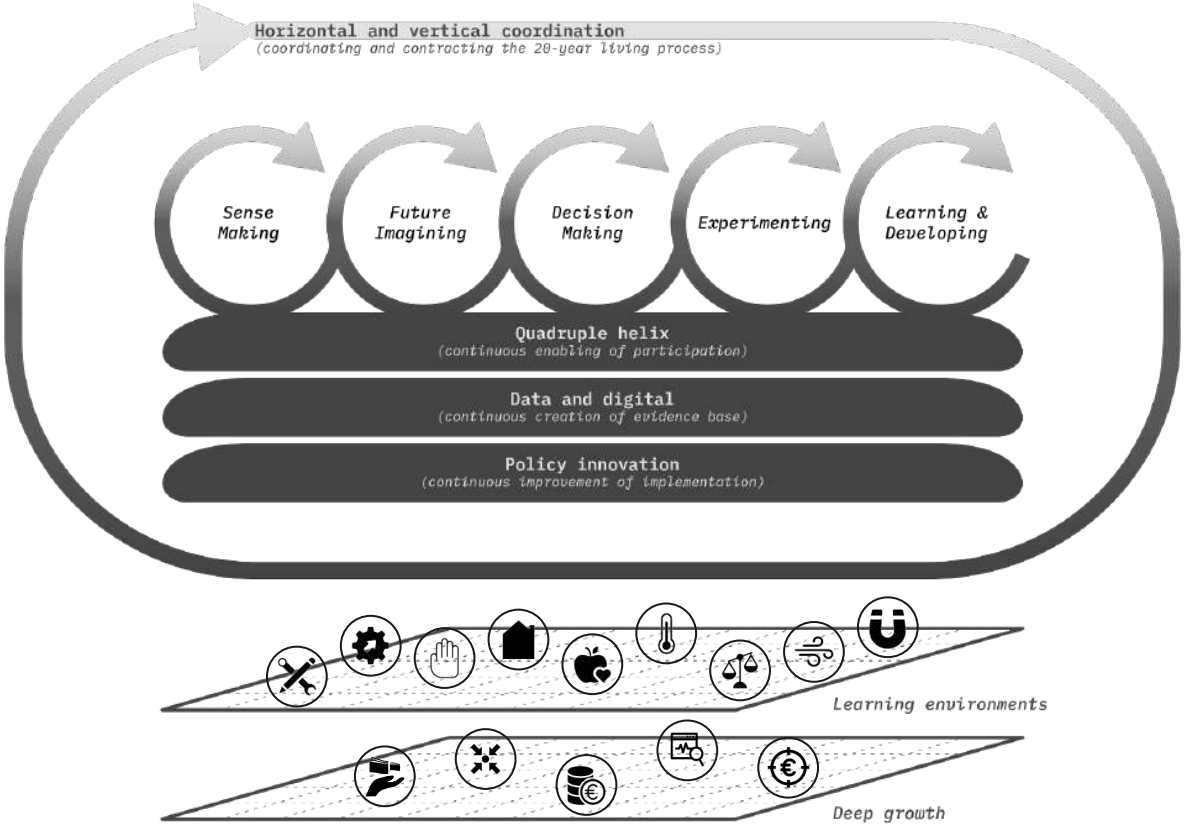
Timeline and activities

Creating the first iteration of the strategy

The following section describes how the first iteration of the strategy can be created over a two year timeline.

A living strategy however is a continuous 20 year process, with activities that need to re-occur on a cyclical basis, as well as continuous monitoring and evaluation and real-time adaption.

The NDS will need to begin building society's capacity to transition from day one. Therefore, the methodological approach to creating the strategy will follow the same logic.



Timeline and activities

What has already happened?

The transition requires a deep understanding of the systems that it seek to change. Without accepting them as complex and interwoven systems, interventions will struggle to penetrate below the surface.

Sense making helps us to comprehend the existing dynamics and flows of the nation’s systems, understand the cascading risks and opportunities that they face, and identify strength-based approaches to the transition capable of generating multiple value and co-benefits.

A Stakeholder Mapping Process was conducted from April to May 2021 during the phase of determining the Methodological and Governance Framework for the NDS. This helped to identify key stakeholders across 13 key categories (State administration; State Owned Enterprises; Local self-government units/municipalities and the City of Skopje as a separate LSGU; Planning regions; Academia; Trade unions; Chambers of Commerce; Professional Associations; NGOs; Media; Political Parties; Individuals) and optimal strategies for stakeholder engagement to take the NDS process forward and guide a consensus building process among key stakeholders.

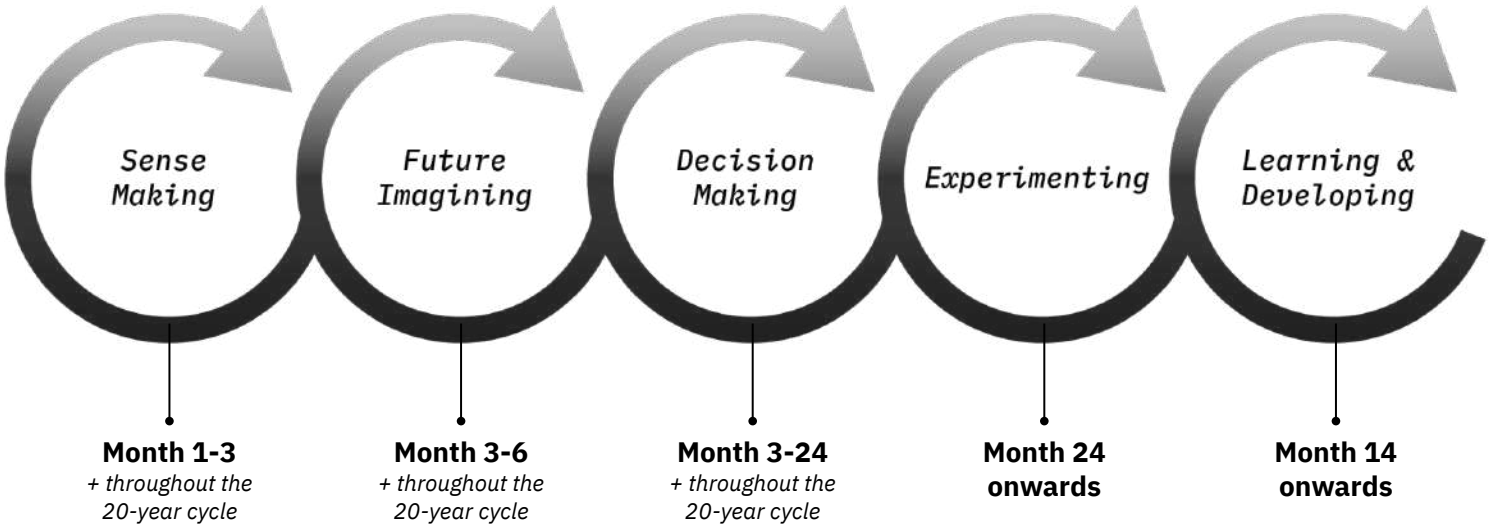
Stakeholder expectations survey

A "Screening Stakeholder Expectations" Survey Report was undertaken in March 2021 that found that the majority of respondents (80%) found the NDS process important (i.e. "extremely" or "very" important), while more than half of the respondents (59%) found it important (i.e. "extremely" or "very" important) to participate personally in the content of NDS.

Such respondent wanted to be engaged via the following modes: public discussion (37%); participation in a survey (31%); and participation in internet forum (23%).

Phases

The NDS will be created through a ‘5 phase process’ described though the logic model and includes the following phases:



Timeline and activities

Sense making

MONTHS 1-3
Some activities will continue into next three months and longer

The transition requires a deep understanding of the systems that it seek to change. Without accepting them as complex and interwoven systems, interventions will struggle to penetrate beneath the surface.

Sense making helps to comprehend existing dynamics and flows of the nation's systems, understand the cascading risks and opportunities they face, and identify strength-based approaches to the transition capable of generating multiple value and co-benefits.

MONTHS 1-3

Outreach & Engagement Protocols to explain and understand the NDS process, and build legitimacy of the process by securing wider, collective buy-in.

Participatory System Mapping is a process of extensive engagement with stakeholders designed to build a shared language and comprehension of the problem space.

MONTHS 1-2

Sense making with internal stakeholders. Building shared understanding of uncertainty, risks (+/-) and new value potential. One or several of the below techniques can be used to create systems maps.
***Capabilities Assessment to also be conducted**

Strategic risk analysis is a discursive tool to uncover the cascading risks faced by cities and the opportunities for strategic intervention within and across the systems affected.

MONTHS 2-3

Sense making with external stakeholders, reviewing and building on the outcome of the internal sense making exercise. The feedback and additions are shared back with the NDS Unit to iterate the internal maps.
***Capabilities Assessment to also be conducted**

Causal Loop analysis helps to interrogate the interrelated variables within and between systems, and build a more dynamic view of possible intervention points.

Future imagining

MONTHS 3-12
Some activities will continue into the next three months and longer

What we do today will create cascading impact for coming years and generations. By building the capacity to imagine the future for North Macedonia, we can create the conditions for long-term thinking and decision making.

It is important that this capacity building reaches beyond central government and into society, as every actor's action will count in this transition.

MONTHS 3-6

Work with the different government representatives to **identify key strategic areas** by first doing **long-term future design exercises**. Exercises which shift mindsets and create more long-term conscious outcomes.

Future Design by Tatsuyoshi Saijo is an intergenerational deliberative practice that designates members of an imaginary future generation to negotiate with people in real time.

Learn more

MONTHS 8-10

Work with the Macedonian Academy of Science and Arts to identify key nodes throughout the nation to host engagement with actors and **build a network of public labs.**

Build capabilities to host deliberative conversations and ability to support experimenting (via tool-kits, training, peer-to-peer feedback).

MONTH 10 ONWARDS

Host 50 Dream Labs
Through the engagement network, inviting society to imagine their future and build their understanding of how it can be impacted. Synthesise stories and feedback to the NDS Unit.

The Dreaming City invited actors in the city of Glasgow to contribute their stories about what they imagine for the future; simultaneously building imagination capacity of the city.
Learn more

Timeline and activities

Decision making

MONTHS 4-24
Some activities will continue into next three months and longer

Every piece of content created as a part of the NDS is a decision. Some of these decisions will require more formal decision making processes while others can use crowdsourcing techniques and deliberation.

The 20-year living strategy will not only require decisions to made during the first iteration of the NDS and therefore it is important that the different steps taken during the first two years are testing elements that could be used beyond the first cycle.

MONTHS 4-6

Government representative, with advice from the Advisory Board, make **decision on key priorities for the NDS**, based on initial findings from the "Screening Stakeholder Expectations" and the process of sense making and future imagining.

MONTHS 6-8

Create the NDS unit including the different key bodies and roles:
- NDS Working Committee;
- Quadruple Helix Council;
- Chief Data Councillor;
- Innovation in Policy-Making Councillor.

MONTHS 4-8

An **online platform** is being designed and built to host the NDS and enable real-time feedback from different actors to inform decisions. The platform could further become the tool to co-draft the first iteration and future iterations of the NDS.

MONTH 8-24

Legislative process to enable the adoption of the NDS, *please refer to Annex*

MONTHS 10-24

Working with local authorities and actors to define local commitments and draft the first year(s)' **transition contracts**.

MONTHS 10-24

Creating a national **Citizens Assembly** to host participatory budgeting and ensure participation in future key decisions for the NDS

MONTHS 8-20

Budgetary process is taking place once the key priority areas have been defined. It should include participatory budgeting mechanisms.

Timeline and activities

Experimenting

MONTH 1 ONWARDS

The NDS is in itself a framework for experimenting and a framework through which new experiments are enabled.

The nature of experimenting depends on context and timing, and can be designed and informed through different participatory processes.

MONTH 1 -

Creating the first and the future iterations of **the NDS is a process of experimenting in itself**. The first two year cycle will host multiple new experiments and these should be seen as opportunities the better understand how future iterations of the NDS can be created. The insights generated can be collected and build the foundation for the next iteration's experiments.

MONTH 24-

The Innovation in Policy-Making Councillor can host policy and regulatory experiments and work with civil servants to build an understanding and **government culture for experimenting**.

MONTH 24-

The Chief Data Councillor enables **experiments related to smart governance and data.**

MONTH 24-

The network of public labs scaffold civic experiments.

Civic Square
A Strategy project in the UK focusing on visioning, building and investing in civic infrastructure for neighbourhoods of the future.
Learn more

Smart Gov
To meet the challenges faced, a new UK Commission was established to assess the current reality and suggest recommendations for policy reform.
Learn more

Timeline and activities

Learning & developing

MONTH 1 ONWARDS

The national transition are emergent pathways that demand constant reconfiguration and multiple speeds of change. Without a willingness to learn and act in an agile, adaptive manner, efforts will fall at the first hurdle.

Ongoing monitoring and evaluating that leverages strategic learning and sensemaking practices help to surface the insights and actionable intelligence that can best inform real-time decision making.

MONTHS 14-24

Building the **transition evaluation tools** will help to feedback real-time progress of the transition; highlighting emerging risks (+/-) and trends.

What if... North Macedonia created a machine driven doughnut evaluation system that could be used for deliberative evaluation at key moments?

MONTHS 1-24

Gather **learning and insights** to understand how next iterations of the NDS can be improved. It could be done both through crowd sourced learning and by ensuring that the NDS unit has adequate frameworks to efficiently gather insight.

vTaiwan
A complex and versatile process designed to enable Taiwanese citizens to address legitimate concerns and spark change on a national scale.
Learn more

MONTH 24-

Create toolkits that can scaffold different actors to monitor their contexts and **build reflective capacity** to better care for it.

Internet of Trees
The Internet of Trees provides an open platform for citizens to subscribe to trees and track their watering requirements for Berlin's urban forest.
Learn more

Data baseline

The coming twenty years' transition will require North Macedonia to expand the scope of their national data system; creating an increasingly transparent, participatory, efficient and qualitative data baseline for and by society - a data system informing and being informed by the NDS.

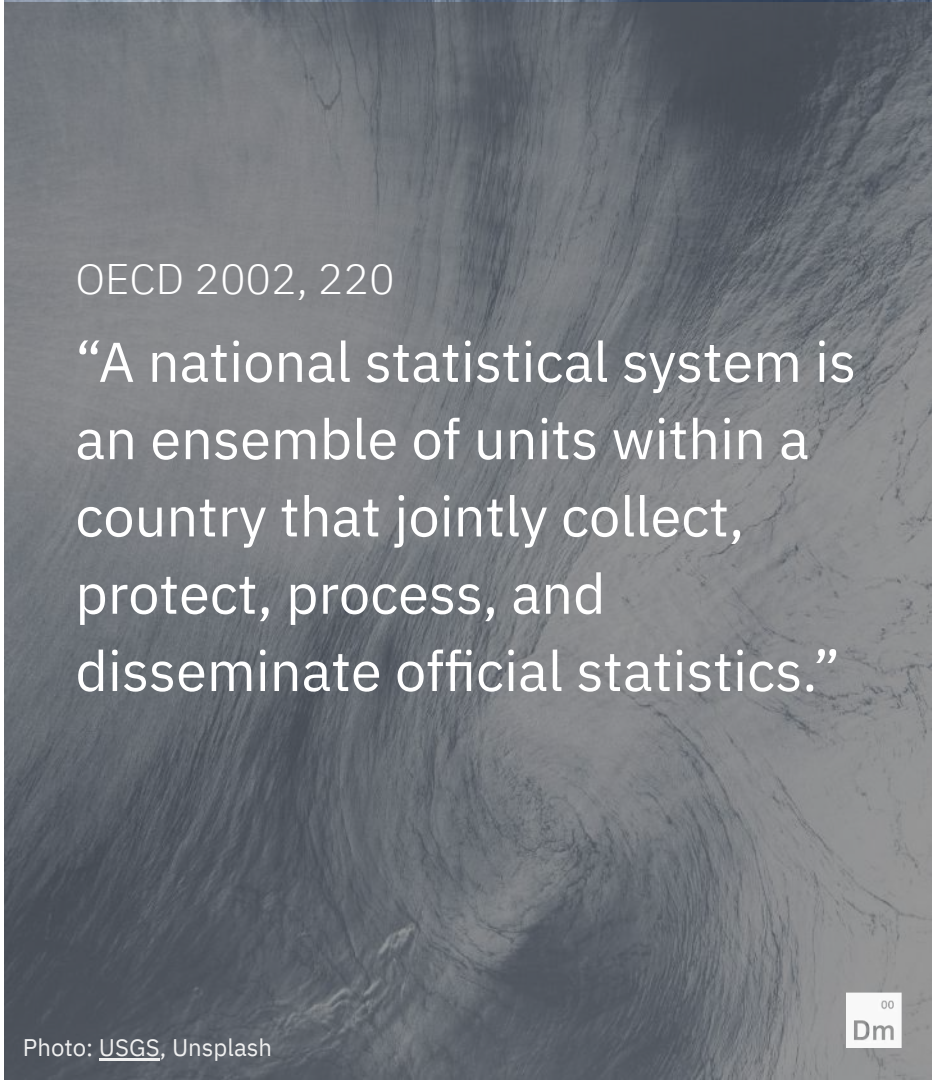
The NDS will span over multiple horizons, starting with where we are today by building on existing data strategies, government priorities and the data system already established by the State Statistical Office and the Ministry of Information Society and Administration (MISA)

Existing data baseline

The State Statistical Office of North Macedonia is entrusted to collect, process and disseminate statistical data in line with the related strategies (see current policy sufficiency). It is about to publish new consensus data and the NDS has an opportunity to use this as its initial baseline data. *Note however that the continued work with the NDS would benefit from clear investment in the development of a more expansive and integrated national data system.*

The State Statistical Office has adapted international standards, referring both to Eurostat and IFRS. This ensures high-quality, internationally recognised data that brings transparency with regards to taking informed economic decisions, accountability, and efficiency. It allows comparison of data across borders and it is important to keep in line with international standards in future development of the data system (thereby also engaging international partners).

The State Statistical office works with the MISA to enable the open data portal. It currently host a collection of more than 400 data sets and is guided by the Open Data Strategy (2018-2020) and Law on open data. It is important to ensure that available data leads to better decisions and higher efficiency and productivity. State institutions possess a lot of data and information that need to be systematised and publicly released.



Data baseline

Building towards an integrated national data system

In order to develop the required sense making, future imagining, decision making, experimenting and learning and developing frameworks necessary for the transition, North Macedonia will need to expand the scope of the existing national data system. **What if they developed an integrated national data system; informing and being a part of the NDS at every step?**

The scope of an integrated national data system goes beyond official statistics to encompass the data produced, exchanged, and used by participants from civil society, the public and private sectors for a variety of purposes.

The Open Data Strategy, alongside other relevant strategies, could inform the blueprint for developing the existing data system. The new blueprint could further outline the nation's plan for capturing greater economic and social value from data, in line with the principles of a social contract for data (World Bank 2021).

World Bank 2021

"...at the end of the day, it is **people who will benefit from an integrated national data system**. They will see better public policies, programs, and service delivery; more business opportunities and jobs; higher market efficiency; and greater accountability."

Key principles for an integrated national data system

An **integrated national data system** is designed to enable the full potential of data for development. It is founded on a whole of society approach to data governance that is deeply intentional, inclusive, equitable and trustworthy. Its ambition is to build data production, protection, exchange, and use/reuse into planning and decision-making. It does so by integrating actors from civil society, public and private sectors into the data life cycle and governance structures of the system.

An **integrated national data system** is putting people at its centre. To ensure antifragility of the system over time it needs to be involving people in: 1) the production, processing and the managing of high-quality data; 2) the institutions that safeguard and protect data; 3) the drafting, overseeing, and implementation of data strategies, policies, and regulations. In addition, it needs to enable people to use data to inform production in both the public and private sector and to hold these sectors accountable.

An **integrated national data system** includes both qualitative and quantitative data to inform decisions and planning. It should aim to provide data as close to real-time as possible. Using the two types of data alongside each other can highlight discrepancies and create a more sophisticated data baseline, which is constantly evolving.

An **integrated national data system** recognises that when the data system expands, the potential for economic, social and development returns increases, at the same time as the requirements for data protection become more complex.

An **integrated national data system** needs to ensure the public's trust by safely storing, exchanging, protecting against misuse and using data to create value equitably. The system becomes recognised as a part of the NDS and incorporates the nation's social contract for data.

An **integrated national data system** is continually improved to ensure its sustainability. To ensure this, North Macedonia needs to invest in distributed data literacy and highly skilled human resource across Government, academia, private sector and civil society.

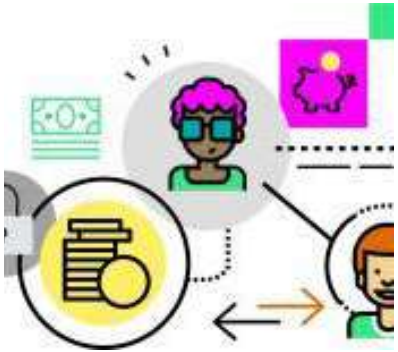
An **integrated national data system** is built up incrementally over time, based on the maturity of the existing system (World Bank 2021). By keeping sight of the vision of an integrated national data system, one can help guide the decisions of how to enable step by step development.

To read more about the incremental approach and the integrated national data system, please refer to the referenced World Bank report.

Case studies

Decode: Common Knowledge

Barcelona, Spain
Commons provide a useful set of principles to support privacy-enhanced sharing of data for public value, with the aim of reconciling both personal and collective control, while maintaining transparent, accountable and participatory governance over data.

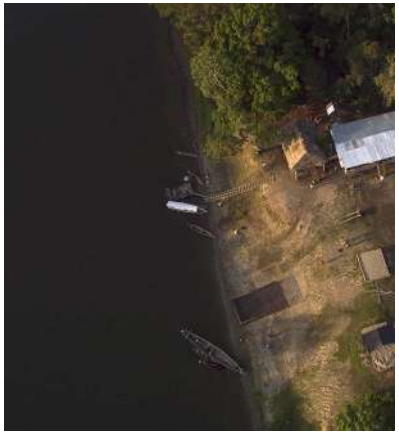


Digital Governance and Identification

Madagascar
The government of Madagascar adopted a roadmap for digital transformation and appointed a Chief Digital Officer, published a new e-governance strategy and started building a new digital Identity Management System .

Citizens Science for the Amazon

Amazonas
Citizens Science for the Amazon created a network across seven countries including 100+ groups of citizen scientists and 25+ academic, conservation, and grassroots organisations to measure and register water quality and fish migrations to guide local initiatives.



Transition contracting

Transition contracting empowers all layers of society to participate in the transition. It is a mesh of contracts and public pledges done by public, private and civil sectors.

Distributed commitments to act

Transition Contracting is a mechanism to create commitment for a transition informed by a 'plurality of publics' (each aware of their interdependencies). The key question addressed through the design of transition contracting is: **How can different layers of democracy contract a just transition in an age of uncertainty and complexity, while building legitimacy for large-scale transformation?**

The European Commission is developing and designing similar mechanisms to enable and ensure the transition toward carbon neutral cities by and for citizens. In the report "100 climate neutral cities by 2030 - by and for citizens" they propose "a multi-level and co-creative process formalised in a Climate City Contract, adjusted to the realities of each city, [...] aiming at the shared goal of the mission". Building on a similar logic, a Transition Contracting process can enable North Macedonia to create accountability and legitimacy of the momentous transition required.

It is proposed that the contract is designed to be a non-legally binding contract. It is to be seen as a mesh of commitments at different layers of society and a mechanism to unlock support of local public, private, academic and civil initiatives that can drive the transition. The different commitments are guided by the shared mission and development plan stated in the NDS.

Photo: Manki Kim, Unsplash

Key principles for transition contracting

The transition contracting process is:

- A contract with an open, additive and modular framework — continuously evolving;
- A contract which is built on the foundations of advancing learning and development;
- A contract designed for radical legibility — accessible and understandable by everyone;
- A contract where the city is defined as the extended city (i.e citizens, municipalities, industry, academia and civil society);
- A contract for civic and capital commitment, accelerating a climate and sustainability transition;
- A contract which is digital by default, and operating with a persistent, immutable record.

A contract designed on a hybrid contractual basis:

- Short-term: contracting for self-defined outputs (in a particular context), i.e CO_2 reduction, Community Wealth, etc;
- Medium-term: contracting for collectively-defined outcomes, i.e. economic justice, human development, equality, etc;
- Societal: contracting for capabilities for transition, i.e sense-making, experimentation, societal decision-making.

A contract focused on driving accountability, through radical transparency and mass participatory engagements:

- Self accountability (feedback-based);
- Collective accountability (peer2peer);
- Public accountability (e.g. radical transparency, citizen audits).

Case studies

Klimatkontrakt 2030

Sweden
Klimatkontrakt 2030 is an agreement between cities, government agencies and Viable Cities in which all parties commit to making concrete contributions to speeding up the climate transition.

TfL STARS

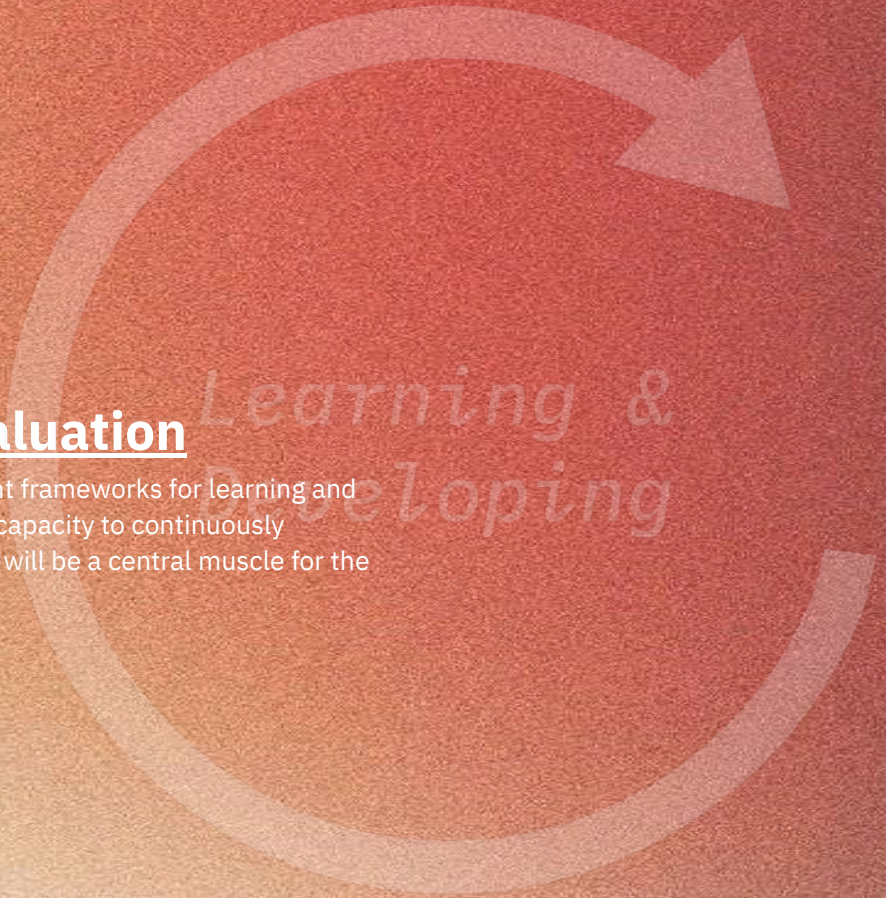
London, UK
STARS is a programme run by Transport for London to encourage and support schools to commit to more sustainable travel. A school can together sign up and receive support on how to achieve their ambitions.

iWill Pledge

UK
The #iwill campaign is represented by over 1000 organisations from different sectors. They all have made commitments to do something particular to help make participation in social action the norm for young people under 20.

Monitoring and evaluation

Monitoring and evaluation are important frameworks for learning and developing. To build the societal scale capacity to continuously measure, reflect and feedback insights will be a central muscle for the transition.



Learning and accountability

Monitoring and evaluation are mechanisms for continuous learning and developing, supporting North Macedonia's transition acceleration. Well-functioning monitoring and evaluation frameworks create deeper understanding of what is working well and what needs to be improved and how it can be improved. It builds the foundation on which more strategic and evidence-based decisions can be made.

Monitoring and evaluation can further highlight anomalies and emerging trends, that manifest as risks or potentials. By creating awareness of these patterns, risks and potentials can be addressed at an earlier stage. Therefore, monitoring and evaluation frameworks are much more important than simply providing quality control and compliance, as they build antifragility against uncertainty.

Lastly, monitoring and evaluation provide accountability to citizens on how tax money is being spent and what impact that expenditure has. This potential is predicated on monitoring and evaluation frameworks that are kept transparent, accessible and legible.

Data baseline

Difficulties with monitoring and evaluation

To design monitoring and evaluation format and frameworks that enable learning and development and highlight emerging patterns - rather than just bureaucratic processes - is a craft that policy makers are struggling with today. In a survey done by the European Union and sent out in 2018 to regional innovation policymakers, it was highlighted that monitoring and evaluation is the area in the policy making process that raises the most problems:

“[we identified] six main steps for the design of Smart Specialisation Strategies [...]). With respect to these steps, respondents reported major difficulties in monitoring and evaluation (54%), followed by governance (48%) and definition of a coherent policy mix, roadmaps and action plan (40%).”

Equally, the policy sufficiency analysis of North Macedonia highlighted evaluation and monitoring as current policy insufficiencies (see chapter about Policy Sufficiency). To accelerate a transition based on learning and developing, financial and human capital investments for improved monitoring and evaluation format and frameworks need to be prioritised.

Key principles for monitoring and evaluation

Every monitoring and evaluation scenario will require different formats and frameworks. The below principles can give important guidance to policy makers and other stakeholders in North Macedonia and need to be developed and added to during the NDS process.

- Monitoring and evaluation is informed (not driven) by data from the integrated national data system *(see page about Data Baseline)* but might need to be complemented ensuring that necessary data for a specific evaluation process is produced.
- Monitoring and evaluation create accountability of agreed standards, rules and legislation.
- Monitoring and evaluation create real-time feedback for learning and developing
- Monitoring and evaluation use human intelligence and machine intelligence on continuous and cyclical bases.
- Monitoring and evaluation consider a multitude of (proxy-)indicators over time to create a holistic image of complex systems. It is important to combine statistical data (quantitative and objective) and stories (qualitative and narrated) to contextualise hard data *(Snowden 2016)*.
- Monitoring and evaluation are processes never too early to design. They can be used before, during and after experiments and are an intricate part of an experiment's and program's logic models *(HM Treasury 2020)*.
- Monitoring and evaluation need to be assigned an appropriate evaluation team in order to avoid corruption (for example mixed assemblies, external research groups, peer-to-peer, etc.). The outcome of the evaluation is communicated and made as accessible and transparent as possible to other actors.
- Monitoring and evaluation of experiments and programs is done against a baseline of what would have happened otherwise. For example, by using a control group which is carefully selected and could use sample sizing *(Innovate UK 2018)*.
- Monitoring and evaluation frameworks benefit from using domain specific standard principles as it enables comparison between different experiments or programs.

To read more about monitoring and evaluating, please refer to annex.

Monitoring and evaluation

What if...

Doughnut Evaluation
What if North Macedonia created a framework that invites actors to evaluate their impact and progress in relation to social and planetary boundaries? It could combine continuous machine driven measuring with deliberative human reflection.

Cornerstone Indicators
What if North Macedonia created a set of cornerstone indicators that indicate systems change using single unit measures? The indicators would in themselves tell stories and thereby have the potential to act as political tools for the transition (Trebeck, 2021).

Transition Index
What if North Macedonia created a transition index that measured the capacity of the nation to transition? It could include indicators related to horizontal and vertical collaborative capacities and the adoption of deep code transformation.

Evaluation Assembly
What if North Macedonia set up an assembly of randomly selected actors from across public, private and civil sectors to evaluate the progress of the transition on a yearly or bi-yearly basis? The assembly could use deliberation to create recommendations for the next cycle.

Evaluation Toolbox
What if North Macedonia enabled domain and purpose specific evaluation toolboxes and kits to be designed? They could include both open digital tools and guides for how to conduct deliberative processes and dissemination.

Spatial Feedback
What if North Macedonia shared their real-time progress through spatial and digital installations? It could be presented in spaces where people interact on a daily basis (e.g. streets, schools, work spaces, social media, etc) creating awareness.

Case studies

National Indicators Dashboard

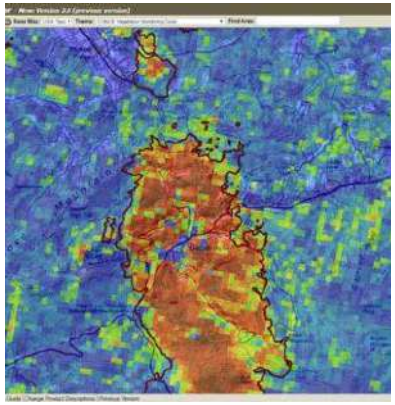
Scotland

The performance overview tracks progress of National Outcomes. It shows how well Scotland is performing overall on their 81 National Indicators. The indicators are developed in relation to the SDGs.

NASA & US Forest Service Anomaly Detection

USA

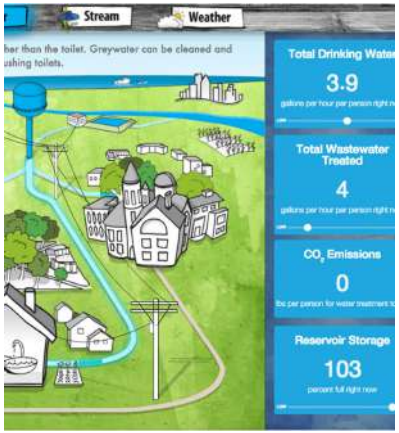
Joining datasets & analysing anomalies, they enabled early warning signs of catastrophic weather events and prepare evacuations.



Real-time Dashboards

Ohio, USA

Real-time information feedback dashboards supports children's understanding of complex systems. The socio-technical interfaces helps the children identify dynamic behaviours across the systems.



How can the process of implementing the strategy keep up with the speed and multitude of the transition?

A methodology for a 20 year living process

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Photo: NASA, Unsplash

Professionalisation, training and skills

To learn *how to learn* will only become more and more important as the speed of technological advancement increases. Policy makers will have to adopt a mindset of learning both by reading and researching and by testing and experimenting.

Enabling policy making for the 21st century

Policy making still follows much of the same, traditional practices. Some of these practices have been refined over long stretches of time and work very well, while other elements are slowing down change or not being sufficiently responsive.

At the same time, the speed of change in society is accelerating and therefore the need for policy making to evolve will be foundational to North Macedonia's transition.

Learning from across the world about investing in professionalisation, training and skills becomes crucial. It is time to ensure that policy making is fit for the 21st century society.

Photo: Annie Spratt, Unsplash

Areas for professionalisation, training and skills

To enable policy making fit for a 21st century reality, there are almost too many areas that need addressing. To narrow this down, by looking at the trend analysis made as a part of the sense making process, the Innovation in Policy-Making Councillor could, together with other actors, start to identify key areas for development. Some likely areas are:

- Data and digital *(see also Continuous Data Baseline)*
- Deliberation *(see also Cross Sector Coordination)*
- Co-creation
- Innovation
- Self-reflection for continuous learning and developing *(see also Monitoring & Evaluation)*

Learning infrastructures

To enable policy making fit for a 21st century reality, there are almost too many areas that need addressing. To narrow this down, by looking at the trend analysis made as a part of the sense making process, the Innovation in Policy-Making Councillor could, together with other actors, start to identify key areas for development. Some likely areas are:

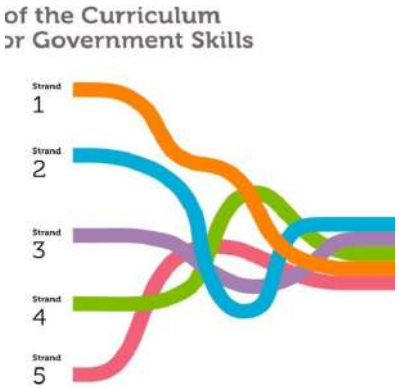
- Data and digital *(see also Continuous Data Baseline)*
- Deliberation *(see also Cross Sector Coordination)*
- Co-creation
- Innovation
- Self-reflection for continuous learning and developing *(see also Monitoring & Evaluation)*

Case studies

Curriculum & Campus for Government Skills

UK

This one-stop-shop for learning hopes to fill existing training gaps and thereby improve the quality of work by civil servants. The project began in January 2021 with a renewed emphasis on technical and analytical skills.



The Elements of AI

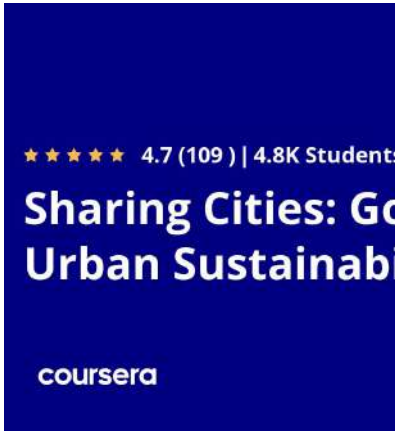
Finland

Finland is providing all its citizens and civil servants a free online course in artificial intelligence to ensure equal AI literacy and more just AI innovation. 1% of the Finish population has already taken part in the training.

MOOC Sharing Cities

Sweden

Massive Open Online Courses can open up for training and learning across Government and society. Sharing Cities has developed an open course about Governance and Urban Sustainability.



A culture of experimenting

North Macedonia needs to invest in new policy innovation that is increasingly digital and smart to ensure that first, policy making can keep up with rapid changes and second, take full advantage of the benefits that digitalisation provides.

Innovation often starts with small scale experiments before being scaled up to larger infrastructures and programs. This type of process enables learning through a step by step process and can reduce the risk related to large scale innovation initiatives. Governments can adopt similar procedures to engage a culture of experimenting.

Common practices to scaffold experimenting and the creation of portfolios of experiments (portfolios enable increased learning opportunities) are dedicate policy labs and regulatory sandboxes. They could be set up within different ministries/departments and state bodies and focus on set topics such as finance, mobility or construction. These labs and sandboxes can be connected to policy innovation funds and receive support through open platforms.

The Innovation in Policy-Making Councillor will play a central role in enabling the spaces for policy innovation.

Gina Belle and Giulio Quaggiotto (2020)

”In the last few years, in particular, we’ve seen the increase of calls for the public and development sectors to adopt more experimental approaches, across a spectrum that goes from speculative design and probes all the way to randomised control trials. As the incoherence of linear planning and single point solutions with issues like climate change or rapid urbanisation become increasingly apparent, organisations are starting to explore “portfolio approaches” as a way to better come to grips with complexity. One can only really understand a complex system by interacting with it, and the **dynamic management of a portfolio provides a stronger basis for accelerating learning and adaptation than the rigidity of five year plans**.”

Photo: Manki Kim, Unsplash

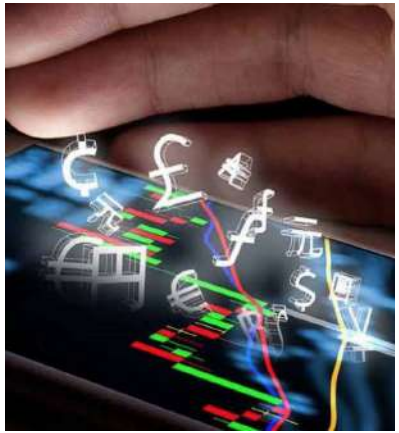
Case studies

A **policy lab** is a group of actors with various competencies that want to develop a regulatory framework. In a policy lab, they use a set of user-centric methods and competencies to test, experiment and learn to develop new policy solutions (Vinnova 2021).

A **regulatory sandbox** is an approach to regulation that collects important insights before deciding on new regulatory actions by reducing barriers and costs for new innovation areas, such as fintech, mobility or construction. It allows live, time-bound testing of innovations under a set of rules, supervision requirements, and appropriate safeguards (UNSGSA 2020).

Smart Policy Springboard

Sweden
Cooperation between Vinnova policy lab and Finansinspektionen's work with policy development resulted in a forum for policy development that fintech companies now can turn to.



Open Policy Lab

UK
The lab brings new policy techniques to Government departments, helping design services around people's experiences, using data analytics and new digital tools.

Fintech Sandbox

Malaysia
WorldRemit were permitted to use Bank Negara Malaysia's sandbox to test a solution for remote customer identification. Previously, this approach to customer identification was not allowed by the legal and regulatory framework in Malaysia.

Culture, diversity and inclusion

Creating a culture of diversity and inclusion will be crucial to ensure legitimacy and participation in new policy making.
It builds a platform on which a multitude of actors can see both role models for inspiration and some of their own unique attributes recognised as valuable in the system.

Whole of society approach

Ensuring that the whole of society is included in the transition starts inside the Government. Working proactively with internal culture and representation creates a strong foundation on which to build policy. There are multiple tools and frameworks that can support this, for example:

- Representation and strategic recruitment;
- Up-skilling to mitigate cognitive biases;
- Reading groups to explore cultures and perspectives of others.

When reaching the point of policy making using challenge groups, red-teaming and evidence assurance, it can: 1) create greater awareness of different perspectives amongst civil servants, Government officials and actors across society; 2) ensure that implemented policy includes a multitude of perspectives; and 3) build resilience against polarisation.

The responsibility to address these aspects of the policy making process will be helped by the Innovation in Policy-Making Councillor and is crucial for the long-term development of the transition.

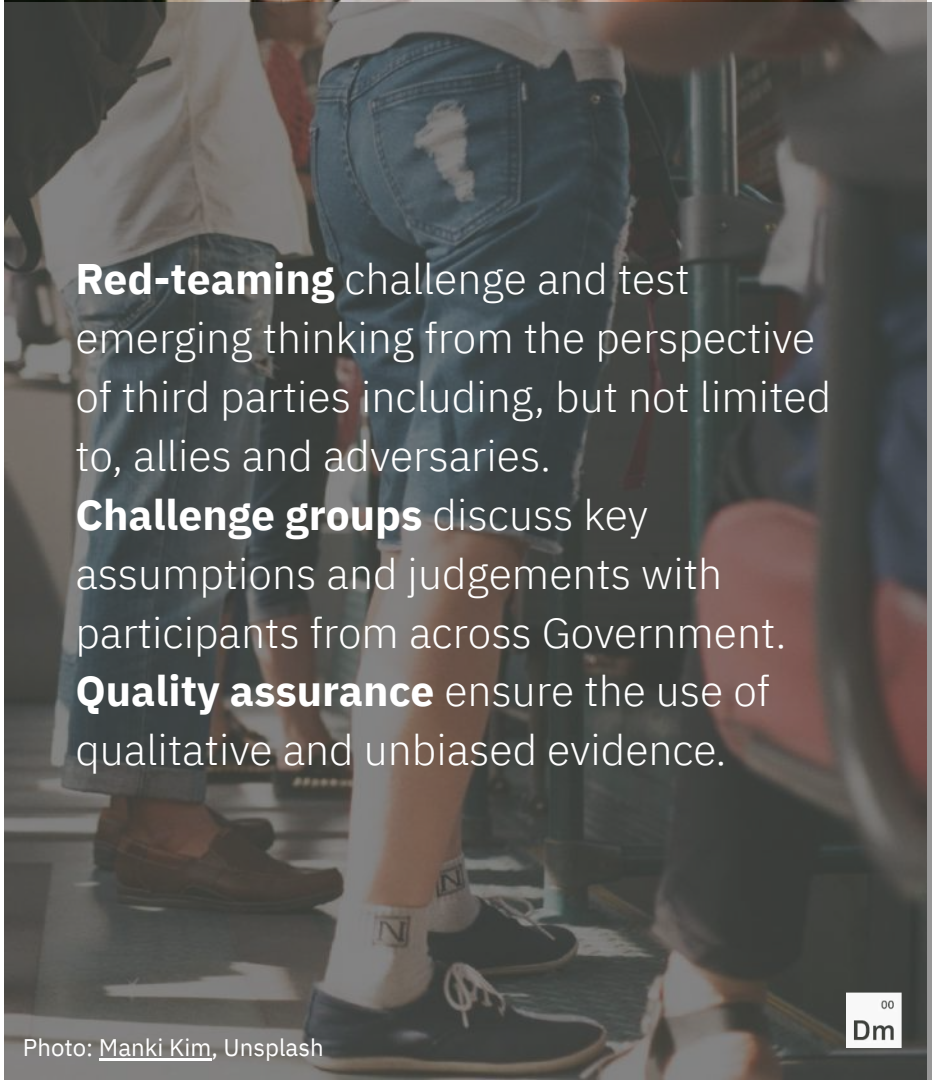


Photo: Manki Kim, Unsplash

Crowdsourcing and co-creating

Polarisation and a decreasing trust in Government is creating a challenged environment for policy makers to navigate. Working closer with actors across society can support in building back trust, give legitimacy for policy implementation and bring in new ideas.

There are multiple ways of including different actor groups, spanning between deep deliberation over multiple days to online feedback systems generated using social media. It will become crucial for North Macedonia to learn from other contexts and to continuously experiment with different solutions to build a culture that increase diversity and inclusion.

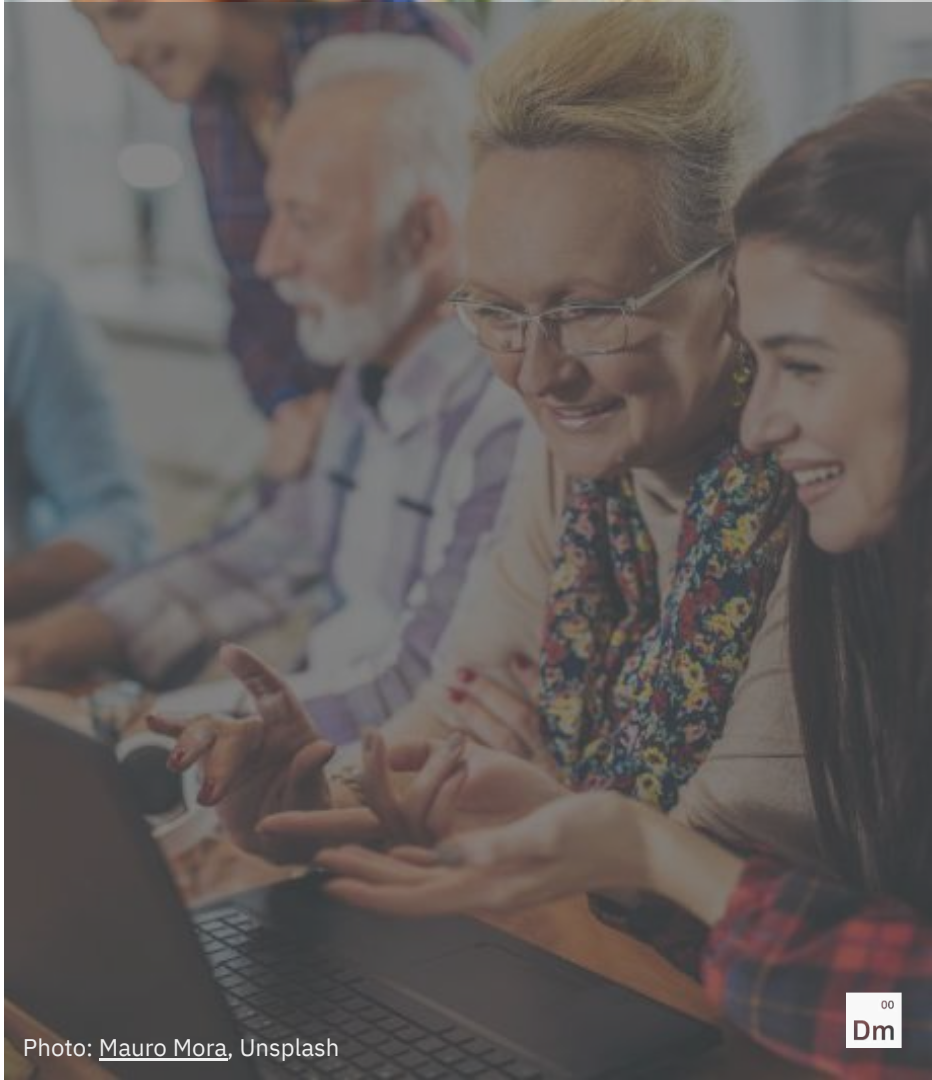


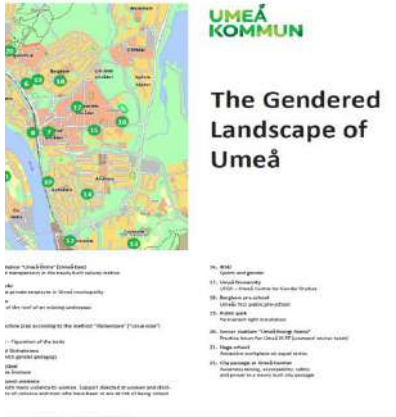
Photo: Mauro Mora, Unsplash

Case studies

Gendered Policy

Umeå, Sweden

Umeå closely collaborated with the local university to better understand the root causes of gender inequality and to enable new policies and initiatives that confront these.



Mixed Deliberative Committee

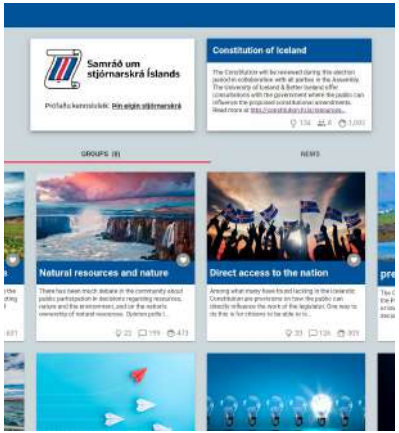
Brussels, Belgium

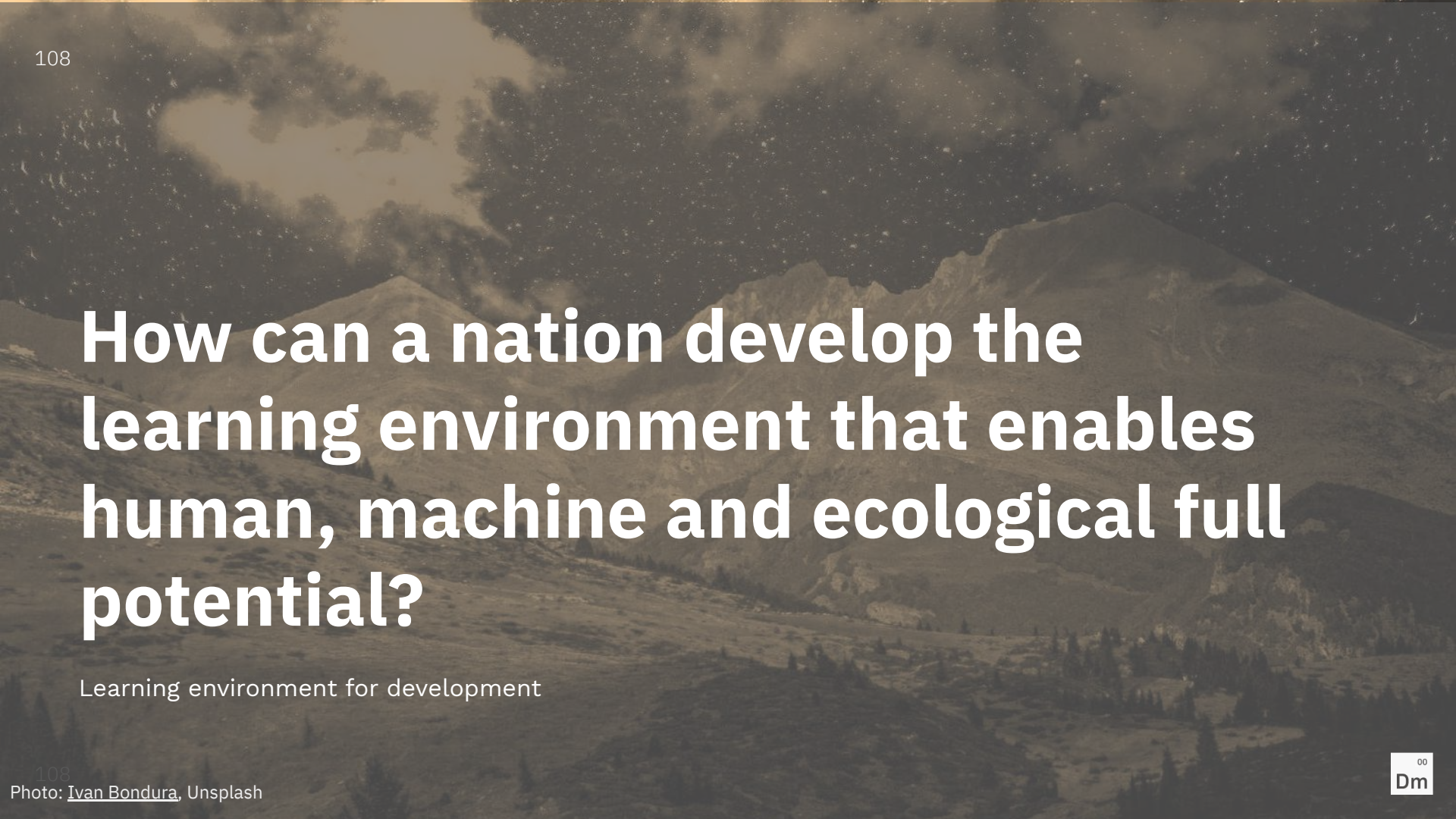
Regulatory reform to open the possibility to enact mixed deliberative committees to advise on legislative work through recommendations.

Crowdsourcing Constitutional Reform

Iceland

The goal was re-writing the constitution with citizens using crowdsourcing and social media. It did not secure parliamentary approval but left key insights.





How can a nation develop the learning environment that enables human, machine and ecological full potential?

Learning environment for development

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Photo: Ivan Bondura, Unsplash

Learning environment

Nature is constantly responding to its context. For example, the monstera is a climbing plant from the jungle where it has learnt that when growing in the shade of other trees and plants, it needs to grow towards the darkest corner. This is because there it may find a tree on which it can start climbing in order to reach sunlight. However, to have the strength to embark on such a vertical journey, the monstera first needs enough nutrients and water, and some access to light.

Equally, humans are responding to their context. However, the time that we have had to adapt to our current digital and densely populated contexts has not been enough to develop deep learning.

For North Macedonia to create the conditions for humans to learn deeply and therefore develop, together with nature and machines, significant investment into the education system will be required. Moreover, it will also need to invest in the living environment, socio-economic context, nutritional landscape and the digital world. **What if...the NDS enabled a human bio system 2.0, institutional infrastructures 2.0 and automation 2.0 that combined, unlocked the full potential of human, machines and the ecological environment?** The following pages explain these systems.

Tristan Harris

"The ultimate freedom is a free mind, and **we need technology that's on our team to help us live, feel, think and act freely.**

We need our smartphones, notifications screens and web browsers to be exoskeletons for our minds and interpersonal relationships that put our values, not our impulses, first. People's time is valuable. And we should protect it with the same rigor as privacy and other digital rights."

Photo: Johannes Hofmann, Unsplash

3.2 Human bio systems 2.0

Improving the quality and nature of the bio systems which human and non-human actors operates in creates: 1) increased cognitive capacity of humans; 2) biodiversity of the ecological systems; and 3) just health and wellbeing of humans and non-human actors. It informs the nurturing capacity of our shared biological systems.

Human bio systems 2.0 are the environment, earth-systems and physical conditions that enable humans and ecological systems to thrive.

Examples

Air quality
Light quality
Sound quality
Microbiome quality
Nutritional quality and food security
Temperature and humidity

Air

Neighbourhood air pollution impact the cognitive performance and mental wellbeing of humans.

Source 1, *Source 2*

Temperature

Hot environments impact the brain with uncomfortable heat diminishing cognitive abilities.
Source

Food

Gut microbes impacting the structure and function of the brain.
Source

3.2 Institutional infrastructures 2.0

Creating the settings that allows human actors to develop together creates: 1) meaningful work; 2) distributed care for each other and the environment; and 3) antifragility against shocks. It informs a non-precarious driven development of the nation's systems.

Institutional infrastructures are the formal and informal organisation that is foundational to the human's health, education and welfare.

Examples

Inclusive growth
(building the infrastructure for a much more decentralised and distributed financial system that works at local level)

Preventative health care
(based on technological and scientific advancement which enables us to plan, predict and prevent future sickness)

Human development
(new models for working and learning)

Urban environment

Growing up in an urban environment doubles the risk of developing psychosis later in life.
Source

Inequality

Structural inequality within higher education determines your potential to succeed with your studies.
Source

Violence

Exposure to violence in pre-adulthood impacts the mental wellbeing in later years.
Source

3.2 Automation 2.0

Driving just automation and building the capabilities for humans to operate with it creates: 1) space for humans to use their deep cognitive, emotional and social capabilities; 2) create efficiency in precision and repetitive tasks; and 3) leverages the ability to sense make complexity. It enables the new potential of society to develop in an age of complexity where the speed of change is accelerating.

Building the startup ecosystem and institutional infrastructure for open automation 2.0.

Examples

Automated Operations
Open interoperable API
Provenance of goods
Algorithmic business
AI bots
Real time trading licence
Open source

Acceleration

Keeping up with accelerating change requires education to transform.
Source

Jobs

The future of jobs is at risk if we do not redefine the role of humans in an automated world.
Source

Polarisation

Automation may simply accumulate wealth for the few, unless addressed and designed for inclusion.
Source

How can we achieve deep, inclusive growth without endangering our place on the planet?

Deep growth for development

Photo: Ivan Bondura, Unsplash

What is deep growth?

1. Growth that accounts for all the **negative externalities** that result from the economic activity causing that growth
2. Growth that is **sustainable** to the ecological, human and machine systems to which it contributes
3. Growth that **maximises the potential** of those systems
4. Growth that is the result of a **regenerative economy**, which is not only extracting natural resources, but maintains the natural ecosystem in which society is embedded and helps it thrive.

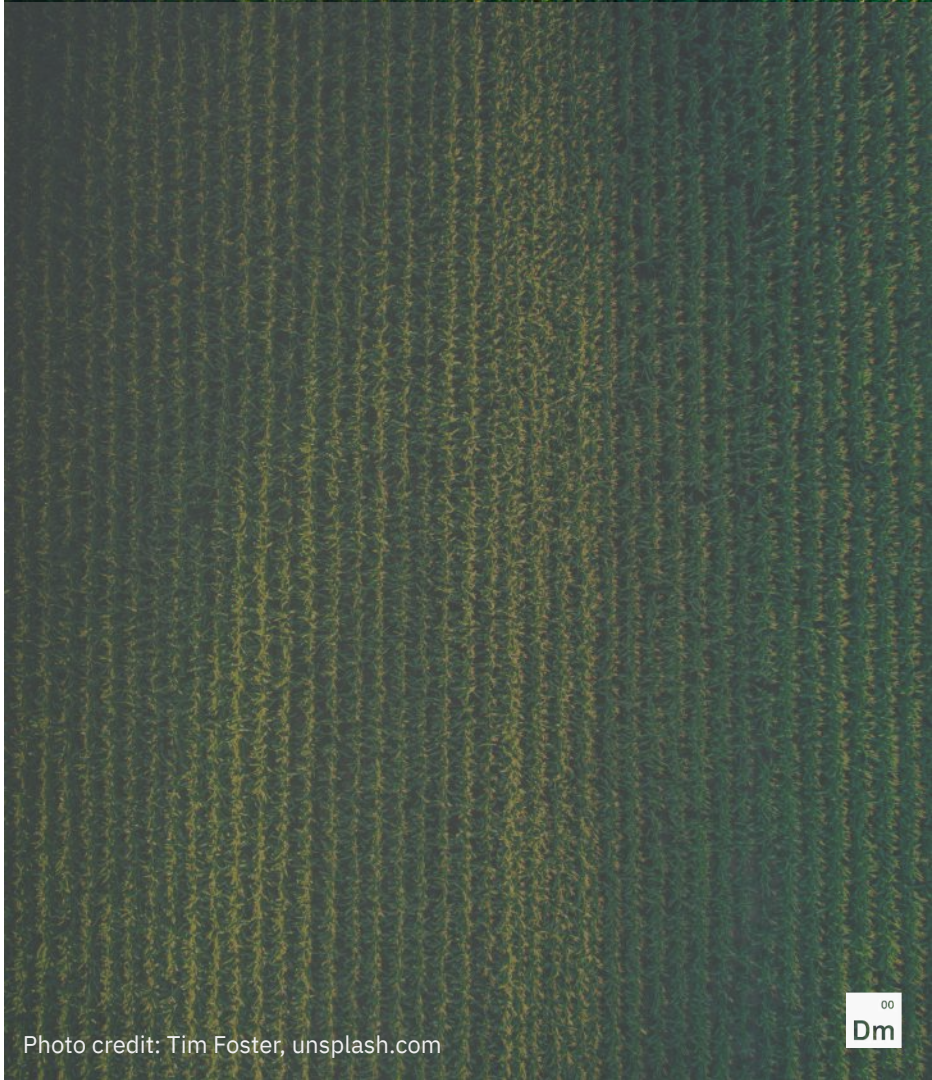


Photo credit: Tim Foster, unsplash.com

What is the problem with current growth?

The world economy has been “growing” with little regard to myriad unpriced externalities. These are accumulating all around us and threaten the very existence of the economy that has brought them about. Climate change, mental health, biodiversity loss, soil erosion, ocean acidification and zoonotic pandemics like COVID-19 are all externalities.

Deep inequality and poverty are both externalities of unbalanced economic and social systems.

In the case of North Macedonia, these are compounded by the challenges of overall slow growth, high unemployment, high rates of informal economic activity and low human capital development.

The country’s current growth model is predicted on its competitive advantage of cheap labour force, attracting Foregin Direct Investment (FDI), especially through the establishment of Technological and Industrial Development Zones (TIDZs), and fiscal facilities attracting foregin factories.

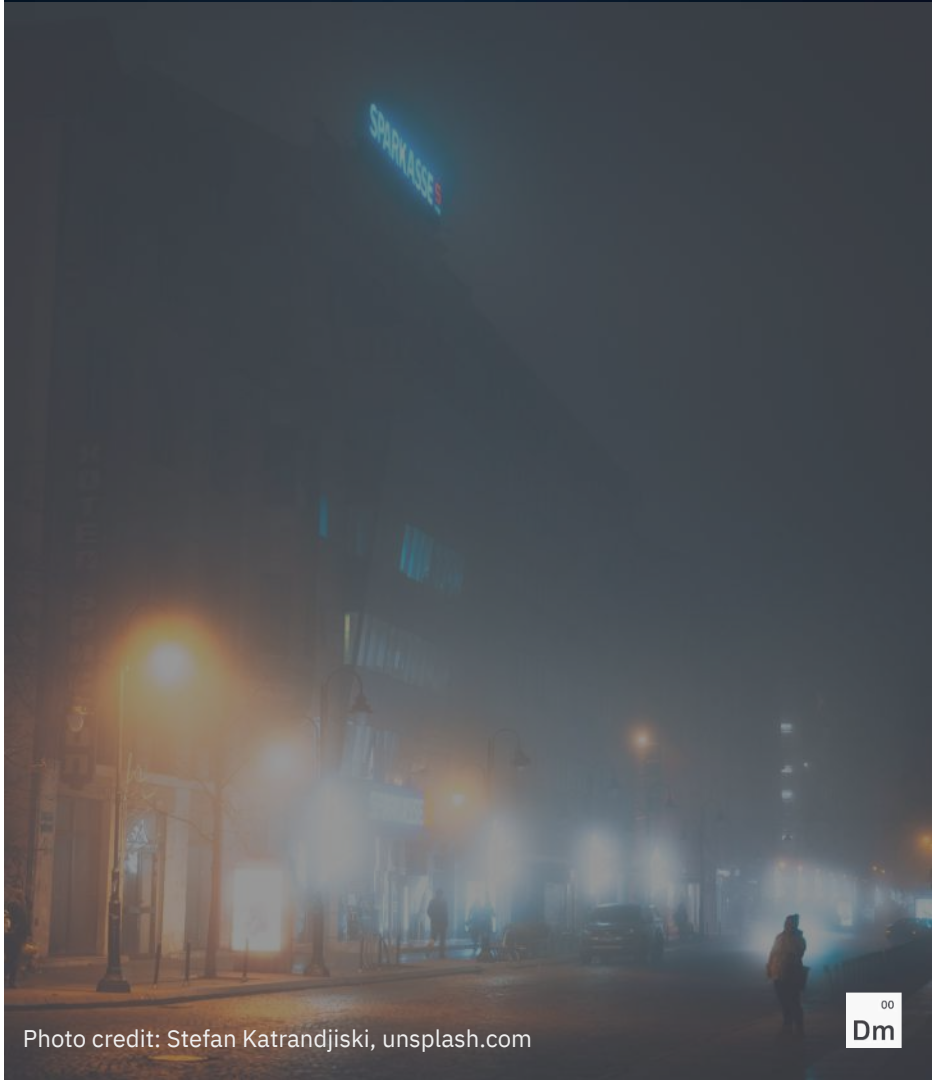
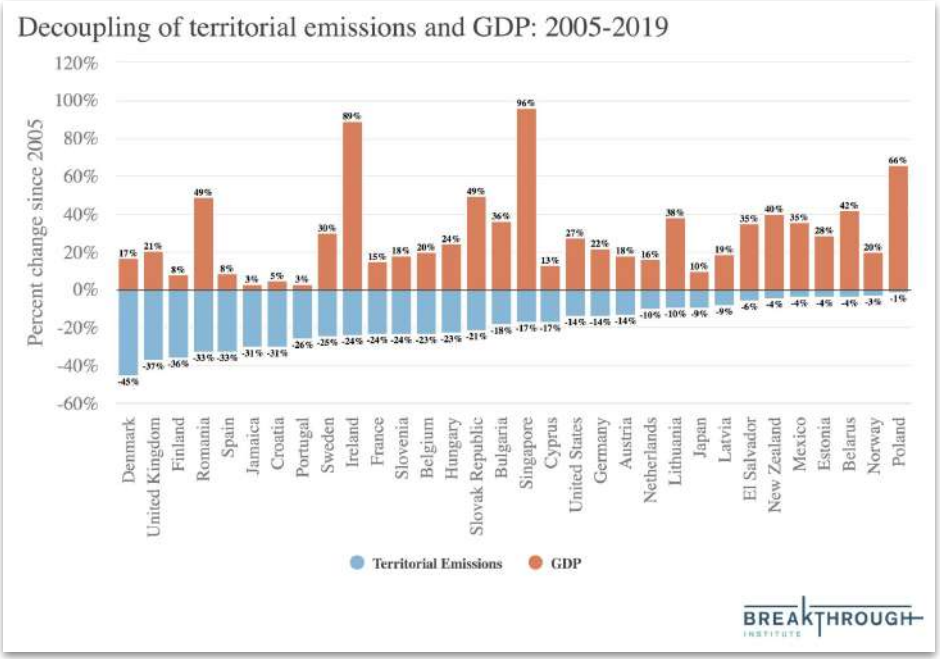


Photo credit: Stefan Katrandjiski, unsplash.com

Future growth will happen **without adding to the existing externalities debt mountain**

1. Future growth will happen through activities which do not add to existing externalities, or while actively decreasing the existing mountains of externalities debt - in activities which nurture human development and protect the environment.
2. 32 developed and developing countries have achieved GDP growth in the past 14 years while reducing their carbon emissions, proving this is possible, at least in terms of the most pressing externality, climate change.



Source - The Break Through Institution

How does an economy achieve deep growth?

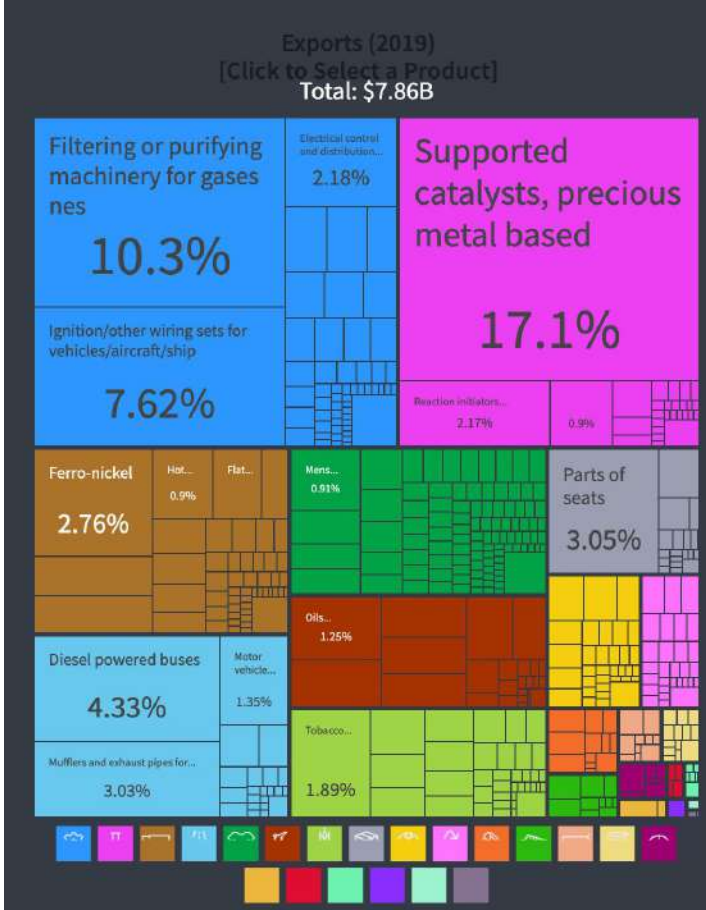
- Achieving **circularity in its' material flows**. Recycling is an important part of this, and should be prioritised, but is by no means enough. According to Eurostat, the EU was recycling 55% of all recyclable waste in 2019, but its overall rate of circular material use was just below 12%. See (Circularity Rate in the EU). Macedonian recycling rates are well below those of the EU - in 2012 only 18.86% of municipal waste was recycled in North Macedonia, whilst Germany was recycling 65.2% (see Circularity Rate in the EU)
- Increasing its **human capital development.** This means not just improving the traditional educational system, but creating opportunities and pathways for lifetime learning, reducing mental health issues and optimising for the good life.
- Focusing on the i**ntangible economy** - growing the Arts, culture, innovation, and caring sectors of the economy - in essence decoupling the economy as much as possible from the material footprint. Of course, that is not entirely achievable, nor is it desirable to withhold all material economic growth.
- Reducing the **costs of the maintenance** of its existing material infrastructure. Maintenance and caring are some of the most overlooked economic activities. Caring often happens in the household and is not even considered an economic activity. But these skills and activities are at the cornerstone of thriving communities and for a world where our resource use does not overshoot all planetary boundaries. Internationally, attitudes towards maintenance and the maintainability of products are shifting - **right to repair laws** are being passed by different regulators around the world.
- Denying that **"demography is destiny".** A deep-growth economy can continue to grow even in the face of diminishing population, by deeply increasing the productive capacity of its members.
- The overarching priorities exposed above tend to show a necessity for path-finding, experimenting and directed transitions. These require brave policy experiments and innovative ways of thinking about financing.

Transition Funding for the 4th Industrial Revolution

Almost a quarter of today's exports in North Macedonia are in sectors related to fossil fuel transport. Pursuant with the priorities and measures outlined in the Industrial Strategy, the government could prioritise investments and knowledge transfers to shift existing exporting corporations into higher value-added, future-proof adjacent sectors. A few examples:

- Diesel bus factories ➡️ Electric bus factories
- Catalytic converters ➡️ Battery production & recycling
- Ignition wires ➡️ General wiring for electric cars

Other policy levers at the Government's' disposal include procurement policy, which can be used to shape North Macedonia into a lead market in industrial and service areas that it wants to bolster. For example, a company transitioning from diesel busses to electric busses would be greatly incentivised by the certainty of the demand of a procurement contract for electrifying an entire municipality's transport grid.



Source: Observatory of Economic Complexity, Data for North Macedonia 2019

What if...North Macedonia enabled ‘free municipality experiments’?

Inspired by Denmark's Frikommuneforsøg programme, these can be **municipalities in which policy experimentation is encouraged by exempting them from national regulations in certain areas**. These can range from affordable housing, taxation models, investments, democratic models. These can complement and replace Technological and Industrial Development Zones (TIDZs), limited in their scope to tax exemptions and general better conditions to foreign investments.

Free Municipality Experiments can act as incubators for local innovation, by concentrating focus on different policy levers or techno-social points of intervention which could benefit from novel approaches. By spurring local innovation, North Macedonia can leverage more economic growth than through FDI.

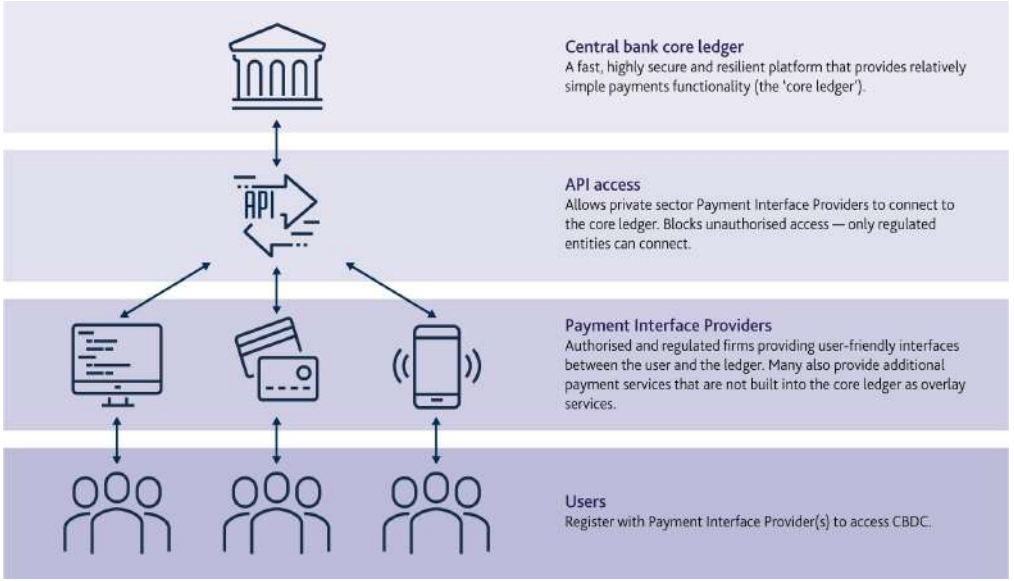
Some proposed ‘free municipality’ themes could be positioned around:

- **Taxing and integrating the informal economy**: novel taxation models can be used in a free municipality to test their impact on increasing tax collection rates and increasing formal labour market participation.
- **Mechanised rural areas**: remote rural areas could experiment with regulation around drone-based agriculture, creating a low-impact, high-yield food-system, with minimal human participation
- **E-currency deployment**: Related to the larger EU - North Macedonia monetary policy sandbox proposal, some municipalities could be the initial test bed before a large-scale deployment
- **Incentivising new forms of entrepreneurship, ownership and corporate governance**: Some of the most well-developed areas in Europe, like Emilia-Romagna and the Basque Country are well known for their high level of cooperatives. Other modes of ownership and governance of companies and commons are being trialed. Deeper engagement and a shared sense of ownership and power could spur a wave of broad-based entrepreneurship.

A joint EU-North Macedonia sandbox on digital monetary policy and innovation: Digital Denari

We propose that North Macedonia become a hotbed for monetary and digital-financial leapfrogging. In this sense there are a few areas worth exploring. This should be aligned with the newly announced fintech strategy spearheaded by the Central Bank.

Digital currency issuance is a large problem space, and each possible design and implementation choices of Central Bank Digital Currencies come with their own distinct possibilities for central bankers and treasuries, banks, the financial system and the general public. The possibility raises many potential questions. Would the entire population be able to open accounts directly with the central bank? Would the deposits generate interest? How would the interchange with other currencies happen? Would third parties interact with the central bank account through APIs or would the bank offer their own interface for all beneficiaries? What would the role of commercial banks be in this brave new world?



Source: Bank of England. Potential CBDC design.

Potential applications for the digital denar:

- **Fast and secure, government-backed transactions**: Knowing transactions are backed by a government-enabled system can reduce economic frictions.
- **Easily targetable welfare payments or Transition Income Investment**, directly through central bank accounts. Having a direct line to distribute income to citizens will ease distribution of welfare, reducing its overall cost, increasing efficiency and limiting abuse of the welfare and pension system.
- **Smart money and smart contracts**, enabling **automatic collection of taxes**, reducing the administrative apparatus required for tax collection and the frustration of filling out complex tax forms for most citizens, providing a simplified way of formalising parts of the underground economy.
- **Easily directed credit:** The ability to direct cheaper credit to certain areas of business and thus better target areas of desirable economic growth, or, conversely, to target inflationary areas more precisely than broad interest changes would achieve.
- **A Safe Asset for the Public**: If the general population has a bank account at the central bank offering interest on deposits, this would create a safe asset for the entire population, and would create an effective floor on commercial bank deposit rates.

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Photo: Mikola Mihajloski, Unsplash

Appendix

Glossary

Antifragility	The ability to absorb shocks and bounce back stronger
Autonomous	Having the freedom to govern itself or control its own affairs
Cascading Risks	Cascading risks are the dynamics present in disasters, in which the impact of a physical event or the development of an initial technological or human failure generates a sequence of events in human subsystems that result in physical, social or economic disruption.
Co-creating	Collaborative development of new value (concepts, solutions, products and services) together with experts and/or stakeholders (such as customers, suppliers etc.). Co-creation is a form of collaborative innovation: ideas are shared and improved together, rather than kept to oneself.
Complexity	It expresses a condition where different elements/factors in a system are entangled in numerous forms of relationships, complicating the act of distinguishing or making sense of the whole.
Deep code transformation	Transforming the underlying structures of society: regulation, policy, contracting, financing, information systems, language, etc.
Deep trends	Deep trends indicate the direction our deep codes are shifting and could be understood by looking at indicators, such as regulations being broken, funding priorities, new words being used, etc., or proxy indicators, such as apples being bought in Autumn, amount of litter in a street, or girls riding bike to school, urban lighting etc.
Dynamic system	A system or process in which motion occurs, by their very nature are constantly moving or must change states to be useful.
Ecological development	An approach to development that takes into account ecological factors and the need to conserve biodiversity and protect ecological systems.
Emergent trends	The direction of a topic area's growing interest and utility over time.
Experiments	A time-limited experimental prototype or initiative that is being explicitly tested and will be evaluated before commitments are made to continue, implement, or scale.
Foundational security	Building on the concepts from Maslow and Max Neef, the foundational security is covering humanity's basic needs, including the physiological and safety needs (Maslow) or the subsistence and protection needs (Max Neef)

Appendix

Glossary

Future imagining	The process of envisioning future potential, visions, solutions, ideas etc.
Growth agnostic	Growth agnosticism is a vision on economic activity and development that does not concern itself with traditional economic metrics (e.g. GDP), but with addressing fundamental human needs and creating a thriving society. That might mean
Horizontal capacities	Capacities, tools, knowledge that are distributed horizontally (as opposed to vertical/hierarchically) across individuals and organisations e.g. knowledge/data that flows throughout the organisation that everyone can access—instead of just a select few at the management level.
Human development	Development focusing on expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices.
Institutional infrastructure	The basic physical and organisational structures and facilities needed for the operation of an institution, consisting of core components organisational structure, built infrastructure, digital artefacts, and people.
Interdependencies	The condition of two or more things (nature, people, systems etc.) depending on each other to succeed or fail.
Knowable risks	Risks we are aware of but unaware of the size and effect of the risk.
Known risks	These are risks that have been correctly identified and properly measured.
Machine development	Development focusing on expanding the richness of machines' potential in order to support the context in which human beings live. It is an approach that is focused on human and machine interaction to leverage their opportunities and choices.
Maintenance innovation	The totality of new designs, processes, provisioning systems which are aimed at reducing the material impact, human health impact and other externalities and costs involved in maintaining our existing material base.
Mission	A transition related objective that is specific, measurable, actionable, realistic, and time-based, and established by an authority with the legitimacy and responsibility for achieving it.

Appendix

Glossary

Portfolio approach/ Portfolio logic	As opposed to a single point, silver bullet solution, where we rely on one great idea to solve difficult problems, a portfolio approach aims to curate multiple solutions that target different parts of the system — i.e. a portfolio of solutions/experiments working in tandem, creating a multiplier effect. In the case of youth unemployment, we mean taking a set of interventions related to the issue and constructing it as an interconnected portfolio. From here, the intention is to manage the portfolio in order to actively test hypotheses, leverage interconnections, generate learnings fast, adapt interventions based on learnings, and thereby accelerate impact
Qualitative data	Qualitative data describes qualities or characteristics. It is collected using questionnaires, interviews, or observation, and frequently appears in narrative form. The data may be in the form of descriptive words that can be examined for patterns or meaning, sometimes through the use of coding. Coding allows the researcher to categorise qualitative data based on properties, attributes, labels, and other identifiers to identify themes that correspond with the questions asked and to perform quantitative analysis.
Quantitative data	Quantitative data are statistical data used when to quantify a problem, or address the questions of "how much" or "how many". This data type is measured using numbers and values, making it a more suitable candidate for data analysis. This data are usually gathered using instruments, such as a ratings scales or sensors. Statistical analysis software, such as SPSS, is often used to analyze quantitative data.
Sense making	Sense making is a collaborative process/activity to extract and generate meaning from different individuals' perspectives, varied interests and experience—creating shared awareness and accelerating learning.
Statecraft 3.0	Building society's distributed capabilities and agency to transition.
System Failure	A flaw or weakness in a system or network that could be exploited to cause damage to a system.
System vulnerability	A weakness that can be exploited to gain access to a system
System(s)	A system consists of elements, interconnections, and a function or purpose. To take a systems/systemic approach to a problem means to understand the various elements, their interdependence, logic and function, how these different parts make up the whole, rather than isolating or singling out the problem.
Systems Mapping	A collaborative process of identifying and mapping elements/factors in the system, their interconnections, and functions, which allows us to discover knowledge gaps, intervention points, and insights.

Appendix

Glossary

Systems thinking	One of the main methodologies for understanding complex social problems is system theory. Systems thinking identifies recurring patterns and interdependencies found between various external and internal factors and actors within the overall system. Through this, it is used as a basis/premise for making system change.
Taxonomy	Is the practice and science of classification of things or concepts, including the principles that underlie such classification
Time Horizons	A fixed point of time in the future at which point certain processes will be evaluated or assumed to end.
Transition income investment	An equally distributed income for all actors in society to unlocking the potential of every actors participating in the transition. It can be seen as a type of UBI
Uncertainty	The lack of certainty, a state of limited knowledge where it is impossible to exactly describe the existing state, a future outcome, or more than one possible outcome.
Unknowable risk(s)	An unknowable risk is a potential threat that is not known and cannot be quantified or controlled.
Unknown risk(s)	Unknown risks are operational risks where the event that could cause a loss is known, but the probability of its occurrence is difficult to predict.
Unmeasurable risk(s)	Risks can be expressed in probabilities, i.e. the chance of being struck by lightning is 1 in 1000000. But uncertainty is fundamentally unmneasurable, as it manifests from possibilities not imagined or incorporated in our risk models.

Annex

Input to Methodological Framework

Dark Matter Labs

Reports

- Current policy sufficiency
- Current key priorities
- Integrated national data system
- Monitoring and evaluating

Mapping Strategic Documents

Prepared by: Simonida Kacarska, Sasho Kjosev, Olgica Apostolova and Elena Gavrilova, European Policy Institute (EPI)

Reports

- Report on the recommended criteria for identification and selection of strategic documents relevant to the development of the NDS for North Macedonia (March 2021)
- Economy and Public Finance Analysis (2021)
- Energy, Environment and Climate Analysis (2021)
- Good Governance Analysis (2021)
- Social Policy Analysis (2021)

Excel Sheets

- Economy and Public Finance Inventory
- Energy, Environment, Climate Inventory
- Good Governance Inventory
- Social Policy Inventory

Annex

Input to Methodological Framework

Prepared by: Neda Maleska, Center for Change Management (CCM)

Reports

- Input to Methodological Approach for the Strategic Development of the National Development Strategy 2021-2041

Resource Analysis

Prepared by: Marjan Petreski & Blagica Petreski, Finance Think (FT)

Reports

- A conceptual framework for assessment of resource capabilities for implementation of National Development Strategy of North Macedonia
- Submission of FT Report towards the “North Macedonia Common Country Analysis for the 2021-2025 United Nations Sustainable Development Cooperation Framework”, United Nations (November 2020)

Local & National Development Interplay

Prepared by: Professors Borce Trenovski & Aleksandar Stojkov, Faculty of Economics, Ss Cyril and Methodius University. Skopje

Reports

- Aligning Local and Regional with National Development Strategies: In Search of Synergies

Mapping and Engaging Stakeholders

European Policy Institute (EPI)

Prepared by: Ardita Abazi-Imeri and Stefan Ristovski

Reports

- Stakeholder Mapping Narrative

Excel Sheets

- Local Stakeholder Mapping Review of Local Consultants

Models

- Model 1: Stakeholder Mapping (Chart)

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Thank You

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