



Report International Examples of a Wellbeing Approach in Practice

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Your contact

Elizabeth Dirth

M: elizabeth.dirth@zoe-institut.de

W: www.zoe-institut.de/en

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institute for
future-fit
economies

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Authors

Jan Siebert, Lukas Bertram, Elizabeth Dirth, Jakob Hafele, Erich Castro, Jonathan Barth

Editors

Anna Molon, Coline Lavorel

Reviewers

Amanda Janoo

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Points of contact at the Ministry: Inge Schrijver, Marloes Dignum

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Content

Introduction.....	3
Methodology.....	3
Context	3
Research Methodology	4
Five Cases of Wellbeing Policies	5
1. Wales – Well-being of Future Generations Act	6
2. Scotland – Green Infrastructure Strategic Intervention (GISI).....	13
3. France – Green Budget.....	20
4. Portugal – Recovery and Resilience Plan	27
5. Canada – The Federal Sustainable Development Strategy	32
Lessons Learned and Recommendations	38
Conclusion	40
Recommended reading	41
References.....	45
Appendix.....	49
Appendix 1: Long List.....	49
Appendix 2: Interview Partners	49
Appendix 3: Additional Information about the Case Selection Methodology	49
Appendix 4: Scotland: Quality Assessment Examples Questions per Assessment Category	50
Appendix 5: Portugal: RRP Selection Criteria for Environment and Climate Action	53

Introduction

Over recent years a movement has been building among policymakers and governments around the world to begin to incorporate a wellbeing approach into policy making. This can be seen in examples such as the WEGO initiative: a collaboration of national and regional governments promoting sharing of expertise and transferrable policy practices, initiated by the Wellbeing Economy Alliance. It is also seen in local hubs springing up around the world to encourage multi-stakeholder-led policy design to build a wellbeing economy and internationally both in EU countries (e.g. France, Portugal) and around the world (e.g. New Zealand, Canada).

This momentum has been building because many governments and policy makers within governments have come to realise that the current and historic way of making, designing, and implementing policy is often not enabling progress on important social and ecological challenges, such as climate change, biodiversity loss and social polarisation. Already high economic inequalities have been further increased by the pandemic, and at the same time, environmental challenges such as climate change, biodiversity loss are accelerating. Many have identified taking a wellbeing approach to policymaking as a solution to designing policies which adequately address these social challenges. An important aspect of this policy approach is the policy design process, and in 2021 a Wellbeing Policy Design Guideⁱ was developed to outline a concept for implementing a policy design process for taking a wellbeing approach.

This report responds to the growing momentum within the Ministry of Infrastructure and Water Management (IenW) in the Netherlands to incorporate wellbeing policies and aims to provide an overview of specific cases of implementation of a wellbeing approach and to reflect on lessons learned from these approaches to support the Ministry in its journey.

The report builds on comprehensive research on examples for wellbeing policies and presents an analysis of five selected case studies. After briefly presenting the methodology, the report offers a general description on each of the selected policies and then adopts a perspective tailored to the specific circumstances of the Netherlands and its IenW. Relevant policy aspects are highlighted, and contextual factors are discussed to distil policy implications for the IenW. The selected cases have been deemed relevant sources of takeaways for both the policy design and implementation process.

Methodology

Context

This research is informed by an ongoing discussion within the IenW about the integration of wellbeing into policy. In the Netherlands, political recognition and concern for the integration of wellbeing, or directly translated, 'broad prosperity' (*brede welvaart*), has been growing over the past years. This builds on the work across different ministries within the Dutch government to integrate the Sustainable Development Goals (SDGs) that has been ongoing since 2016. Since 2018, the Dutch Central Bureau of Statistics publishes a yearly monitor on 'broad prosperity' and the SDGsⁱⁱ. This report uses the definition developed by the Central Bureau of Statistics as a starting point: *'Broad prosperity concerns the quality of life in the here and now and the extent to which this is (or is not) at the expense of that of later generations and/or of people elsewhere in the world'*ⁱⁱⁱ. In addition, further conceptualisation of wellbeing (broad prosperity) has been developed through interviews and a co-creative session within

the IenW, which also offer further identification of four elements central to IenW. The core elements that emerged from these IenW sessions conclude that wellbeing policies should include: economic, social and environmental aspects of prosperity; dimensions of "here and now", "later" and "elsewhere"; objective factors and subjective factors; and distribution issues. Finally, wellbeing policies should also deal with trade-offs. The process to define these elements took as its starting point the idea that there are planetary boundaries and basic social needs that must be respected and met, and that the economy is at service of society.

Research Methodology

Our research aims at providing the analysis of five cases of international wellbeing policies. To do this, we first developed a comprehensive list (see Appendix 1) of international policies related to wellbeing on different levels (e.g., national, regional, city). We then narrowed down on policies to focus on those based on the core elements central to the IenW's conceptualisation of wellbeing – as listed above - and on their relation to the Dutch context and the policy domains of IenW. As a consequence, cases at the city level were not considered. Cases were also narrowed down based on whether or not they had begun to be implemented and could offer outcomes to source from the experience. The selection and structuring of the case studies (see Appendix 3) was finally informed by exchanges with IenW.

After identifying five cases, complementary research was done through a full understanding of the cases themselves, as well as by insights into all the relevant aspects such as the policy design, the implementation, the impact assessment and the political context. Expert interviews have also been conducted for all cases. A list of the interview partners and their affiliation can be found in Appendix 2.

Each case presented below has been analysed using the structure of the Wellbeing Economy Alliance's (WEAll) Wellbeing Economy Policy Design Guide which has been used as a tool to reflect on the process, implementation, and impact of each of the policies assessed here. This guide has been developed by a team of international experts on wellbeing economy and the crucial role of policy design, lead and coordinated by WEAll. The framework outlined in the guide elaborates essential aspects and principles of designing wellbeing economy policies and as such provides a comprehensive tool for analysis of wellbeing policies^{iv}. At the heart of the guide is the idea that the process is central to the policy design for wellbeing policies, and adopting these principles allows this research to root itself in overarching principles rather than definitions which might be context-, culture- or political system-specific. The core aspects which form the structure of the cases are:

- **Vision:** developing a wellbeing **vision** and framework that reflect local values, objectives and contexts.
- **Implementation:** assessing and **selecting** wellbeing economy **policies** by their alignment with wellbeing values and goals; **implementing** wellbeing economy policies by empowering communities to take the lead in this transformation.
- **Strategy:** designing a wellbeing economy **strategy** that identifies the areas of economic life that are the most important for our wellbeing and outlines a plan for fostering them.
- **Policy Impact:** **evaluating policy impact** on wellbeing.

Within this structure, each of the cases are assessed using the Wellbeing Economy Policy Design Principles, and specific factors identified with IenW as important. Factors that were identified by IenW and that have been included for analysis include: context, policy design (specifically how the example addressed environmental, social and economic aspects as well as "here and now", "later and elsewhere"), implementation, impact assessment, and learnings. The Wellbeing Economy Policy Design Principles are outlined in the below table, with relevant corresponding questions.

Wellbeing Policy Design Principle ¹	Presence in Case X	Relation to IenW criteria
Goal Oriented	<ul style="list-style-type: none"> Does the policy set goals? Are they defined and evaluated? Are clear targets with clear timeframes defined? Is a monitoring and evaluation system connected to these objectives and targets to track progress towards the goal? Are the goals designed in a way that promotes the wellbeing of people and planet? 	Objective and subjective aspects of how success is defined; “here and now”, “later and elsewhere”.
Participatory	<ul style="list-style-type: none"> Are the communities that are impacted by the policy involved in the policy design process? Are other key stakeholders involved in the design process? Is the policy created through open, co-creative, and transparent processes? Does the implemented policy foster participation in policymaking in the future? 	How does the policy address distribution and inclusion issues?
Experimental	<ul style="list-style-type: none"> Is the policy designed in a way that fosters experimentation and innovation on wellbeing? Reflection and learning 	
Holistic	<ul style="list-style-type: none"> Does the policy take a holistic approach to include social, environmental, and economic aspects? Does it address trade-offs and tensions? 	Balancing environmental, social and economic aspects of prosperity. Acknowledging trade-offs
Evidence-Based	<ul style="list-style-type: none"> Is policy making informed through a systematic use of qualitative and quantitative evidence? 	Objective and subjective aspects of how success is defined
Strength-based	<ul style="list-style-type: none"> Does the policy recognise the strengths of communities, focusing on achieving the positive aspirations of society rather than purely mitigating negative outcomes? 	Contextual relevance for the Netherlands

Table 1: Wellbeing Policy Design Principles

Five Cases of Wellbeing Policies

In the following section, we present five cases of well-implemented wellbeing policies which offer relevant learnings for the Dutch context. Although the selected cases are good examples of wellbeing policies, the policy process should involve a constant iteration and learning process to ensure that it is implemented well, has intended impacts and adapts to evolving conditions and contexts.

¹ In the Wellbeing Economy Policy Design Guide there are seven elements. We have removed contextual from the list as it originally was defined in the Policy Design Guide because this aspect is addressed in the case description, analysis and recommendations more thoroughly.

We selected examples of wellbeing policies from Wales, Scotland, France, Portugal, and Canada. The presentation of the cases that follows uses a consistent structure. First, in the **case description** we briefly outline the case, its **vision** and the **implementation** process. We then describe the case's **strategy**. Next, we evaluate the policy according to the **wellbeing principles** outlined in the Wellbeing Economy Policy Design Guide. Finally, we elaborate on the **lessons learned**. It is important to emphasise that in each case we also describe the policy design process. This is to acknowledge that the way a policy is designed is essential to its success in implementation, and each of the examples requires this starting point to understand their impact. Two aspects are particularly important: first, ensuring policies are designed in relations with the context, which builds on the institutional and cultural strengths and backgrounds, is essential to their success; second, reconciling the different social, environmental and economic criteria is a significant challenge that all policy makers face and which requires appropriate governance rather than a technical fix.

1. Wales – Well-being of Future Generations Act

Case Description

In 2015, Wales adopted the Well-being of Future Generations (Wales) Act^v. This was the result of a long process working to integrating the sustainable development approach in Welsh policymaking. Already in 1998, the publication of annual reports on sustainable development was made a constitutional duty, and in 2006, the Government of Wales Act 2006 confirmed the government's duty to promote sustainable development in Wales. In 2011, sustainable development was legislated as public bodies' central organising principle. Following the national conversation "The Wales We Want by 2050" in 2014, the Well-being of Future Generations (Wales) Act was passed in 2015.

The local context for the Well-being of Future Generations (Wales) Act was significant in how the institution has developed. The new institution is often seen as the local successor to the UK Sustainable Development Commission, which was disbanded in 2012. The UK Commission had very little authority and was not enshrined in law, so it was ultimately disbanded because of a change in the UK Government. The Welsh institution was developed with significant safeguards to protect it against the same fate as the UK institution, not least of which that it is enshrined in legislature which was passed with cross-party support and the Bill elaborates significantly on the details of the functioning of the institution. Consequently, this institution is often pointed to as an exemplar for the future^{vi}.

The Act institutionalised a Future Generations Commissioner for Wales. The Commissioner is appointed by Ministers of the Government in power and is responsible for promoting sustainable development, acting as a guardian for future generations, encouraging public bodies to think in the longer term, and monitor and assess the objectives of the Future Generations Act. The Commissioner's mandate for implementing intergenerational equity is explicit in the Act which created the post, and in the positions purpose. The Future Generations Commissioner is supported by an office (Office of the Future Generations Commissioner for Wales) with a staff of approximately 25. The responsibilities of the Office of the Future Generations Commissioner for Wales include, among others, monitoring the Act, publishing annual reports, or supporting and challenging public bodies in the execution of the Act. The Future Generations Commissioner is also supported by an advisory panel which provides advice on the exercise of the Future Generations Commissioner's functions.

Vision

The Well-being of Future Generations (Wales) Act requires each public body to carry out sustainable development by setting and publishing well-being objectives designed to maximise their contribution to achieving the seven well-being goals that the Act established:

A Prosperous Wales

An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.

A Resilient Wales

A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).

A Healthier Wales

A society in which people's physical and mental wellbeing is maximised and in which choices and behaviours that benefit future health are understood.

A More Equal Wales

A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).

A Wales of Cohesive Communities

Attractive, viable, safe and well-connected communities.

A Wales of Vibrant Culture & Thriving Welsh Language

A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.

A Globally Responsible Wales

A nation which, when doing anything to improve the economic, social, environmental and cultural wellbeing of Wales, takes account of whether doing such a thing may make a positive contribution to global wellbeing.

These seven wellbeing goals link to the United Nation's Sustainable Development Goals (SDGs) as they build on the same dimensions (economic, social, environmental, political, etc.) and also incorporate a global perspective through the wellbeing goal of "A Globally Responsible Wales". In the context of the Well-being of Future Generations (Wales) Act, sustainable development is defined as "the process of improving the economic, social, environmental and cultural well-being of Wales"^{vii}.

Implementation

Next to the seven wellbeing goals which set out the vision of the Well-being of Future Generations (Wales) Act, the "five ways of working" make up the other important part of the act. They are the principles that guide the public bodies in their decision making. Public bodies shall work in these ways to ensure they take into account impact on both present and future generations. Thus, the Well-being of Future Generations Act is unique in that it does not just focus on goals but also provides guidance for the policymaking processes. The five ways of working are:

Thinking for the long-term

The importance of balancing short-term needs with the needs to safeguard the ability to also meet long-term needs.

Prevention

How acting to prevent problems occurring or getting worse may help public bodies meet their objectives.

Integration

Considering how the public body's wellbeing objectives may impact upon each of the wellbeing goals, on their objectives, or on the objectives of other public bodies.

Collaboration

Acting in collaboration with any other person (or different parts of the body itself) that could help the body to meet its wellbeing objectives.

Involvement

The importance of involving people with an interest in achieving the wellbeing goals, and ensuring that those people reflect the diversity of the area which the body serves.

Another key institution for the implementation of the act is the Future Generations Commissioner. The commissioner recommends specific policies to achieve the seven wellbeing goals, reviews how public bodies comply with the “five ways of working”, and monitors and assesses whether the public bodies meet wellbeing objectives. The policy recommendations by the Future Generations Commissioner are structured around more specific policy areas than the seven wellbeing goals, such as housing, decarbonisation, transport, or procurement. These policy areas are chosen because of their relevance for future generations and for the sustainable development of Wales.

The Future Generations Commissioner for Wales has recommended 82 “Simple Changes” to public bodies, 71% of which are already adopted or in development^{viii}. Each recommended change refers to at least one of the seven wellbeing goals and can be implemented relatively easily by the public bodies. Examples of recommended changes to public bodies include reviewing energy contracts and pension providers for divesting from fossil fuels, data sharing with other organisations and flexible working policies.

One exceptional example is the **decision to suspend all new road building projects** for the next 30 years, taken in 2021. A general discussion about transport infrastructure was triggered by the plans to build a 14-miles relief road for the M4 around the city of Newport in South-East Wales. Because the project would have costed £1.4 billion and would have crossed the precious and historic landscape of the Gwent levels, it was rejected by the government^{ix}. This triggered a broader reflection on the topic of road-building and the related benefits and drawbacks for society. With this political window of opportunity for suspending new road-buildings being open, a general suspension of new road buildings was implemented by the Welsh Government with relatively low political opposition. The Future Generations Commissioner also played a strong role in this decision by recommending in the Future Generations Report 2020 to stop the prioritisation of road building investments and to move instead to alternative solutions in transport planning^x. This decision strongly represents Wales' commitment to shift to a more environmentally friendly and future-fit transport system. To cushion potential negative effects on rural communities, this decision is accompanied by investments in local co-working hubs (as a result of the recent trend of increased remote working due to the pandemic) and the provision of electric bikes in rural areas (as part of strengthening both active travel and public transport). Hence, this decision marks a strong prioritisation of environmental and social interests and proves that a measurement of success beyond economic interests is possible.

A similar situation unfolded in Scotland, where the opposite decision was taken. The legal robustness, institutional framing, and political will that developed around the wellbeing framework in Wales made the decision to suspend road-building possible, where it was not in other places.

Box 1. Scotland's National Performance Framework (NPF) and its road-building decision

Scotland launched a National Performance Framework (NPF) in 2007 which sets out eleven “National Outcomes” (resembling the Welsh well-being goals) and 81 national indicators used to measure the progress against the National Outcomes. The National Outcomes are underpinned in statute by the Community Empowerment (Scotland) Act 2015, which places a duty on public authorities (and anybody with a public function) to have regard to the National Outcomes. In practice, it means that various organisations have aligned their strategies and plans to the NPF, ensuring they consider and progress the National Outcomes. The NPF is a reporting framework that helps understand, publicly and transparently, the progress towards important policy goals. This information on the performance of the indicators is reported regularly on the NPF's website and also feeds into regular “Wellbeing reports” which bring together existing evidence and analysis on the key issues of the NPF.

An interesting development in Scotland has revealed significant differences between the Scottish NPF and the Welsh Well-being of Future Generations Act in terms of their impact. Contrary to the decision to suspend road buildings in Wales, in 2008, the first Strategic Transport Projects Review recommended the dualling of the A9 motorway from Perth to Iverness, upgrading 80 miles (129 kilometres) of road from single to dual carriageway. Although the recommendation of the Strategic Transport Projects Review was based, among others, on a Strategic Environmental Assessment, there were strong arguments against the dualling of the A9. With a total estimated cost of £5.6 billion and the related climate effects from induced traffic, a cost-benefit analysis has shown that the total costs outweigh the total benefits¹. Nonetheless, the project has been approved and is still in progress (completion in 2025).

Comparing the Welsh Well-being of Future Generations Act with the Scottish NPF raises the question of why all new road-buildings have been suspended in Wales while a road-building project with an unfavourable cost-benefit ratio continued in Scotland.

The purpose of the NPF is to promote outcomes-based policy and to ensure public authorities have regard to the National Outcomes. The NPF does not aim to stop any policies but to ensure these take into consideration all of the National Outcomes. The recommendation of the Strategic Transport Projects Review was a decisive in the decisionmaking process. In Wales, the strong legal basis of the Well-being of Future Generations Act enabled the Future Generations Commissioner to influence the decision making process.

A central take-away from this comparison of cases is the dependence of the impact of national wellbeing frameworks on the legal basis it builds on, the national political context and the power and agency of different institutions involved in the decision. A strong legal enforceability of a wellbeing framework can enable meaningful decisions to be taken in important moments.

As another component of the Act, Public Services Boards (PSBs) were created to implement the Well-being of Future Generations (Wales) Act at the local level. The PSBs are made up of all the public bodies of a county and one representative of the civic groups. They assess the state of wellbeing in their area and set local wellbeing objectives in their local wellbeing plan to maximise the PSBs' contribution to achieve the wellbeing goals. They also monitor the fulfillment of the wellbeing plan and its objectives. However, the PSBs add to the complexity of the Act because they add another layer of institutions that are not that well known. They receive very little attention and hardly anyone knows what their targets and plans are.

Strategy

Throughout the entire process that led to the Well-being of Future Generations (Wales) Act, there was a strong focus on putting sustainable development at the heart of policy making. Only at a later stage of the process, following a public consultation called “The Wales We Want by 2050”, the framing around wellbeing was chosen since this was believed to better resonate with the public. This adaption to a more publicly accessible narrative emphasised the intention to increase the citizen’s participation and to give them the feeling that their wellbeing is the central goal of policymaking. Thus, the chosen strategic approach utilises the wellbeing narrative directly as a core framing. The policy sets out a comprehensive vision for what Wales should look like in the future through the seven wellbeing goals. By enshrining these goals in the law, this common wellbeing vision is placed at the heart of policymaking.

In terms of dealing with trade-offs between the different wellbeing goals, there is a strong focus on avoiding trade-offs and creating win-win situations. The narrative of trade-offs is seen as an instrument to protect business as usual. Overcoming trade-offs and thereby challenging the status quo therefore requires to adopt a perspective focussed on creating synergistic solutions. For instance, increasing energy efficiency of buildings can reduce greenhouse gas emissions and simultaneously lead to cost-savings for residents, thereby supporting both the environment and the economic situation of residents. However, this focus on creating synergies and co-benefits might not always be helpful, because there will always be some trade-offs where hard decisions will have to be made. For these, the Well-being of Future Generations Act does not offer a specific approach, but rather offers an all-encompassing framework within which synergistic and mutually beneficial outcomes can be designed in to policies.

Principles for Wellbeing Policies

The following table shows that the Act incorporates most of the wellbeing policy design principles. It applies the principles in five of the six categories (goal oriented, participatory, experimental, holistic, strength based). The evidence-based principle is only partially incorporated.

Wellbeing Policy Design Principle	Presence in the “Well-being of Future Generations (Wales) Act”
Goal Oriented	The policy is fully goal-oriented. The seven wellbeing goals mark the central guidance for the act. The fulfilment of these goals is monitored and evaluated by the Future Generations Commissioner, especially in the annual reports. The goals are also directed towards the wellbeing of people and the planet. Clear timeframes are not defined but this can be ascribed to the fact that the Act does not aim to achieve the goals at a certain point in time but rather to continuously embed wellbeing as a guiding principle in policy making.
Participatory	The policy is strongly participatory but still leaves some room for improvement. The extent of public participation in the design process of the Act was very comprehensive. More than 3000 people from all around the country have been engaged in face-to-face participation. The selection of the seven wellbeing goals, for example, was based on outcomes of workshops with key stakeholders from an early stage of the process. Stakeholder participation is still ongoing. For example, the people’s perception of progress towards the wellbeing goals is assessed in the annual Future Generations Reports. On the local level, however, there is room for improvement in terms of citizens’ involvement (e.g. in the PSBs).

Experimental	The policy is strongly experimental. The Future Generations Commissioner can recommend “Simple Changes” which can be adopted in an experimental and non-binding way by public bodies. The annual publication of reports by the Future Generations Commissioner allows for a timely adoption of lessons learned. In addition, the extent of participation of the public, and the long-term approach are policy innovation themselves.
Holistic	The policy takes a holistic approach. The seven well-being goals cover a broad range of aspects that are relevant for wellbeing. The entire Act aims to put them at the heart of policymaking instead of just considering them in some policy areas. Trade-offs and tensions are also addressed.
Evidence-Based	Recommendations by the Future Generations Commissioner are partially evidence-based (more qualitative than quantitative) but the experimental nature of the recommendations sometimes comes at the expense of fewer evidence.
Strength-based	The policy is purely strength-based. The positive nature of the seven wellbeing goals (i.e., the focus on what should be achieved rather than on what should be avoided) ensures a strength-based design of recommendations and implemented policies.

Table 2: Wellbeing Policy Design Principles in Well-being of Future Generations (Wales) Act

Policy Impact and evaluation

The comprehensiveness of the Well-being of Future Generations Act results in a balance of economic, social and environmental aspects.

Social aspects are central to the Well-being of Future Generations Act. They are covered in all of the seven wellbeing goals. The focus on social aspects is especially strong in “A More Equal Wales”, “A Healthier Wales” and “A Wales of Cohesive Communities”. Here issues like education, access to services, and wealth- and income inequalities are addressed.

Additionally, environmental aspects are covered extensively. In “A prosperous Wales”, environmental sustainability, a low-carbon economy and the reduction of the ecological footprint are targeted. The goal “A Resilient Wales” highlights the need to adapt to future environmental trends (e.g. climate change). The goals also take an integrated approach to policy outcomes, including environmental and social in the same goals. For example, the goal “A Healthier Wales” refers to health damages linked to air pollution and environmental disasters. The other goals address issues like the impact of wealth inequality on solving environmental problems, low-carbon lifestyles and natural resource use.

Economic aspects are also covered in many of the seven wellbeing goals. The goal “A Prosperous Wales” embraces many economic aspects such as employment, productivity and innovation. But even in other goals, the economic aspects are considered, for example sustainable employment in the goal “A Resilient Wales” or skills and job opportunities in the goal “A More Equal Wales”.

By addressing a large variety of aspects relevant to wellbeing, the Well-being of Future Generations Act adopts a systemic perspective by addressing both the “here and now” and the “later and elsewhere” dimensions of policymaking. It balances the “now” with the “later” by balancing interests of current generations with interests of future generations. The long-term perspective is inherent in the approach of factoring in the wellbeing of future generations in today’s policies. It is a key element of the legislation that must be used throughout the lifetime of a project, from its design to its review. Short-term needs shall be balanced with the need to safeguard the ability to also meet long-term needs. This feature is particularly visible in the “five ways of working” which include “Thinking for the long-term” as one of the five principles.

Moreover, the Act balances the “here” with the “elsewhere” by combining a local focus with an awareness for its international impacts. While six of the seven wellbeing goals are focussed on Wales, the goal “A Globally Responsive Wales” recognises Wales’ impact on the rest of the world. This is possible thanks to specific policy recommendations from the Future Generations Commissioner such as establishing alliances and best practice sharing with other countries who are leading on sustainability. Moreover, even the wellbeing goals that are focussed on Wales can have positive effects on the rest of the world, e.g., through decarbonisation policies.

Annual reports assessing the progress made on the wellbeing goals are published. These reports clearly monitor the implementation of policy recommendations as well as the implementation gaps. To measure the progress in terms of wellbeing, 50 wellbeing indicators assess the country’s wellbeing performance. The indicators span from the number of people living in poverty to energy efficiency of homes, and social value partnerships. All indicators refer to at least one wellbeing goal and some refer to a majority or even to all wellbeing goals. The figure below demonstrates this exemplarily for the first ten indicators.

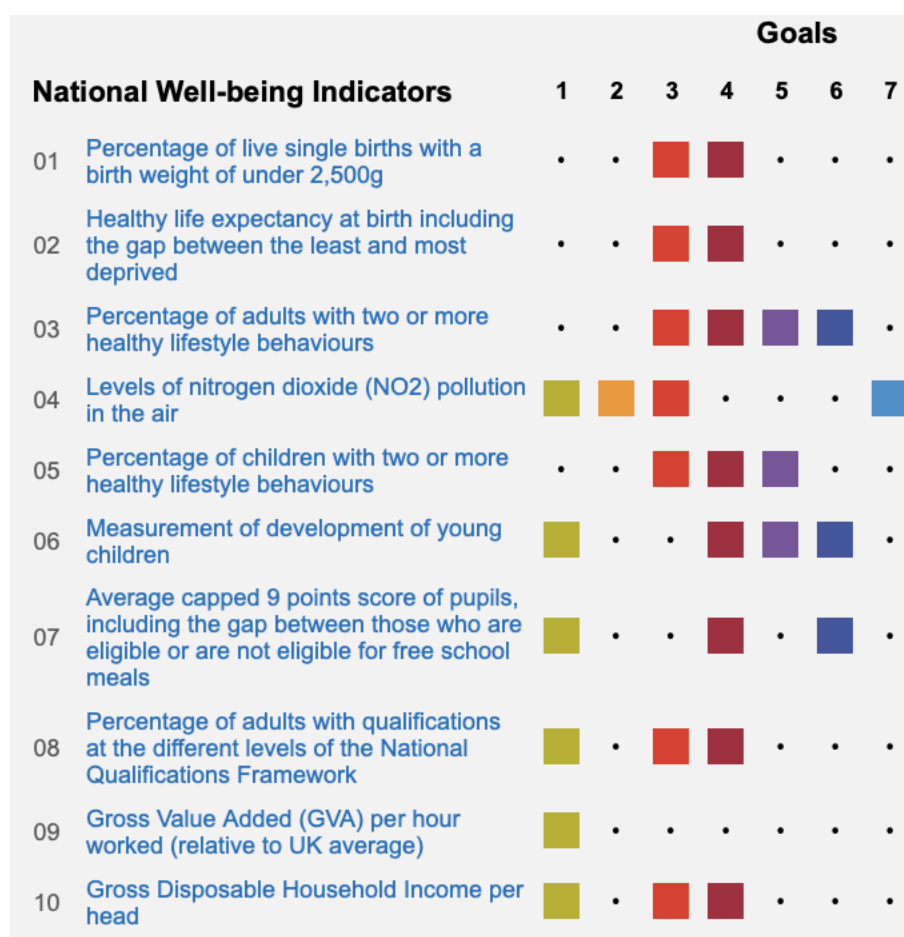


Figure 1: National Well-being indicators (Source: Government of Wales^{xi})

These indicators can be measured either quantitatively or qualitatively and compared over time. Each year the Welsh Ministers publish a report on the progress made on the national indicators. In order to establish future targets, Welsh Ministers also set expectation milestones. They can also review and amend the national indicators and milestones. Additionally, the annual Future Generations Reports also evaluates citizen’s perception of progress towards the goals^{xii}. To assess progress towards the well-being goals on a local level, the PSBs assess the state of economic, social, environmental and cultural wellbeing in their respective areas every five years.

Lessons learned

A comprehensive framework with strong enforceability delivers impact

The Well-being of Future Generations Act demonstrates that the interests of future generations can be integrated in today's policymaking, not just in separate policy decisions, but also as an overarching and universal guiding principle. Especially impressive is the strong participatory nature that allowed for broad public engagement in all relevant stages of the process. Furthermore, the Act proves that a simultaneous targeting of environmental, social, and economic interests as well as the incorporation of the "here and now" and the "later and elsewhere" dimensions is possible. By integrating these dimensions, the Well-being of Future Generations Act is an important reference point for the Netherlands' conceptualisation of wellbeing. By enshrining this strong focus on future generations in national law, the Welsh case therefore delivers an example of how the "later" dimension can be enforced substantially. The care for the design of the process, combined with the legal foundation, has led to impactful changes resulting from the policy.

Indicators and goals need to be connected

The monitoring of progress towards the seven wellbeing goals does not consider progress on the underlying 50 indicators. Including them in the monitoring would certainly strengthen their impact and the rigor and depth of understanding of progress towards these goals. Moreover, the indicators do not cover all relevant topics and some crucial aspects are missing, e.g., plastic-use reduction.

Connection between institutions and citizens is important

The strong participatory nature of this case marks a positive example of how citizens can be involved in wellbeing frameworks of national governments. Thanks to the role of the Future Generations Commissioner, this even includes reflection of future generations. On the local level, however, there is room for improvement in terms of citizens' involvement in the local delivery bodies (PSBs). A solution would be to strengthen the PSBs' visibility, e.g., by setting up citizen assemblies which collaborate with the PSBs and control them^{xiii}.

Strength of the policy evolved from national circumstances and design

The broad scope of the seven well-being goals implies that the Well-being of Future Generations (Wales) Act touches on all the relevant policy areas for the IenW but does not have a clear focus on any of these policy areas. The transferability of the policy to the Dutch context does have some limits. The Well-being of Future Generations (Wales) Act was implemented in a very long process. Its feasibility and strength were significantly increased by the fact that sustainable development was already enshrined as a guiding principle of policy in the constitution. On the level of the implemented changes, the example of the road-building suspension shows that national circumstances are highly relevant (in this case the previous suspension of the M4 motorway relief road that opened a window of political opportunity).

2. Scotland – Green Infrastructure Strategic Intervention (GISI)

Case Description

The Scottish Government's Green Infrastructure Strategic Intervention (GISI) aims at improving multifunctional green infrastructure in areas affected by multiple deprivations in larger towns and cities, through a series of funded projects. The intervention makes these areas more attractive for people to live and work in, improving people's overall wellbeing and conditions for housing and local businesses.^{xiv} Scotland's Nature Agency, "NatureScot" leads on the GISI, which is funded by the 2014-2020 European Regional Development Fund (ERDF) programme.

Vision

According to NatureScot, green infrastructure can tackle several societal challenges at once. It raises awareness^{2xv} on the value of nature, provides economic, health and recreational benefits, and enhances the overall life quality of communities. The policy focuses on deprived urban areas, turning them into areas that provide climate mitigation solutions, improve citizens' wellbeing, create resilient communities and open economic opportunities in a way that helps everyone achieve their full potential. NatureScot outlines the goals of the initiative as to create multifunctional space through the GISI that:

- improves the quality, accessibility and quantity of green infrastructure in major towns and cities
- provides increased and better opportunities for people to improve their health and wellbeing
- addresses inequalities through the creation and improvement of green space for communities in areas of multiple deprivations and communities living in proximity to vacant and derelict land
- provides increased opportunities for people to experience and value nature and promotes greater use of greenspace by local communities
- contributes to economic regeneration, providing benefits to people and businesses by investing in green infrastructure
- addresses inequalities, provides opportunities for better health and supports sustainable economic growth^{xvi}

Implementation

The Scottish Parliament passed the Community Empowerment (Scotland) Act 2015 and the Land Reform (Scotland) Act 2016, which were important political and legal foundations for developing the GISI.^{xviiixviii} In particular, the GISI aimed at aligning the emphasis on community engagement, public spaces and co-designing with the Community Empowerment (Scotland) Act. In 2015, the ERDF accepted the application of GISI and allocated the first funding in 2016.³ The implementation of the first GISI projects started in 2016, and all projects will be completed by June 2023.

Unfortunately, the Corona pandemic and Brexit have caused severe delays in implementing the projects. Seven projects have been completed so far, nine are still in progress, and one is still in the planning process. The Fernbrae Meadows^{xix} project is the only completed and evaluated project so far. Fernbrae Meadows is a newly created 20-hectare contemporary greenspace on the southeast edge of the greater Glasgow conurbation led by the South Lanarkshire Council.

² The growing awareness is also reflected in the Scottish Land Right and Responsibilities Statement. The statement is a national guideline that followed the Scottish Land Reform Act from 2016 and forces the Scottish Government to ensure that Scotland's urban and rural land contributes to inclusive and sustainable economic growth and social justice.

³ In the first batch of activities, £15 million (€19.95 million) of ERDF money was available through two competitive funds: the Green Infrastructure Fund and the Green Infrastructure Community Engagement Fund. The intervention contributes up to 40% of the costs of each project in the Lowland & Upland Scotland area and up to 70% in the High-lands & Islands. GISI delivers a total value of £37.5 million (€44.88 million) of investment throughout the programme.

Box 2. Health Benefits through “Green Prescriptions”

The Canal and North Gateway (CNG) project is part of the GISI changes a 10ha derelict site into the Claypits Local Nature Reserve (LNR). The LNR provides a nature reserve, a barrier-free path and boardwalk network, a mountain bike trail, and canal pedestrian bridges. It is developing into an essential element in a green corridor that links the deprived north of Glasgow with the city centre. Improved green spaces and greener active travel routes are proving increasingly popular through the CNG project. Daily visitors increased from January 2021 to March 2021 from 900 to 4977 per day. Since a path along the canal opened in March 2018, people counters have recorded around 30,000 visitors to the LNR in the first six months. The CNG project connects with a new health centre specialising in addiction and mental health services. The National Health Service (NHS) and the Green Exercise Partnership are partners in this project and see the LNR and canal as an opportunity for ‘green prescriptions’ to add to conventional therapy.

NHS Grampian leads a similar project in the Aberdeen region in the East of Scotland. The project funds the greening of the Foresterhill campus on the site of Aberdeen’s leading hospitals. The site has historically been developed incrementally in an uncoordinated manner, resulting in a campus dominated by vehicular circulation and infrastructure, difficult for pedestrians and covered by impermeable surfacing and lacking usable or accessible greenspace. The project aims to improve pedestrian accessibility and create ‘destination’ green spaces for patients, visitors and staff.

Strategy

Through policies such as the GISI, the Scottish Government seeks to combine social, environmental and economic criteria and no longer favours economic criteria alone. The GISI recognises that the purpose of the economy goes beyond generating growth and revenue. It acknowledges people’s need for purpose, social connections and health. By focusing on deprived and derelict areas, the policy aims to upgrade neighbourhoods that have been severely neglected in the past, increasing their educational and professional prospects, and working to address pre-existing inequalities.

According to NatureScot the GISI follows a multi-dimensional approach including three horizontal themes and five supporting outcomes from the ERDF 2014-2020 programme that cross-cut all the activities it funds.^{xx} The GISI aims to implement and achieve these themes and goals as an integral part of all its funded projects. The three themes and five outcomes can be summarised as follows:

Horizontal Theme/Outcome:	Projects consider:
Theme 1: Sustainable Development	<ul style="list-style-type: none">the impact their activities have on climate adaptation and mitigation, preserving and protecting the environment and promoting resource efficiency
Theme 2: Equal Opportunities and Non-Discrimination	<ul style="list-style-type: none">the needs of the groups at risk of discrimination, particularly the requirements for ensuring accessibility for persons with disabilities
Theme 3: Equality Between Men and Women	<ul style="list-style-type: none">gender equality and integration of gender perspectives throughout the preparation and implementation of programmes
Outcome 1: Nature, biodiversity and ecosystems	<ul style="list-style-type: none">improving habitat networks, increasing biodiversity space, helping species adapt to climate change, and creating better natural connections between urban and rural environments to redress some of the losses resulting from the heavy industrial past
Outcome 2: Environmental quality, flooding and climate change	<ul style="list-style-type: none">reducing environmental problems like noise pollution, poor air and water quality, urban heating and flooding by improving the ecosystem services.

	<ul style="list-style-type: none"> mitigate the threat of flooding through improved water management
Outcome 3: Involving communities and increasing participation	<ul style="list-style-type: none"> engaging communities in planning, managing, improving, and using their green spaces
Outcome 4: Increasing place attractiveness and competitiveness	<ul style="list-style-type: none"> increasing economic activity in most deprived communities attracting local businesses to make use of the greenspace resource empowering people to use their green spaces for work, education and leisure
Outcome 5: Improving health and well-being	<ul style="list-style-type: none"> increasing use of nature visits as “green prescriptions” as an alternative to drugs or other therapies greenspace helping patients, visitors and staff to see their hospital or medical centre as a positive place.

Table 3: ERDF Horizontal Themes and Green Infrastructure Fund Outcomes, Source: NatureScot

Table 3 describes how the GISI aims to interconnect environmental, social, and economic criteria to resolve tensions among them. For example, green areas should simultaneously mitigate climate risks, tackle social inequalities, and create education and business opportunities considering different actors and interests.

Principles for Wellbeing Policies

The GISI makes a great effort to align social, environmental and economic criteria and pursues a holistic and co-creative policy approach. The policy strongly incorporates the wellbeing policy design principles in three of the six categories (experimental, holistic, strength-based). In the remaining three categories (goal-oriented, participatory, evidence-based), the policy partially incorporates the principles as explained in the table below.

Wellbeing Policy Design Principle	Presence in the “GISI”
Goal Oriented	The policy is partly goal-oriented because it defines clear goals and targets but does not yet have a well-developed and uniform evaluation method to assess all projects within the GISI consistently. Fernbrae Meadows, the only completed project, is assessed through an individual case study. However, by 2023, NatureScot plans to assess the whole intervention by outlining the cumulative impact of all projects. NatureScot further plans to demonstrate the added value of the GISI projects and use findings to invest in other multifunctional green infrastructure in the future with partners and research institutions. ‘Grassroots’ evaluation, speaking directly to the people who live nearby, will show the impact at the community level will reveal important community and social aspects to consider in future policies.
Participatory	The policy is partly participatory. The projects that get funded go through a competitive selection process, excluding community participation in the final decision. The Scottish Government asked NatureScot to take the lead partner status on the GISI, meaning they were responsible for the decisions about which projects get funded. However, local communities were included in the design of the projects themselves. For example, in the Canal and North Gateway project, surveys were conducted to determine residents' priorities for the project. They were also able to indicate which health services should be offered in the nearby health centre to support them.

Experimental	The policy creates public space for people to flourish and try new things. The newly created space gives people the opportunity to explore nature. School classes go on excursions to explore the green area. People can use the space to grow and produce natural products. Local businesses are encouraged to develop innovative business models that incorporate nature and green public spaces. Therefore, the policy encourages people to learn and experiment to find innovative solutions to improve their wellbeing and is strongly experimental.
Holistic	The policy considers the economy as a part of and not distinct from society and the environment and is therefore strongly holistic. The dimensions of green infrastructure projects target multiple policy areas, making it relevant to the climate emergency, green recovery and Sustainable Development Goals. Improvements in green infrastructure underpin and complement activities to increase economic activity in the most deprived communities. Increasing place attractiveness and competitiveness attracts businesses, increases inward investment, raises property values, and brings visitors.
Evidence-Based	All GISI projects are assessed as part of the process and therefore must demonstrate how the project complies with the quality assessment criteria, including the three horizontal themes and five objectives (see table 3). A general post-assessment does not yet exist since most projects are not finished yet. The only finished project is evaluated through a case study and therefore is only partly incorporating the principle of evidence-based design.
Strength-based	The GISI builds on the strong historical relationship between the Scottish population and its culture towards nature. By building on that underlying identity, it is strongly strength-based.

Table 4: Wellbeing Policy Design Principles in GISI

Policy Impact and Evaluation

NatureScot **pre-assesses** projects that apply for funding through GISI. For the pre-assessment process, NatureScot asks applicants to outline tensions between economic, social and environmental criteria in their projects and how to best resolve these tensions between the criteria. NatureScot compares the different projects and only gives funding to those that best demonstrate how they can equally fulfil and harmonise the three criteria.

NatureScot also wants to conduct **post-assessments** to evaluate how well the project has been implemented and its impact. Since only the Fernbrae Meadows project has been completed so far, it is also the only project that has been evaluated in a non-representative case study. However, by 2023 NatureScot aims to develop a uniform assessment framework that evaluates all projects according to a standard procedure in line with the project objectives and outlines their cumulative impact.

Pre-assessment process and criteria that apply to all projects^{xxi}

Applying projects are screened to ensure that they:

- create new functionality in existing or new natural and semi-natural habitats and/or create or retrofit urban greening, particularly where water and urban climate management benefits are integrated, and links between greenspaces are established or re-created.
- increase participation and community engagement in greenspace. Applicants must demonstrate how they engage the local community during the application development and how they will continue to do so during the delivery of the project and beyond.

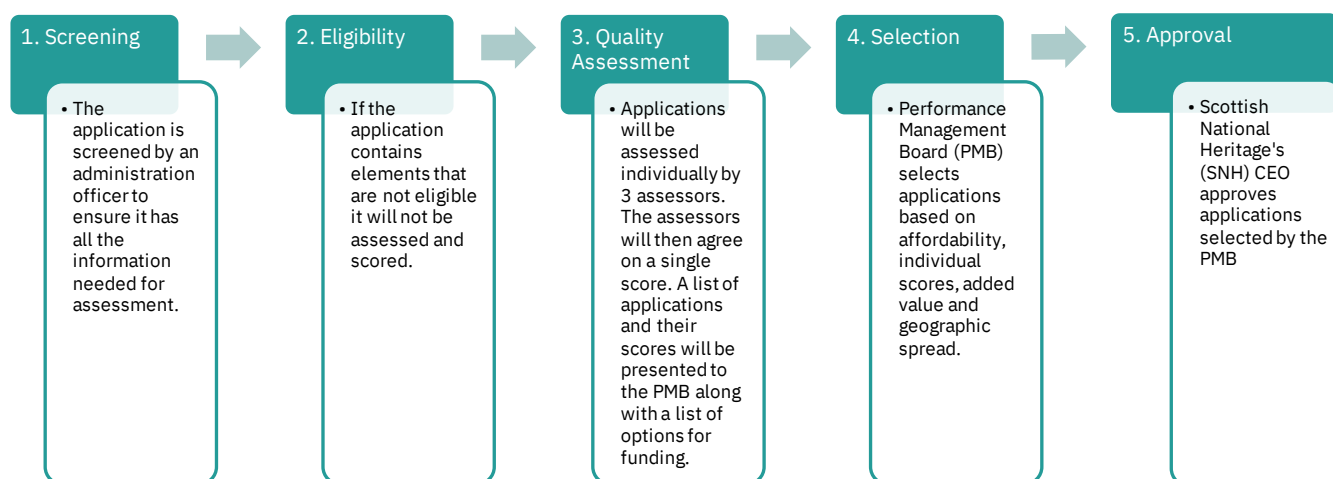


Figure 2: Application process for projects: From screening till approval (Source: NatureScot – Assessment and Scoring Guidance^{4(xxi)})

Only applications that score full marks on “Eligibility” will proceed to “Assessment and Scoring”. Possible scores are yes/no (1/0) or not applicable. The following sample questions can be asked in the ‘Eligibility’ step:

- Will the project activities occur within or benefit areas within the lower-ranked 20% of SIMD (Scottish Index of Multiple Deprivation)?⁵
- Does the application benefit an urban settlement in Scotland with a population of more than 10,000?
- Has the applicant fully demonstrated the added value of the project?

The quality assessment step considers how the projects meet defined outcomes. The more outcomes the project meets, the higher it is ranked. The outcomes are grouped under five categories⁶:

- The project in general
- Is the project needed?
- Does the project meet the defined themes and outcomes?
- Project management and deliverability
- Project costs

The project can achieve the following possible scores for each outcome:

0	no evidence / not stated
1	weak (no clear evidence)
2	clear (relevant evidence provided)
3	strong (strong evidence provided)

⁴ The Scottish National Heritage (SNH) is the lead advisory body on nature, wildlife management, and landscape management across Scotland. The Performance Management Board (PMB) meets to agree which applications will be recommended for funding. They assure the assessment process has been followed and look at the strategic fit of applications across the outcomes and added value.

⁵ The Scottish Index of Multiple Deprivation is a relative measure of deprivation across 6,976 small areas (called data zones). If an area is identified as ‘deprived’, this can relate to people having a low income but it can also mean fewer resources or opportunities. SIMD looks at the extent to which an area is deprived across seven domains: income, employment, education, health, access to services, crime and housing.

⁶ See Appendix 4 for detailed questions under each category.

Post-Assessment – Case Study on the Fernbrae Meadows project^{xxiii}

Until 2015, the site was a private golf course with no public access and minimal management for biodiversity. By 2016, it was rapidly becoming derelict with multiple incidents of vandalism, vehicle fires and antisocial behaviour. The site is adjacent to several of Scotland's most deprived communities (>10% Scottish Index of Multiple Deprivation) with associated health, income, and education issues.

The project combines the principle of "enhancing what nature would do" with direct ideas from the local community. The completed park is currently being used by 370 people per day—over triple the expected number. The Friends of Fernbrae Meadows group run weekly litter pick-ups, walking clubs, and events for biodiversity. The 50 allotments are fully let. Approximately six Primary and two Secondary schools are currently using the park for educational sessions. Natural flood management measures reduce flooding events both on-site and downstream.

The following monitoring criteria are specifically tailored to monitor and evaluate the progress and outcomes of the Fernbrae Meadows project:

- Number of hectares of green space created or enhanced in urban areas
- Improved access to better green infrastructure
- Better connected green infrastructure
- Improved health and wellbeing
- Improved quality of place through better green infrastructure
- Improvement in the perceptions of local greenspace

The Fernbrae Meadows project will use several methods to collect these measures, including Geographic Information System (GIS) mapping, footfall counters, records of events and activities, annual park user survey, and analyses of other surveys such as the Scottish Household Survey. The site has people counters set up at five key entrances/exits and has collected data since early 2019. It remains unclear how improved health and wellbeing will be measured since the mentioned indicators are not feasible to measure health characteristics.

Lessons learned

Political and legal commitment through Acts of Parliament can have a guiding function for practically implemented policies and projects. The Community Empowerment (Scotland) Act 2015 and the Land Reform (Scotland) Act 2016 created the policy and legal framework within which the GISIs operate. Crucially they made it possible for communities to own and manage land, and ensured the co-creative design of the policy and the use of public space. Scottish Land Rights and Responsibilities Statement adopts a human-rights-approach to land rights and responsibilities, and leads the way in ensuring that Scotland's urban and rural land contributes to inclusive and sustainable economic growth and social justice.

Community participation and meaningful input results in higher commitment, greater acceptance and a better project design. As an example, residents were involved during the construction of a new Health Centre, which is a part of the Canal and North Gateway project. There were surveys among the residents about what services the health centre should offer and even what design the buildings should have. Through their participation in the project process, the people could build a close connection to the health centre, ensuring that they use the services offered, as well as design a policy that targeted the resident's needs. However, it can take a long time and a substantial commitment to design policies through co-creative processes, the output ensures greater impact and policy outcomes.

Measurements of success related to wellbeing are not always quantifiable in numbers. Qualitative or a mixed-method approaches allow for a fuller picture of the impact of a policy on wellbeing to be seen and understood. The GISI comprises several, very different projects, which may all need different assessment strategies to understand the real impact of each. As an example, simply counting the number of people using parks and green spaces does not answer whether people's stress levels have been reduced and their quality of life improved. Qualitative methods, such as interviews or surveys, as well as engaging multiple institutions and types of actors, e.g., health institutions, can help understand the impact of a policy more deeply and in a way that aligns with a wellbeing approach.

Participation and co-creative design can lead to policy outcomes for ecological, social and economic factors. The GISI worked to resolve conflicts between ecological, social and economic factors by rooting projects in the local contexts. Projects were planned with and for the neighbouring residents and therefore the range of their priorities was taken into account, whether this be attention to deprived areas to improve their living conditions by using the green environment for recreational and health-promoting activities such as sports and others, green spaces enable further education and exposure to nature, or reduction of local flood risks through the renaturation of canals.

3. France – Green Budget

Case Description

In 2021, the French Government published its first “Green Budget” as an annex to the 2021 Finance Bill. This event attests to France’s strong commitment, notably under the OECD-led “Paris Collaborative on Green Budgeting” (France joined in December 2017), to integrate “green” tools into the budget process. It builds on the methodology outlined in late 2019 by two State inspection bodies—the General Inspectorate of Finance (IGF) and the General Council for Ecology and Sustainable Development (CGEDD). France is not the first country to take an interest in the environmental impacts of its budget. In the last 15 years, around 50 countries conducted experiments to evaluate budget investments according to their ecological impact.^{xxiv}

France’s “Green Budget” has four defining characteristics which make it the most comprehensive to date^{xxv}:

- providing an assessment of the “green” impact of all state budget expenditures
- covering tax revenues
- reflecting on climate change, biodiversity and the fight against pollution
- assessing expenditures favourable to the environment but also expenditures with a negative impact

The Green Budget creates the transparency necessary in order for the green transition to be monitored and understood. It also allows assessment of the consistency of public spending with a country’s environmental and climate targets, and it improves the transparency of government action for parliamentarians, civil society and citizens.

Vision

The initiative aims at assessing and driving improvements in aligning national expenditure and revenue processes with climate and other environmental goals. The French Government sees the Green Budget as a crucial step in achieving a central objective of the Paris Agreement on climate change and the SDGs aligning national policy frameworks and financial flows on a pathway towards low greenhouse gas emissions and environmentally sustainable development.^{xxvixxvii}

Implementation

The Green Budget was prepared by a working group of representatives from the Ministry of Finance (Budget Directorate, Treasury and Economic Analysis Directorate, Tax Policy Directorate) and the Ministry of Ecological and Inclusive Transition. The working group applied the methodology outlined in the 2019 IGF⁷/CGEDD⁸ report to the whole budget. This methodology rates state expenditures into five categories ranging from an unfavourable (-1) to a very favourable (+3) environmental impact covering six primary environmental goals^{xxviii}:

- the fight against climate change
- adaptation to climate change and prevention of natural disasters
- the management of water resources
- the circular economy, waste, and the prevention of technological risks
- the fight against pollution
- biodiversity, and protection of agricultural, forestry and other green areas.

The second step was to explain the methodology mentioned above to all line ministries and agencies that had to deliver for the Green Budget as an appendix to the 2021 budget bill. Next, the involved line ministries discussed with the Ministry of Finance's Budget Directorate how this methodology should be applied in preparing their 2021 budget proposals. In most cases, the analysis went down to the lower level of the French program budgeting framework, namely "actions" or, in some cases, "sub-actions". Where relevant, meetings also addressed tax expenditures. Supervised entities were also involved in this work. For example, for the "Research and Development" policy area, the classification of expenditures was developed at a very granular level with the leading state research agencies based on an in-depth discussion of their spending patterns. A final step was for the working group to conduct a consistency check before all the material was consolidated into the "Green Budget" document published as an annex to the budget in September 2020.^{xxix xxx}

Box 3. Two political developments triggered the implementation of the "Green Budget"

In 2017, when the Trump administration was opting out of the Paris Agreement, France feared that the dynamics from the Paris Conference in 2015 would lose momentum. It therefore initiated the One Planet Summit in 2017 as an additional event for the COP to resume speed. For the Planet Summit, France and the OECD worked out and launched the Paris collaborative on Green Budgeting. The initiative aims to design new, innovative tools to assess and drive improvements in national expenditure and revenue processes with climate and other environmental goals, thus aligning national policy frameworks and financial flows on a pathway towards low greenhouse gas emissions and environmentally sustainable development. A second trigger was the domestic protests by the yellow vest's movement in the second half of 2018. The government raised the carbon tax, and energy prices increased, especially hitting low-income groups. Massive public protests and civil unrest followed. As a direct reaction and to calm down the situation, the government urged to present the "Green Budget" to create transparency on the collected tax money. Plans to track public investments and use the revenues of carbon taxes already existed and could therefore be implemented quickly. Think tanks like C4IE were consulted to build the methodology and follow up on the implementation process.

⁷ French General Inspectorate of Finance (IGF)

⁸ General Council for the Environment and Sustainable Development

Strategy

Before the “Green Budget”, France had already been working on efforts to green its budget and had launched the Paris Collaborative on Green Budgeting together with the OECD. Although the introduction of the Green Budget in 2021 followed a formal procedure involving two ministries in coordination processes, the introduction was an ad-hoc reaction to the external pressure of the ‘yellow vest’ movement caused by the increase in the carbon tax. The French Government wanted to show the protesters how their taxes were spent, thus creating transparency to mitigate the protests and answer questions that emerged with the ‘yellow vest’ movement: how much does the government spend to help households and businesses reduce their greenhouse gas emissions? How much does the state collect in the name of climate? And who is exempt from this tax effort?^{xxxi}

The environmental focus of the budget is clearly on the foreground. Social, economic and environmental aspects are not balanced at the moment. Social outcomes are not incorporated. Another tension lies between environmental and economic outcomes. In particular, the aviation and heavy industries continue to receive environmentally harmful subsidies. It is feared that jobs will be lost if these subsidies were to be removed. This tension has been partially defused by, for example, French carmakers receiving state aid due to the Corona crisis in exchange for the requirement to produce more electric cars.

As the Green Budget is still very new and iterative, further improvements are expected in the coming years. The French Government believes that the Green Budget was a very complex pioneering effort and that further improvements to align environmental, social and economic outcomes can only be implemented step by step, with help of Think Tanks and NGOs. However, despite some proposals from NGOs on expanding the French Green Budget into an SDG budget, there is yet no strategy and no timetable on how and when this will be implemented.

Principles for Wellbeing Policies

Evaluating France’s Green Budget according to the wellbeing principles shows that the policy is not yet pursuing a wellbeing approach because it specifically focusses on environmental and climate aspects. However, this approach could be broadened out to be holistic, by, for example, including social aspects, as is explored in Ireland and elaborated in Box 4. In addition, the policy was not created with participation from impacted groups but rather a political priority driven policy, exclusively focusing on environmental and economic outcomes rather than a broad wellbeing approach. As the Green Budget policy is an iterative process, there are possibilities to improve and integrate this holistic approach in the future. That said, the introduction of the Green Budget is a bold, pioneering achievement with significant leverage to drive change. It could serve as an example for other countries to utilise this approach in their national budgets and accounting.

The policy is consistent with the wellbeing policy design principles in two of the six categories (experimental, evidence-based). In three categories it only partially incorporates the principles (goal oriented, holistic, strength-based). However, in one category the policy does not incorporate the principles at all (participatory).

Wellbeing Policy Design Principle	Presence in the “Green Budget”
Goal Oriented	France’s Green Budget is only partly incorporating the goal-oriented criteria because only the wellbeing of the environment is taken into account, but not that of the people. The Green Budget approach follows France’s National Low-Carbon Strategy (SNBC), France’s ‘net zero emission’ goal in 2050 and

	the Paris Agreement. The Green Budget has the function of a policy tracker and can therefore monitor the progress towards the defined goals.
Participatory	The top-down approach of the Green Budget policy did not leave space for a participatory process. While the policy may have been a reaction to civil society movements, they were not included in the process. The Green Budget was a reaction to civil unrest by the 'yellow vests' movement to create transparency about the newly collected carbon tax that led to an increase in energy and petrol prices hitting low-income groups. The only participation was in a technical sense where think tanks were included to work out the technical details rather than make suggestions for change.
Experimental	The policy creates public space for people to flourish and try new things. The newly created space gives people the opportunity to explore nature. School classes go on excursions to explore the green area. People can use the space to grow and produce natural products. Local businesses are encouraged to develop innovative business models that incorporate nature and green public spaces. Therefore, the policy encourages people to learn and experiment to find innovative solutions to improve their wellbeing and is strongly experimental.
Holistic	At the moment, the Green Budget only takes into account environmental criteria and no social criteria. However, the French Government tries to find interfaces between social and environmental criteria that may be included in the Green Budget assessment in the future. Therefore, the policy is only partly holistic. The French Green Budget recognises that the economy is part of and not distinct from the environment. The link between economy and society has not yet been established. A counterargument for the inclusion of social criteria is that expanding the exercise to SDG budgeting will add much complexity, and its objective may lose clarity. NGOs have suggested how to include social criteria into the "Green Budget". However, it has not yet been decided if the budget will also expand to include social aspects.
Evidence-Based	The policy systematically adopts both qualitative and quantitative evidence and is strongly evidence-based. It is challenging to develop a framework that assesses all expenses with a standardised methodology because of how expenses are classified on the basis of subjective decision-making by different departments and ministries. The Green Budget policy is assessed with a more practical approach which reduces complexity and makes it easier to prepare the expenses for the finance bill in Parliament. An analysis is carried out on a case-by-case basis, meaning that some expenditures are evaluated through quantifiable indicators while others are assessed through qualitative assessment or case studies.
Strength-based	The policy is partly strength-based, because it reflects the strength of the government to take climate change seriously and take governmental action by being fairly innovative in adopting new governance practices. However, the Green Budget neglects the strength of French culture, which is that people generally value an egalitarian society.

Table 5: Wellbeing Policy Design Principles in the Green Budget

Box 4. Ireland’s Social Impact Assessment would be a beneficial addition to the process to ensure the environmental and social aspects are considered together in budgeting. The Irish Social Impact Assessment (SIA) is an analytical framework that examines the social impact of budgetary policy decisions. The framework takes account of the impacts of existing government expenditure and provides scope for incorporating the impact of changes to expenditure on public services over time. It complements existing budgetary impact assessment exercises conducted by the Departments of Public Expenditure and Reform (including Equality Budgeting), Finance, Employment Affairs and Social Protection, and externally by the Economic and Social Research Institute (ESRI). A combination of the French Green Budget and the Irish Social Impact Assessment might follow a holistic wellbeing approach. It can be an incentive for other countries to develop synthesis and learn from the French example of the “Gilets Jaunes”. Thus, all public investments could be assessed for environmental and social standards in a wellbeing budget.

Policy Impact and Evaluation

This section explains the evaluation method, the used criteria to classify the different budget expenditures and the assessment results more in detail. In the Green Budget Assessment, more than 250 budget measures have been identified: expenditures, tax exemptions, taxes, all of which have a significant influence—upward or downward—on the six environmental criteria (climate mitigation and adaptation, land use, management of water resources, waste and biodiversity) that form the basis to classify the expenditures and taxes in green, neutral or brown. There is no uniform evaluation procedure for the different budget measures. Each expense is classified as green, neutral or brown based on individually accessible quantitative or qualitative data and case studies. Evaluating all expenses and taxes with a standardised evaluation method would be implausible.

Categories	Description of Expense	Example
“Green”: favourable to the environment according to at least one of the six criteria above	Expense has a primary environmental objective or directly produces an environmental good or service	Investing in solar and wind energy parks
“Mixed”: favourable to the environment according to one of the above-mentioned criteria but unfavourable according to another one	Expense with a favourable impact yet contradictory effects (risks on the long-term like technological lock-in)	Investing in nuclear power plants
“Neutral”: does not hinder or improve the current state of the environment	No significant effect of the expense or unavailable data/information to determine the environmental impact	Teachers’ salaries
“Brown” or unfavourable	Expenses have a direct negative impact on the environment or encourage behaviours that harm the environment	Subsidies for coal power plants or on kerosine for airlines

Table 6: State expenditure ranking categories^{xxxii}

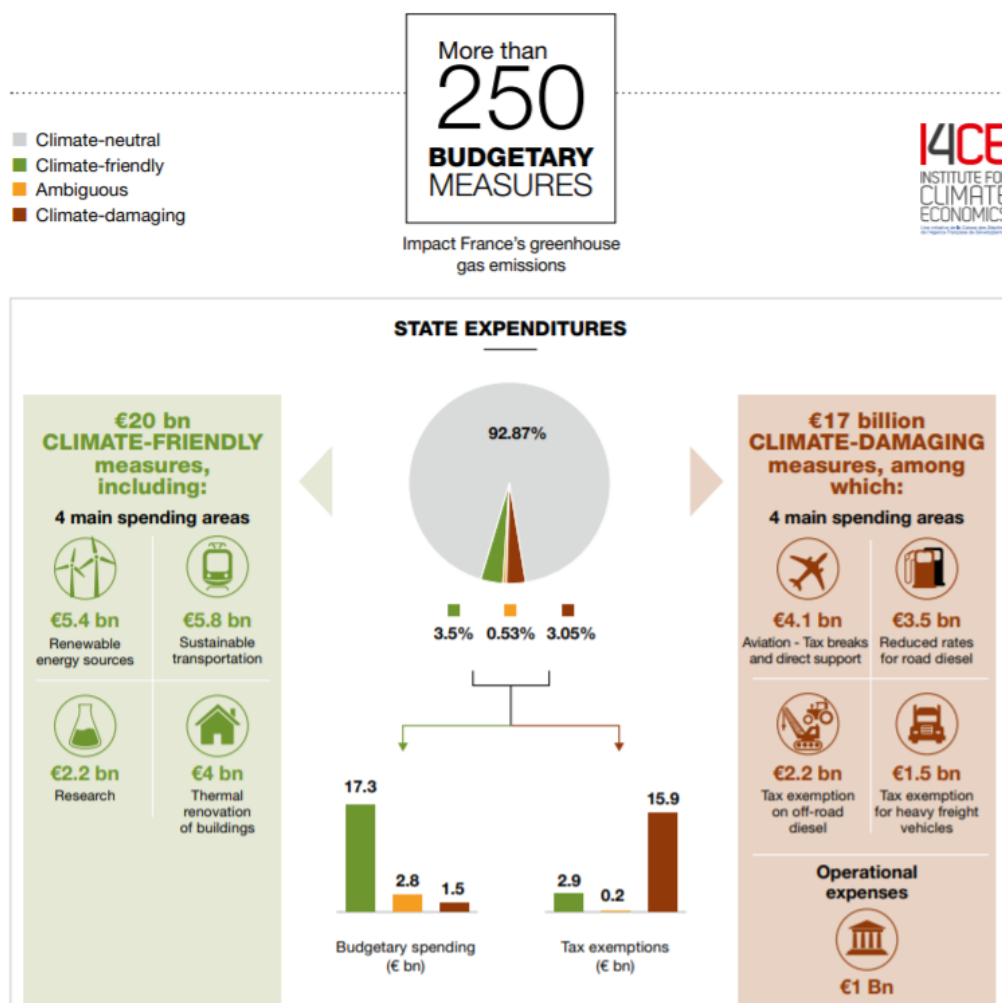


Figure 3: Share budgetary spending of Green Budget (Source: I4CE^{xxxiii})



Figure 4: Share tax Revenues of Green Budget (Source: I4CE^{xxxiv})

The first “Green Budget” assessment of 2021 concludes that out of a total of €574.2 billion in budgetary^{xxxv} spending and tax expenditures, 92.87 per cent have no impact on one of the six environmental categories (climate mitigation and adaptation, land use, management of water resources, waste and biodiversity). Only 3.5 per cent have an impact on at least one out of the six environmental criteria. 0.53 per cent of the expenditures are favourable to the environment on at least one criterion but have adverse effects on one or more other criteria. Another 3.05 per cent of the expenditures are unfavour-

able on at least one environmental criterion without having any favourable impact. Of the taxes collected, 7 per cent are climate-friendly. This also includes the carbon component of fuel, which was much discussed during the ‘yellow vest’ movement.

The Green Budget is also connected to the French National Recovery and Resilience Plan, which includes many green expenditures, as required by the EU COVID-19 recover instrument, the Recovery and Resilience Facility (RRF). The RRF required 37% of investment to be green, however some external analysis has concluded the French plan fell short. Therefore, the question of the impact of Green Budgeting on increasing green expenditure or reducing brown expenditure is still open and may signal that many reforms will be needed in the future to make France’s budget greener. As social outcomes were not defined and examined in the Green Budget and are not shown in the analysis, it is not possible to say what percentage of French Government spending is socially favourable.

Lessons learned

Budgeting can be a significant lever for change.

Incorporating the environmental dimension into fiscal frameworks, including the annual budget evaluation of tax and expenditure policies, allows assessment of the consistency of public expenditure with a country’s environmental and climate targets. It improves the transparency of government action for parliamentarians, civil society, and citizens regarding climate action. Moreover, Green Budgeting means better planning and identifying barriers in specific sectors and technical assistance needs. National capital raising plans could explore financing gaps and suggest to which sectors financial resources should be redirected. Furthermore, Green Budgeting contributes to the capacity development of administrations, finance and budget specialists that have not got in touch with environmental topics.

The Green Budget is a policy tracker and should be combined with a concrete roadmap and defined targets. The Green Budget can create transparency without actively implementing binding rules for more green investment. Getting the political will and political frameworks to achieve the climate goals requires a combination of a roadmap with compulsory goals; for instance, by 2035, 80 per cent of budget spending must be “green”. Further, define which sectors should contribute to this amount of green spending and how. This is also connected to the goal-orientation aspect of the design principles.

Lack of participatory processes in policy design risks creating negative impact and threatening legitimacy and acceptance of change.

In France, the introduction of the carbon tax led to massive civil unrest. As a reaction, the government introduced the Green Budget to create transparency and understanding of the carbon tax. However, both policies were designed without input or participation from citizens, especially affected groups. While the measure has created transparency for spending and budget decisions, it hasn’t solved the root source of the problem: lack of meaningful input, participation, and consideration of impacted groups. An integrated approach and dialogue with all the actors would have likely increased public acceptance of the initial policy, potentially making the Green Budgeting that followed even more impactful.

A wellbeing approach requires more than environmental criteria.

A clear weakness of the Green Budgeting is that it does not include social considerations. There has been a discussion about shifting to a more coherent approach, for example using the SDGs. However, because outlining the green impact of every state expenditure was already a very complex exercise, policymakers involved raised the concern that an extension of Green Budgeting to SDG budgeting will make the exercise even more complex and thus develop into a technocratic exercise. They fear it will no longer be understood by politicians and the public and may lose its political meaning and influence. However complex, the concern is still important and additional frameworks have been developed that

may offer an alternative framework, for example, a report on 10 new indicators of prosperity^{xxxvi} (*Nouveaux indicateurs de richesse*) or the combination of a social framework with the green framework, such as the Irish Social Impact Assessment (Box 4)⁹.

France's Green Budget needs further technical improvement.

The scope of the budget analysis remains too narrow. The discussion around the budget should not be limited to flagship projects like the carbon tax or tax exemptions for aircraft kerosine but be inclusive of all spending. This strategic choice, for instance, excludes analysing satellite accounts used for the supply of petroleum products to the state and the army. It can lead to analysing only the expenditures of the state towards its operators (such as the National Forest Agency or the Water Agencies) and not all the expenditures of the operators. In addition, operating expenditures of ministries (heating, travel, lighting, maintenance), the state's real estate assets, and local authorities' allocations are close to 50 billion euros and are not yet included in the Green Budgeting exercise. "Unclassified" fiscal expenditures are also currently excluded from the analysis. Tightening the criteria for classifying budget expenditure would improve the impact of the Green Budget. A Green Budget with a broader scope of analysis would significantly strengthen the process.^{xxxvii}

4. Portugal – Recovery and Resilience Plan

Case Description

The Recovery and Resilience Plan (RRP) of Portugal provides an interesting example for the integration of Circular Economy (CE) principles in a comprehensive national agenda. The RRP includes many different components that range across different sectors. The Portuguese RRP represents a remarkable example of how CE principles can be applied in a variety of different sectors which is the reason why this specific case was selected.

Developing an RRP is the condition for the EU Member States to access the loans and grants that the EU is disbursing through its NextGenerationEU recovery fund. In the RRP, Member States lay out how they will use the provided financial resources. Incorporating CE principles in the RRP helps achieving the requirements to direct at least 30% of the funding to green purposes and to comply with the do no significant harm principle which the European Commission applies to all RRP (no reform and investment can do any significant harm to the environment)^{xxxviii}. The Portuguese RRP comprises 20 different components which are classified into the three dimensions resilience, climate transition and digital transition. CE principles can be found in different components of the RRP of Portugal, such as Component 9: Water Management, Component 11: Decarbonisation of Industry, Component 12: Sustainable Bioeconomy and Component 13: Energy Efficiency in Buildings.

Vision

The vision behind the NRRPs comes from different perspectives: from the EU level on the one hand, and from the national level on the other.

⁹ Since 2015 the Prime Minister has been presenting a yearly report on France's performance against 10 wealth and well-being indicators (*Nouveaux indicateurs de richesse*). These indicators include Economic development indicators such as FDI (OECD) and Doing Business (World Bank); social progress indicators, such as healthy life expectancy at 65 by gender (OECD), percentage of 18-24-year-olds with no qualification who are not in training (France Stratégie/Eurostat) and poverty gaps (World Bank); and Sustainable development indicators such as greenhouse gas emissions per unit of GDP (European Energy Agency/Eurostat). However, the report has so far been more of a marginal note and has hardly any weight in political practice or on budget planning.

On the EU level, NextGeneration EU is portrayed as “a once in a lifetime chance to emerge stronger from the pandemic, transform our economies and societies, and design a Europe that works for everyone”^{xxxix}. This includes a particular strong focus on the natural environmental (e.g., climate neutrality by 2050) and on the digital transition.

From a national perspective, the guiding vision is the Portugal 2030 Strategy^{xl} which establishes a medium-term path for the economic, social and environmental development of the country until 2030. By mitigating the economic and social impacts of the crisis and providing reforms and investments, the RRP is seen as a crucial instrument in order to achieve this vision.

Implementation

The Portuguese RRP was endorsed by the European Commission in June 2021. The implementation of the policies in the RRP is currently ongoing. As of December 2021, €2.2 billion out of the total €16.6 billion have been disbursed to Portugal by the EU Commission^{xli}. The execution period of the plan ends in 2026.

To support the vision outlined in the Portugal 2030 Strategy, different reforms and investments are outlined in the RRP. Many of them come with a focus on CE principles which are particularly strong in the following components:

Component 9: Water Management

The Algarve Regional Water Efficiency Plan will promote the use of treated wastewater, strengthen the governance of water resources and reduce water losses in both the urban sector and in agriculture.

Component 11: Decarbonisation of Industry

Promoting the circular economy plays a decisive role in the decarbonisation of the industry, for example by using waste as an input for fuels.

Component 12: Sustainable Bioeconomy

The Sustainable Bioeconomy Plan aims at building a sustainable bioeconomy with CE principles at its core in the textile sector, the footwear sector and the natural resin sector¹⁰. The Plan promotes business models that are based on the reprocessing of recycled raw materials, the recovery of by-products and better waste management.

Component 13: Energy Efficiency in Buildings

In the energy renovation wave that is carried out to increase the energy efficiency of buildings, the incorporation of biomaterials, recycled materials, natural-based solutions is promoted.

Strategy

The Portuguese RRP is used as one of the most important instruments for the implementation of Portugal's vision, the Portugal 2030 Strategy. The reforms and investments that are enabled by NextGenerationEU are seen as a crucial lever to achieve a strong economic, social, and environmental development of the country until 2030. The Portuguese RRP explicitly lists the reforms and investments that are directly aligned with the Portugal 2030 Strategy.

A particular strong focus of the Portuguese RRP lies on the integration of CE principles. These are integrated in the selection criteria that the government has set out for the selection of reforms and

¹⁰ These sectors have not only been selected because they show great potential for improved environmental performance but also because they are employment-intensive, face competition from Europe and Asia, and have been hit hard by the crisis.

investments on Environment and Climate Action to be included in the RRP. The amount of different criteria that refer to CE principles demonstrate the comprehensive incorporation of CE principles in the Portuguese RRP:

- the degree of alignment with the principles of a sustainable bioeconomy
- the degree to which innovation is targeted towards the integration of biobased materials and towards increasing circularity in production processes along value chains
- the expected impact on increased valorisation of biomass, by-products and agro-industrial waste
- the expected impact on contribution to greater resource efficiency
- the expected impact on technologies for tracking the productive process demonstrating the sustainability of processes and products; namely, incorporated materials and energy, processes used, and others^{xlii}

However, the criteria that are related to CE principles only account for a part of the total criteria. In total, the selection of reforms and investments builds on 14 different criteria (see Appendix 5 for full list) which are classified in the categories of relevance, implementation, and impact. Other examples of criteria (not related to CE) are whether the reforms and investment comply with the objectives of European and national policies, how they can mobilise the required resources or what their expected impact on the digital transition is.

This framework shows that the Portuguese RRP deals with trade-offs comprehensively. All potential reforms and investments are assessed by this framework in terms of their relevance, implementation, and impact for the economic, social, and environmental dimensions. By assigning scores for each of the 14 criteria and calculating an average score for each reform and investment, the framework selects the reforms and investments that handle trade-offs best¹¹. Only reforms and investments that achieve a high score, and thus respect all relevant dimensions, are adopted in the RRP. However, this does not mean that the Portuguese RRP does not include reforms and investments with strong trade-offs. For example, the Crato multi-purpose hydroelectric plant mentioned in component 9 (water management) of the RRP will contribute to the intensification of agriculture and generate further pressure on water resources.

Another strong feature of the Portuguese RRP besides the integration of CE principles is the consideration of social aspects, especially gender aspects. Many reforms and investments that build on CE principles also include a social perspective, for instance by providing the skills needed for the transformation of the economy. Moreover, gender equality is among the guiding principles that all reforms and investments must comply with¹². Thus, no reform or investment of the Portuguese RRP can contradict the goal of gender equality.

Distributional effects occur within different geographic regions within Portugal. With most reforms and investments targeting specific regions, other regions are left out and do not receive similar investments. While it is sensible that the RRP supports regions that need it most (e.g., investments for mitigation and adaption to water scarcity in the Algarve region), the Portuguese RRP does not come with an overarching strategy how to ensure equal support for all regions.

¹¹ The scores for compliance with the criteria range from 1 (weak) to 5 (excellent). Since there is no weighting of the criteria, the assumption here is that all 14 criteria are equally important.

¹² The guiding principles are transparency, accountability, cost efficiency, governance and sustainable development, and gender equality and equal opportunities.

Principles for Wellbeing Policies

The EU Commission has set requirements that member states must respect in their RRP. These requirements are not focused on wellbeing, but rather on the priorities like the green transition or the digital transition¹³. While the RRP are therefore not directly framed as wellbeing policies, the strong incorporation of CE principles and social aspects in the Portuguese RRP ensures the compliance with at least some of the wellbeing policy design principles. The Portuguese RRP strongly incorporates four of the six wellbeing policy design principles (experimental, holistic, evidence based, strength based). The other two principles (goal oriented, participatory) are only partially incorporated.

Wellbeing Policy Design Principle	Presence in the Portuguese RRP
Goal Oriented	Goal orientation is not a central feature of the policy. The Portuguese RRP is not as clearly framed around goals as other wellbeing policies. While the vision of the Portugal 2030 Strategy serves as a goal for the RRP, the plan itself is structured around the different components but not around visible goals. There is no overarching monitoring and evaluation system for the RRP because different ministries are responsible for the different reforms and investments. The time framing is clear as the execution period ends in 2026.
Participatory	The policy is only weakly participatory because direct involvement of citizens has not been enabled. The RRP was designed mainly by the central government administration but also by consulting other stakeholders such as business associations, the Portuguese environmental agency, or renewable energy associations. However, more direct participation of citizens was not enabled.
Experimental	The policy is experimental. The strong integration of CE principles can be seen as an experimental feature of the plan. Such a strong focus is not known from other national agendas of similar importance. Implementing the reforms and investments related to CE until 2026 will enable timely reflection and learning.
Holistic	The strong focus on CE principles and social aspects makes the policy holistic. The inherent strength of this case is the holistic approach of integrating CE principles in a large variety of components. Especially the combination of a strong focus on CE principles and the incorporation of social aspects provides for a holistic consideration of the economic, environmental, and social dimensions. Trade-offs are handled through the criteria scoring system (see Strategy chapter).
Evidence-Based	The policy is strongly evidence-based. The decision to extensively incorporate CE principles in the RRP was informed by quantitative and qualitative evidence on the potential of CE for contributing to Portugal's vision.
Strength-based	The policy is strength-based. Component 12 (Sustainable Bioeconomy) of the RRP marks a strength-based approach since it focusses on the strengthening of CE principles in three sectors in which the Portuguese Economy is particularly strong (textile, footwear, natural resin). In general, the strong focus on

¹³ The Recovery and Resilience Facility as the key instrument of NextGenerationEU is structured around six pillars: 1) green transition 2) digital transformation 3) smart, sustainable and inclusive growth 4) social & territorial cohesion 5) Health and economic, social and insitutional resilience 6) policies for next generation.

CE principles in the RRP can be considered as a strength-based approach because it aims at a beneficial transformation of the economy instead of focusing only on the prevention of damages.

Table 7: Wellbeing Policy Design Principles in Portuguese RRP

Policy Impact and evaluation

The Portuguese RRP, especially its focus on CE principles, impacts on a variety of dimensions with wellbeing relevance. Through the large number of different components of the plan, the economic, environmental, and social dimensions are all impacted. The impact on the environmental dimension is particularly strong, not just because of the CE principles but also because of the ‘do-no-significant-harm’ principle. However, despite this strong focus on the environmental dimension, the Portuguese RRP does not neglect the social dimension either, as it includes social aspects in many components of the plan and considers gender equality in its guiding principles.

The inherent focus on the recovery from the pandemic ensures that the RRP does not only focus on the “now” but also on the “later”. By aligning the reforms and investments with the Portugal 2030 Strategy, the perspective is targeted not only on the present, but also on the upcoming years of the current decade. However, as a purely national plan, the RRP only has a focus on the “here” and not on the “elsewhere”, although the environmental benefits from CE policies might also accrue to other parts of the world.

There is no overarching impact assessment tool. The main reason is that all the different reforms and investments from the different components are carried out by different responsible authorities, e.g., by the national ministries. While there are separate assessment plans stemming from different sources like the Circular Economy Plan or the Sustainable Bioeconomy plan, no uniform assessment tool has been agreed on. Especially for reforms and investments for which trade-offs occur, an independent and holistic assessment, for example an environmental impact assessment, would be of great importance.

Lessons Learned

Circular Economy can drive economic transformation

The Portuguese RRP proves that CE principles can be incorporated holistically in a broad national agenda. With the strong environmental and economic benefits they induce, CE principles can be utilised for promoting a sustainable transformation in sectors of large national importance. Importantly, they can be used as a guiding framework, rather than just being seen as a technical niche. To bring in the social dimension, this can be accompanied by a strong perspective on social aspects, especially gender equality.

Holistic assessments needed

Although CE principles can provide a basis for environmentally friendly economic activities, thorough scrutiny, monitoring and assessment are still needed. Trade-offs occur not just between dimensions (environmental, social, economic) but also within dimensions (e.g., conflict between pressure on water resources through hydroelectric plant and water needs for agriculture). A holistic assessment of wellbeing policies that considers trade-offs both between and within dimensions is therefore needed.

Positioning Wellbeing Policies centre stage

In comparison to other examples in this report, the Portuguese RRP comes with some gaps in the implementation of wellbeing principles and a wellbeing approach (see table 7). However, it is important to emphasise that this case was chosen due to the RRP's importance for all EU Member States because of the scale of financial resources available and the potential for economic transformation they bring. Comparing this case to the others, a trade-off occurs between the impact and the feasibility of wellbeing policies depending on the level of implementation. Designing very strong wellbeing policies, in particular adhering to a wellbeing policy design process, might be more feasible for smaller projects (e.g., projects with limited financial resources rather than for an economy-wide national recovery plan), and on a smaller scale (e.g., local level instead of national level). The Portuguese RRP offers an important reflection that the scale increases the challenge of a wellbeing approach and design process.

5. Canada – The Federal Sustainable Development Strategy

Case Description

The Federal Sustainable Development Strategy of Canada (FSDS)^{xliii} is a political framework that focuses on environmental priorities, actions, and results on the federal level. The FSDS integrates sustainable development into decision-making at the Canadian federal governmental level, highlights intergenerational equity, openness and transparency, as well as the necessity to involve indigenous communities.^{xliiv} The FSDS is enshrined in law with the Federal Sustainable Development Act, the environmentally focussed Sustainable Development Goals (SDGs), and targets and actions concerning environmentally sustainable development in Canada. The FSDS 2019–2022 strategy centres on 13 goals that primarily reflect the environmental dimensions of the SDGs.^{xliv}

Vision

The FSDS defines sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. From an environmental perspective, this means achieving low-carbon, environmentally responsible economic growth, maintaining and restoring ecosystems, and ensuring that people flourish in clean and healthy environments.^{xlvi}

Implementation

The Sustainable Development Act was implemented in 2008, and the first Sustainable Development Strategy followed in 2010.^{xlvii} The Act was then amended in 2020. The Canadian Ministry of Environment “Environment and Climate Change Canada” (ECCC) has a crucial role in implementing the Sustainable Development Act and its amendments. It houses the Sustainable Development Office (SDO), which is responsible for monitoring progress on implementation of the FSDS. The SDO also coordinates the development of the strategy that cuts across many departmental and agency mandates. The Act and the FSDS reflects this, requiring agencies named in its schedule to prepare sustainable development strategies that comply with and contribute to the FSDS. The role of departments and agencies also includes^{xlviii}:

- working collaboratively with Environment and Climate Change Canada¹⁴ to develop the FSDS
- integrating environmental and sustainable development considerations into policy, plan and program development through strategic environmental assessments
- preparing sustainable development strategies containing objectives and plans within their mandate that contribute to the FSDS

Departments and agencies across government contribute to implementing the strategy and achieving results. The FSDS continues to support Canada's overall response to the 2030 Agenda and to address 13 policy areas, outlined in Table 8, with equal priority.

Goal	Target within the Goal
Effective Action in Climate Change	Contribute to limit global average temperature increase to 1.5 degrees Celsius
Greening Government	Transition the Government of Canada to low carbon, climate-resilient, and green operations
Clean Growth	Promote clean technology industry in Canada to contribute to clean growth and the transition to a low-carbon economy
Modern and Resilient Infrastructure	Modern, sustainable, and resilient infrastructure to support clean economic growth and social inclusion
Clean Energy	Provide affordable, reliable and sustainable energy for all Canadians
Healthy Coasts and Oceans	Coasts and oceans support healthy, resilient and productive ecosystems
Pristine Lakes and Rivers	Clean and healthy lakes and rivers to support economic prosperity and the Canadians' wellbeing
Sustainably Managed Lands and Forests	Lands and forests to support biodiversity and provide a variety of ecosystem services for generations to come
Healthy Wildlife Populations	All species have healthy and viable populations
Clean Drinking Water	All Canadians, and in particular indigenous communities, have access to safe drinking water
Sustainable Food	Innovation contributes to a world-leading agricultural sector and food economy
Connecting Canadians with Nature	Inform Canadians about the value of nature, experience nature first-hand, and actively engages in its stewardship
Safe and Healthy Communities	All Canadians live in clean, sustainable communities that contribute to their health and wellbeing

Table 8: 13 Goals of the Federal Sustainable Development Strategy (Source: Federal Sustainable Development Strategy 2019-2022^{xlix})

Public consultation is an integral part of the FSDS development under the Act. Each FSDS draft must undergo a public consultation period of at least 120 days before being finalised. The public consultation results inform the final strategy and are summarised in a publicly available synthesis report. In 2018, the government released the FSDS 2019–2022 draft for public comment. According to them,

¹⁴ Environment and Climate Change Canada (ECCC) assesses the environmental effects of new policies, plans and programmes. When a proposal is approved or announced, ECCC posts a public statement on the assessment results. The reports evaluate whether environmental aspects were considered.

300 written submissions and more than 1000 people attended webinars and presentations on the FSDS. In total, the communication channels reached 250,000 people.

Box 5. The Greening Government Fund:

The Greening Government Fund is a specific initiative within the “Greening Government” policy goal (see table 8). Government departments and agencies that create above one kiloton greenhouse gas emissions per year resulting from air travel will contribute annually to the Greening Government Fund. The money generated through the fund will support projects that allow departments to explore innovative approaches to reducing greenhouse gas emissions. For the Greening Government Fund, especially air travel was chosen since it is one of the major areas contributing to greenhouse gas emissions within the Canadian Government next to heating buildings and its car fleets. Departments and agencies are required to offset their travel as a best practice, for one thing, and also contribute to a central pool. The collected money is put back into initiatives that will be hard to realise otherwise and cut greenhouse gas emissions within the government of Canada facilities. One project that received funding in the 2019/2020 fiscal year is a state-of-the-art CO₂ cooling system and recover the heat produced in a planned server room renovation. The project received \$100,000 over one year from the fund.

Strategy

The FSDS has an iterative process where each FSDS is valid for three years and at the end of the three years, a new FSDS with updated objectives will come into force. Regular updating of the strategy allows to reflect and integrate new priorities. The FSDS 2016–2019 focused on the environmental SDGs and recognised the critical roles of regional governments and indigenous communities. The current FSDS 2019–2022 is now promoting clean growth, ensuring healthy ecosystems, and building safe, secure and sustainable communities¹. The recent amendment (2020) of the Federal Sustainable Development Act has set new strategic priorities for the subsequent FSDS 2022–2025 process to shift priorities to make it more integrated and holistic. The integrated and holistic approach of the next FSDS 2022–2025 is structured as follows²:

- shifting the focus more broadly to sustainable development decision-making, rather than only on environmental decision-making
- expand the number of federal organisations required to prepare sustainable development strategies from 26 to more than 90
- promote close collaboration and coordinated action across governments
- add three additional indigenous representatives to, and modify the role of the Sustainable Development Advisory Council
- set a higher bar for transparency with improved reporting and oversight
- support an ongoing conversation with indigenous peoples and all Canadians, respecting diversity and gender parity

Principles for Wellbeing Policies

The policy incorporates the wellbeing principles in three of the six categories (goal oriented, participatory, evidence based). In the remaining three categories (experimental, holistic, strength based), the policy only partially incorporates the wellbeing principles as explained in the table below.

Wellbeing Policy Design Principle	Presence in the FSDS
Goal Oriented	The precise definition of goals, milestones and targets and the regular progress monitoring make the policy strongly goal-oriented. The FSDS defines 13 goals, short-term milestones, medium-term targets, and detailed action plans. It also includes crosscutting priorities that support progress in all the areas of the strategy.
Participatory	The policy has an open, co-creative, and transparent feedback process. People can directly make suggestions for improvement on the FSDS website with a respective comment button. Comments from the community are considered in the final drafting of the FSDS.
Experimental	The policy design process encourages continuous learning and experimentation, through its iterative strategies that allow space for reflection and adaptations. Feedback from the community also fosters continuous learning and improvement.
Holistic	According to the ECCC, environmental, economic and social criteria are not three competing pillars, but rather a nested set of activities, where the environment is dominant over social and economic criteria. For example, considering gender equality in the FSDS means bringing more women into clean tech jobs. Promoting quality education means that information on science and sustainable development are available to all Canadians, including indigenous communities. At present, the policy strongly focuses on environmental and economic outcomes. However, social outcomes especially linked to indigenous communities are mentioned but play a minor role. FSDS complements with the National Strategy on the 2030 Agenda led by Employment and Social Development Canada, but does not approach environment, economic and social outcomes in a holistic way.
Evidence-Based	The Departmental Sustainable Development Strategies (DSDS) are a good tool to ensure cross-department accountability and is strongly evidence-based. Measurable, time-bound targets allow tracking progress and reporting to politicians and the public on the results. Short-term milestones represent interim steps to help achieve the medium-term targets and long-term goals. The DSDS provide detailed information on the contribution of each department and agency to meet the targets and milestones set out in the FSDS and ensure cross-departmental accountability. Progress reports assess the federal government's progress against its targets in four categories and provide transparency about where more work is needed. These findings inform the work developing the subsequent FSDS and updating and revisiting existing targets.
Strength-based	Since the experience and knowledge of indigenous communities are not sufficiently incorporated into the strategy, the policy is only partially strength-based. Intergenerational equity, openness, and transparency reflect the strengths of the Canadian people, who interact with the environment, value nature, conserve lands, water, and wildlife and address climate change — all aspects that are important to ensure the wellbeing of future generations.

Table 9: Wellbeing Policy Design Principles in Federal Sustainable Development Strategy

In spite of efforts to make the FSDS more holistic, all of the FSDSs, including the FSDS 2019–2022 primarily focus on environmental and economic outcomes to accelerate the energy transition and develop into a green growth economy, and are not truly holistic. This has a legacy in that in 2008, when

the Federal Sustainable Development Act was passed, environmental policy was not a priority topic and the government deemed it necessary to catch up. The Amendment Act expands the environmental focus to a broader SDG approach making future FSDSs more inclusive, but it is still connected to this legacy.

Policy Impact and Evaluation

The Federal Sustainable Development Act requires preparing a FSDS progress report at least once every three years. It shows progress towards the set goals and targets, and shows where more work is required. These results inform the Canadian governmental actions and will help shape the subsequent FSDS. The results presented in the progress report reflect data collection and monitoring and are based on objective information transparently conveyed to Canadians. They are sourced from indicators that track performance on environmentally sustainable development.

In case the progress report says that a strategy's objectives will not be achieved, according to the ECCC, the report ensures that the underperformance remains visible to the public, responsible cabinet ministers, the Commissioner of Environment and Sustainable Development, and parliamentarians. As stated in the report, the performance and underperformance provide decision-makers with helpful information as they consider new plans for sustainable development in Canada.

For each of the 13 goals, the report sets out^{liii}:

- the federal ministers responsible for targets and federal organisations that contribute to implementing the goal
- results for targets and milestones, as well as key trends in the data
- an indication of progress to date, assessed at the level of individual targets
- why the goal is important
- supplemental information that helps understand the context of the goals or targets
- risks, challenges, and additional steps required to meet the goals or targets
- linkages with the United Nations 2030 Agenda for Sustainable Development and other international agreements and initiatives.

An evaluation example on goal two, "Greening Government", could look as follows:

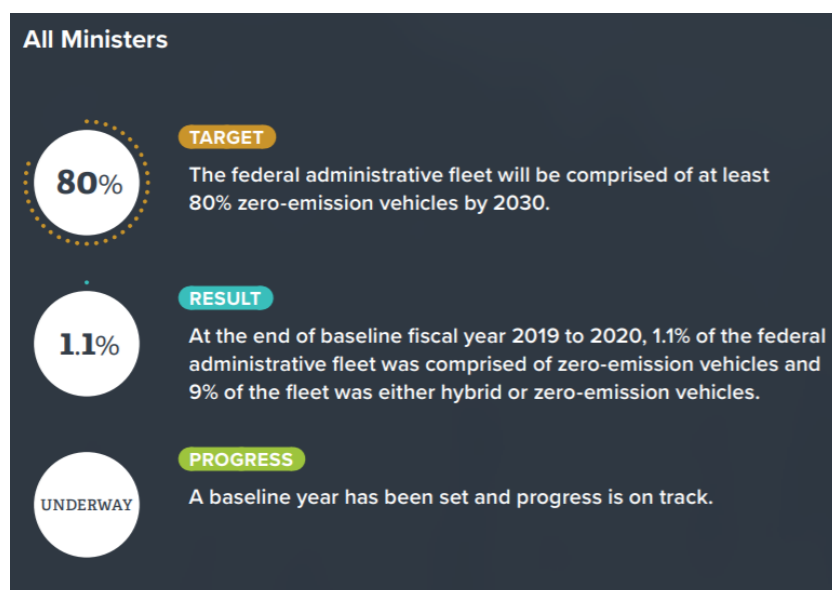


Figure 5: Evaluation example on goal two (Source: 2021 Progress Report on the 2019-2022 Federal Sustainable Development Strategy^{liii})

The Government of Canada uses performance indicators that are linked to the targets and outline the progress on commitments identified in the respective FSDS. Assessments of progress towards targets are evaluated with four possible assessments: 'Achieved', 'On track/underway', 'Attention required' and 'No new data available'. The wide range of indicators on key environmental sustainability issues including climate change and air quality, water quality and availability, and the protection of nature.

The Canadian Environmental Sustainability Indicators (CESI) program produces these indicators with the support of other federal departments and agencies. See below for a concrete example of how an indicator is assigned to a target.

Measures of progress toward the target					
Target	Indicator	Source	Update cycle	Progress Report pages	Year updated
Greenhouse gas emissions reductions from federal buildings and fleets	Percentage change in energy related greenhouse gas emissions from facilities and fleets relative to fiscal year 2005 to 2006	Treasury Board of Canada Secretariat – Centre for Greening Government	Every year	45, 49, 50	2020

Figure 6: Greening Government - Measures of progress toward the target (Source: 2021 Progress Report on the 2019-2022 Federal Sustainable Development Strategy^{liv})

Lessons learned

There can be a tension between setting long-term goals and designing an iterative and reflective process.

Each FSDS has a three-year lifespan, and the targets and goals can be adjusted with each new strategy. On the one hand, this is positive because it allows an iterative reflection and improvement process. On the other hand, the period is too short to focus on and develop long term priorities for lasting change and impact. A lack of long-term goal setting and consistency in goals can undermine some of the principles that the policy seeks to work towards, such as intergenerational equity.

Although Canada has well-designed strategies, policies, and even laws, mental modes, values and behaviour still need to change for success.

A successful approach to implementing a wellbeing approach in policymaking needs to rethink how new policies are adopted and integrated into core societal and governance systems. Embedding a wellbeing approach should go beyond adopting and implementing a policy or strategy, and include a change in how we work, the value system underpinning that and how we think about the economy. This is not just the norms of citizens, but also of policymakers. This requires a holistic approach, which sees social and environmental aspects as mutually essential.

Amendments and iterations can make environmentally-focused policies more holistic, including to incorporate wellbeing principles.

The Sustainable Development Act serves as a legal basis for the FSDS. The Act was amended in 2020 to make the environmentally-focused FSDS strategy more holistic by shifting the focus to sustainable development rather than only environmentally focused. To integrate a wellbeing approach a new policy isn't always necessary, a change to an existing approach or institution can also work towards this goal if approached in the right way. In this example, while this change shifted the focus, it has still not quite gone far enough to integrate a holistic wellbeing approach.

Lessons Learned and Recommendations

Policy Design Process

The above five cases present descriptions of wellbeing policies as they have been put into practice, of how they were developed, implemented and of their impact. We have outlined key aspects of their design and development, impact assessment and key conditions as well as background information, and perhaps most crucially, the policy design process. While these examples have been selected for their relevance for the Dutch cultural, institutional and economic context, to embark on such a process requires to see it as such: a process. Even the most technically robust policy can result in little impact, or even worse, might never be implemented if the process of designing and implementing the policy does not lay the foundations for success. Because of this, each example not only discusses the design and impact but also reflects on the policy design process, using the framework of the Wellbeing Policy Design Guide. While this framework may not necessarily be linear or fully comprehensive, it distills some core aspects of policy design which enables wellbeing policies to be implemented and result in impact.

An initial step in the process **to develop a wellbeing vision and framework that reflect local values, objectives and contexts** is exemplified in the Welsh example, where the value of participation and buy-in from a broad range of stakeholders enabled hard decisions about trade-offs to be made in the implementation of the policy.

Designing a wellbeing economy strategy that identifies the areas of economic life most important for our wellbeing and outlines a plan for fostering them is an essential step in the process towards actualising the vision. In the Scottish example, the GISI outlines core objectives of the fund, which actualise the vision, as seen in Table 3.

While none of the examples demonstrate **assessing and selecting wellbeing economy policies by their alignment with wellbeing values and goals** clearly, the process of Green Budgeting in the French case demonstrates one way that this can happen. This particular example shows how policies can be assessed by their impact or contribution to aspects of a wellbeing economy, in this case specifically environmental aspects. However, this example also shows that a lack of consideration of the broad spectrum of wellbeing goals, specifically social aspects, can limit the effectiveness and potential for impact of a policy.

In the Canadian example we can see **how implementing wellbeing economy policies by empowering communities to take the lead** in this transformation enhances transformative potential of a policy. In this example, the Greening Government policy is one internal to the government, so the community impacted is also internal to government departments. The policy not only empowers people to develop solutions to the problems they see, but it also fosters solidarity and the feeling of collective action.

Finally, we can see how the process for **evaluating policy impacts on wellbeing for learning and adaptation** in Canada allowed for the framework to be strengthened over time. In this case it specifically enabled taking a whole-economy approach to sustainable development, which was not a part of the policy design from the outset.

Insights and Recommendations

Synthesizing all cases, the following are insights and recommendations gathered for each of the corresponding core principle of the Wellbeing Policy Design Guide.

Goal Orientation:

- Setting long-term targets and not changing strategies and goals too often can facilitate realising goals and building momentum towards them.
- Targets, goals, and objectives should be clear, time-bound and specific, and if possible, quantifiable.

Participatory:

- The design process is crucial and should include not just internal buy-in within government, but also citizen buy-in to ensure sustainability.
- High inclusivity may result in a less clear framework and less clear goals. In the process, a good balance needs to be found between inclusion and designing the policies in a way that ensures participation on all levels (national, regional, local) for buy-in and support needed for implementation.

Experimental:

- The wellbeing approach is new. To build truly sustainable and equitable economies, we need to explore uncharted paths. This means that this also requires the courage to invest in projects that might fail. Rather than assuming something is perfect before it can move forward, seeing all policies and progress as dynamically learning, adapting and iterating, and design the process to allow that.

Holistic:

- Not all cases sufficiently integrated both social and environmental criteria to ensure a broad, holistic wellbeing approach. In order to truly deal with the trade-offs that often exist, it appears necessary to design policies in a way that facilitates addressing such trade-offs.
- In order for a policy to be considered holistic, it is crucial to address trade-offs and tensions from the outset and enable a policy design process across ministries instead of a siloed approach.
- Trade-offs, tensions and synergies^{lv} need to be distinguished and dealt with separately, including openly discussing trade-offs to be able to take decisions to resolve them, or identifying solutions for tensions by finding synergies.

Evidence-Based:

- To make the best possible decisions it is fundamental to include qualitative and quantitative evidence.
- Aspiring towards evidence-based decisions may be perceived as reducing the potential for experimentation. Developing experimental and creative approaches, with concrete and evidence-based targets and goals, can help to reconcile these two aspects.

Strength-based:

- Goals and objectives should be designed in a way that recognizes both the ‘aspirational’ (what the policy is working towards) as well as the ‘negative’ (what the policy is looking to reduce) to ensure that both sides are taken into account and acknowledge the innovation that is being created, thus shifting the focus to what should be achieved instead of what must be avoided.
- Policies that acknowledge and try to work with cultural norms and values, existing legal frameworks, existing or previous institutions have stronger potential for impact.
- Building on the above, designing policies with an understanding of the current system and what are the important and big levers for change of that particular system can enable the greatest potential for impact.

Conclusion

This report has presented five case studies of efforts to implement wellbeing policies from different countries and has analysed them adopting the Wellbeing Policy Design Guide as a framework to inform analysis, and within the lens of the broad wellbeing approach of the Ministry of Infrastructure and Water Management in the Netherlands.

Our analysis shows that a policy design process that facilitates support and buy-in from a wide range of stakeholders to the vision, a strategy and plan designed from this vision, selecting policies based on this vision and strategy, confronting and addressing trade-offs and tensions, as well as robust impact assessment all set the preconditions for resulting impact.

While the policies outlined here provide inspiration and can serve as a source of knowledge, each of them has been developed in their own specific context, and the first steps to apply them to the Dutch context should include developing a policy design process that starts from co-developing a vision and strategy and moves forward from there, with the relevant internal and external stakeholders, rather than beginning with a specific policy in mind.

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Appendix

Appendix 1: Long List

Please contact the authors for access to the long-list

Appendix 2: Interview Partners

The case analyses build-on interviews that have been conducted with interview partners experts on the respective policies, either by being directly involved in the policy or by observing the policy from a critical perspective.

Wales

- **Jonathan Tench**, International Partnerships & Network Change Maker, Office of the Future Generations Commissioner for Wales
- **Michael Palmer**, Performance Audit Manager and Sustainable Development Manager at Wales Audit Office (independent of government), Director Performance and Implementation at Office of the Future Generations Commissioner (independent of government)
- Anonymous representative of Scotland's National Performance Framework Unit

Scotland

- **Fiona Strachan**, Green Infrastructure Project Manager, Scottish Natural Heritage
- **May Simpson**, Community Engagement & Development Officer, Glasgow City Health and Social Care Partnership
- **Sandra Barber**, Health Improvement Senior, Glasgow City Health and Social Care Partnership

France

- **Elisabeth Hege**, Senior Research Fellow, Governance and Financing of Sustainable Development, Institute for Sustainable Development and International Relations (IDDRI)
- Anonymous representative of the Institute for Climate Economics (IC4E)
- **Tom Jess**, Program Manager, The Club of Rome
- Anonymous representative of the Ministry of Ecological Transition and Solidarity of France

Portugal

- **Francisco Ferreira**, President of ZERO – Association for the Sustainability of the Earth System
- Anonymous representatives of the Ministry of Environment and Climate Policy of Portugal

Canada

- **Gail Haarsma**, Director of Environment and Climate Change Canada
- **Yannick Beaudoin**, Director General Ontario and Northern Canada, David Suzuki Foundation

Appendix 3: Additional Information about the Case Selection Methodology

Our process to define the five cases to analyse involved sequentially narrowing down based on three core processes: first, identifying a large long-list of potential cases; second, narrowing the cases to a medium list based on their relation to the definition and conceptualisation of wellbeing used by IenW; and third, further narrowing down based on their relevance to the Dutch context and the remit of IenW.

In this process, we first defined a framework containing the core aspects of the conceptualisation of wellbeing by IenW that policies must contain. These core elements are: economic, social and environmental aspects of prosperity; dimensions of “here and now”, “later” and “elsewhere”; objective factors and subjective factors; distribution issues; and should also deal with trade-offs.

Informed by this definition, we began desk research based upon a three-folded approach: (i) Using previous knowledge acquired by the institution and knowledge from ZOE personnel, (ii) Knowledge collated from partners working with wellbeing economy topics (e.g., WEAll), (iii) Research using search engine tools as Google Scholar and NexisLexis. We used a snowballing technique to further identify cases from each of these starting points in order to build a long-list.

Below we outline the step-by-step approach to collect information to form the ‘long-list’ (see Annex):

- 1) Building on previously known examples, further actions and new measures in force in a handful of countries were investigated.
- 2) Analysed the shared documents from our partner WEAll to see and grasp any important policy.
- 3) Delved into the references contained in the shared documents using the snowballing technique.
- 3) Registered any hard (laws; regulations) or soft laws (plans; decisions; reports) related to wellbeing in any pillar (social, environment and economy).
- 4) Snowballed the governmental websites and links of interest.
- 5) Developed a register of governmental websites, laws and decrees, reports and any other important document related to the policy studied.
- 6) Developed a register of potentially relevant contacts for an interview.
- 7) Specific policies embedded in a larger framework were also taken into account and registered in the document.
- 8) Performed a Google and Google Scholar search on “well-being policies” or “well-being policies” AND OECD and “well-being policies” AND “SDGs.”
- 9) Perform LexisNexis searches on “well-being policies” and “SDGs” restricted to NEWS, 2016-2021 timespan and English to know what media outlets are disclosing regarding the topic.

After assembling an initial comprehensive long-list with more than sixty policies, the IenW initial framework of the conceptualisation of wellbeing was adopted to begin to narrow down on which policies to focus on. The (circa 20) most important for the research were then assessed, using the criteria developed with IenW. This assessment encompassed economic, social and environmental aspects as well as “here and now,” “later” and “elsewhere” perspectives. Each one of these criteria was assigned a value being 0 (i.e., not encompassed by the policy), 1 (i.e., mentioned by the policy but not the core) and 2 (i.e., encompassed by the policy) and a final value was assigned for the policy. The policies evaluated with 10+ were shortlisted in the ‘medium list’ and presented to IenW to define the 5 cases that would be further analysed. The final selection of cases was informed by relevance to the Dutch context and by how far the policy had been implemented. The selection and structuring of the relevant indicators for the case studies were informed also from exchanges with IenW.

Appendix 4: Scotland: Quality Assessment Examples Questions per Assessment Category

1. The project in general

- To what extent does the project create or improve accessible multifunctional greenspace?

- Does the project take place in an area where there is an identified deficiency of green-space?
- How innovative is the project in a Scottish context?
- To what extent will the project benefit communities in the most deprived 20% of Scotland according to SIMD?

2. Is the project needed?

- How convincing overall is the evidence provided for the need for the project?
- How strong is the evidence for strategic support for the application?
- How strong is the evidence of demand and support for the project at community level?
- How well does the application show how the project will contribute to local, national and regional plans and strategies including development plans, strategic drainage and flood management plans, local biodiversity action plans, access strategies and social and economic development plans?
- How well has the application demonstrated that the project can't proceed without ERDF grant?

3. Does the project meet the defined themes and outcomes?

- How well will the project improve ecosystem value, restoring habitat and creating wildlife corridors?
- How well does the application help increase people's awareness of the value of biodiversity and the steps they can take to conserve and use it sustainably?
- How will the project contribute towards national biodiversity strategies and targets (e.g., Scotland's pollinator strategy, Biodiversity route map priority projects)?
- To what extent does the project directly involve people in conservation activity?
- How well does the application address water quality, flooding and flooding-related problems?
- How well does the application contribute to improving the ecological status (particularly water quality and physical condition) of a water body (defined as water forming a physio-geographical feature)?
- How well will the application improve or protect soils?
- How well will the project reduce the impacts of pollution?
- How well will the project increase access to or between areas of greenspace?
- How well will the project increase access to a wider range of greenspace types?
- To what extent has the community had the opportunity to influence, inform or even lead the design, implementation, management and use of their green infrastructure?
- How well developed are the applicants plans for ongoing engagement with the local community?
- To what extent will the project provide space for local food production such as allotments, community gardens and orchards?
- To what extent will the project improve the attractiveness of the local area as somewhere to live and work?
- To what extent will the project increase the possibility of skills development (i.e., training for which participants receive some form of accreditation) or outdoor learning?
- How well will the project maintain or increase job opportunities?
- To what extent will the project increase visitor numbers to the site, both local and from other areas?
- To what extent will the project provide increased volunteering opportunities?

- To what extent will the project benefit areas with identified low levels of activity or other identified health issues within sections of the local community?
- To what extent will the project aim to improve health (mental and physical) and wellbeing by improving access to quality greenspace?
- To what extent will the project specifically aim to improve mental health and wellbeing?
- To what extent will the project specifically aim to improve physical health and wellbeing?
- To what extent will the project link to local NHS facilities (GP practices, health centres, hospitals) bringing greenspace closer to patients and/or increasing access for healthcare staff?

4. Project management and deliverability

- How good are the applicant's plans for delivery – are the milestones and timescales realistic, and do they relate clearly to the financial projections?
- How strong is the applicant's track record in delivering large projects (min £500k), EU-funded or otherwise?
- How robust are the applicant's plans for managing risk?
- How strong are the applicant's plans for monitoring and evaluating the success of their project?

5. Project costs

- How well have the costings been confirmed and justified (e.g., on the basis of quantity surveyor reports, recent similar projects, quotes, etc.)?
- How close is the applicant to securing match funding for the project?

Appendix 5: Portugal: RRP Selection Criteria for Environment and Climate Action

Dimensions	Criteria
A - Relevance	<p>A1 - Degree of alignment with the objectives and reference documents of European and national public policies, contributing to the ecological and digital transitions, to the reduction of direct and indirect carbon emissions, to sustainable economic growth and to social justice.</p> <p>A2 - Degree of alignment with the principles and objectives of the RRP and of a sustainable bioeconomy, orienting innovation towards the incorporation of biobased materials and towards increasing circularity in production processes along value chains.</p> <p>A3 - Degree of alignment with the pillars of intervention identified for each sector of the initiative for a sustainable bioeconomy</p>
B - Implementation	<p>B1 - Quality of the project's descriptive memory.</p> <p>B2 - Quality of the detailed technical description of the project (degree of integration of the project components).</p> <p>B3 - Capacity to identify risks of the initiatives for each of the interim milestones and targets (economic, financial, environmental, societal and others) and minimise their impacts on the project.</p> <p>B4 - Quality of the project's communication plan vis-à-vis potential audiences -target.</p> <p>B5 - Potential for transition of maturity scale from fundamental research (TRL 1), to industrial research (TRL 2-4) to experimental development TRL 5-8.</p> <p>B6 - Capacity to mobilise resources (human, financial and technological).</p>
C - Impact	<p>C1 - Expected impact on ecological transition (reduction in the use of fossil-based materials and increased valorisation of biomass, by-products and agro-industrial waste; reduction of emissions; contribution to greater resource efficiency; promotion of industrial symbioses and others).</p> <p>C2 - Expected impact on digital transition (technologies for tracking the productive process demonstrating the sustainability of processes and products, namely incorporated materials and energy, processes used and others).</p> <p>C3 - Expected impact on sustainable economic development (contribution to GVA, job creation, competitiveness of companies in terms of market diversification, contribution to exports or import substitution, and others).</p> <p>C4 - Expected impact on market penetration (market shares of new products).</p> <p>C5 - Expected impact on the capacity to disseminate methods and results (of innovation, industrial production, dissemination and <i>marketing</i> methods and others).</p>

Source: Government of Portugal (2021). Ambiente e Ação Climática. <https://files.dre.pt/1s/2021/11/22700/0001400033.pdf>