

# Enabling Better Infrastructure



## EBI Insights Paper: What should governments consider before strategically planning their infrastructure?

12 July 2023

### Introduction

The world is changing rapidly and global geopolitics, Covid-19 behavioural shifts and changing climates have deepened the existing demands on infrastructure systems, while creating new considerations for planning infrastructure more strategically.

To respond to these challenges, many government departments across the globe have reaffirmed their commitment to addressing infrastructure and societal needs while also achieving the United Nation's Sustainable Development Goals (SDGs). Incorporating the SDGs in their planning processes ensures they continue to meet their national and regional needs and achieve sustainability outcomes.

During consultations with senior policymakers part of our infrastructure decision-making network, we identified common concerns around setting up stable, sustainable and investable infrastructure pipelines.<sup>1</sup> A key challenge identified by these senior policymakers was establishing a robust strategy for informing a balanced approach to project identification and prioritisation. This included:

- finding ways to translate national visions into a tangible strategy for developing an infrastructure project pipeline
- identifying and incorporating needs into strategic planning
- creating tailored strategies incorporating national characteristics.

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<sup>1</sup> Senior policymakers were government officials directly responsible for, or played an influential role in, infrastructure decision-making at national or regional levels. These insights were gathered as part of the public consultation conducted for the Enabling Better Infrastructure (EBI) Report, EBI Scoping Paper consultation and EBI Green Paper.

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Knowing how to identify and prioritise projects supports the development of infrastructure project pipelines. Infrastructure project pipelines are instrumental in helping to action national needs and sustainability outcomes and can create opportunities for attracting new sources of funding and private finance.

To help government departments strengthen their infrastructure governance, the Enabling Better Infrastructure (EBI) programme provides insight and support to senior policymakers worldwide to help them set up stable, sustainable and investable infrastructure project pipelines.<sup>2</sup> The vision behind the EBI programme is a world where the strategic development of infrastructure helps to deliver on the SDGs, and broader societal needs, where they can:

- maximise the infrastructure system's contributions to meeting objectives at national, regional and local levels
- improve public and investor confidence
- improve project delivery
- improve the affordability of future investments by supporting sustainable economic growth.

In this Insights Paper, we are testing the self-reflection tool we have developed to enable government departments to understand where they are in their strategic infrastructure planning process and how to draw on our EBI guidance to create stable, sustainable and investable infrastructure project pipelines.

This forms part of our updated EBI guidance to ensure government departments have what they need to plan infrastructure better.<sup>3</sup>

Our updated guidance consists of the following:

- a **three-step process** for setting up a strategic infrastructure plan; this includes setting objectives, assessing needs and developing a strategy
- **supporting guidance** to ensure governments can action the three-step process in any country; the guidance includes prioritising projects, facilitating stakeholder involvement, efficient regulation and monitoring and evaluation, among other things
- a **self-reflection tool** for helping government departments identify where to start and what initial work needs to be done to ensure they have the best chance of success; this includes key considerations for setting up robust strategic processes that can action change.

## Why is self-reflection important?

Many tools and approaches are available for helping government departments strengthen infrastructure governance. Tools and approaches cut across different stakeholder types and sectors and can be relevant to different stages of the infrastructure life cycle.<sup>4</sup> Some tools are applicable only in specific geographic regions.

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<sup>2</sup> Institution of Civil Engineers (2023) [Enabling Better Infrastructure](#)

<sup>3</sup> Institution of Civil Engineers (2023) [Helping Governments Plan Infrastructure Better – Your Input Matters](#)

<sup>4</sup> German Agency for International Cooperation (n.d.) [Infrastructure Tool Navigator](#)

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An EBI-UNEP (UN Environment Programme) event highlighted that while these tools and approaches offer a wealth of insights, they are less likely to create an impact if government departments are unsure of which tools to draw on, at which stage of their infrastructure life cycle they ought to be used, and what results they are likely to achieve.<sup>5</sup>

As part of our guidance, the EBI programme wants to create stable, sustainable and investable infrastructure project pipelines, rooted in the UN's SDGs. Towards helping government departments achieve this, it is essential to establish what benefits our guidance can offer government departments, and how it will allow government departments to benchmark their current progress.

As part of our updated EBI guidance, we are developing a self-reflection tool to help government departments understand:

- how our guidance can be relevant to their needs
- their progress towards strategic infrastructure planning
- their strengths and weaknesses, and what 'good' looks like in relation to strategic infrastructure planning
- what work needs to be done to create a strong enabling environment.

## How can governments benefit from a self-reflection tool?

Our self-reflection tool will help government departments better understand where they are in their strategic infrastructure planning processes, including how and where our guidance can help them.

We acknowledge that the SDGs provide a consistent and widely adopted basis for measuring national progress. However, it is also acknowledged that other objectives should also be considered when reflecting on progress and next steps.

Our self-reflection tool draws on existing insights gathered from other benchmarking exercises. It has been adapted to incorporate specific outcomes needed to ensure robust and impactful strategic planning at the national or regional scales.

- InfraCompass ranks countries across eight drivers: governance, regulatory, permits, planning, procurement, activity, funding and finance. Countries are assigned a score out of 100 for each driver, enabling benchmarking across countries.<sup>6</sup>
- Project 13 outlines the following 'pillars' to support industry-led delivery: capable owner, governance, organisation, integration and digital transformation. Categories for each of the 'pillars' are descriptive and show three categories to indicate degrees of progress.<sup>7</sup>
- The Benchmarking Capability Tool asks key questions about setting up a benchmarking system. Answers are divided into the following categories: basic, developing, established, advanced and innovative.<sup>8</sup>

The breadth of benchmarking exercises, as shown above, ranges from figure-based indicators to subjective measures of success. While these all present opportunities for guiding users to understand better their contents or the next steps they should take, competitive ranking or benchmarking tools are not particularly well suited to guiding understanding and self-

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<sup>5</sup> Institution of Civil Engineers (2023) [Making Infrastructure More Sustainable: Applying Policy Tools to Create Impact](#)

<sup>6</sup> Global Infrastructure Hub (2023) [InfraCompass Tool](#)

<sup>7</sup> Project 13 (2023) [Welcome to the Project 13 Network](#)

<sup>8</sup> Infrastructure and Projects Authority (2020) [Benchmarking Capability Tool Guidance](#)



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reflection competitive ranking or benchmarking tools do not necessarily take into account how national needs and processes differ between countries.

Our reflection tool, therefore, allows enabling government departments to reflect on their progress to date, and to understand how to continue on the journey most relevant to local conditions.

It is noteworthy that no one country excels in all the aspects of strategic infrastructure planning process outlined in the self-reflection tool. As such, strategic infrastructure planning requires regular reflection and assessment. This process can be supported by the self-reflection tool.

## What are the key considerations for self-reflection?

Our self-reflection tool draws attention to ten key considerations in the strategic planning and prioritisation of infrastructure. These include setting up a national vision, coordinating a systematic approach, conducting a needs assessment, and undertaking monitoring and evaluation against those needs. A needs assessment should define acceptable infrastructure service levels and assess infrastructure performance against those standards.

The subsections below look in more detail at five of the ten key considerations in our self-reflection tool and include supporting information on why they are important. These considerations were selected as they play an influential role in defining the progress made towards setting up stable, sustainable and investable infrastructure project pipelines. The subsections also provide critical detail to help inform answers to questions about our self-reflection tool (Questions 9 and 10 in our EBI Green Paper consultation<sup>9</sup>).

In addition to identifying key considerations, the self-reflection tool includes three features to support self-examination:

- probing questions to guide thinking around key considerations
- descriptions to help countries position themselves using accessible language
- comparative descriptions to enable government departments to identify where further work can be carried out.

***For a full overview of the self-reflection tool, see Appendix 1.***

## 1. Translating a national vision into policymaking processes

A strong national vision, and process for translating it into policymaking, are central to developing an effective infrastructure strategy that governments can use to create stable, sustainable and investable project pipelines.

Translating a national vision into policy can take shape in different ways. A strong national vision and a government mandate for strategic infrastructure planning are necessary for the creation of a streamlined process for translating a national vision into policy and regulation. This process can be made more effective when a clear direction is given from central government to departments specifically responsible for infrastructure planning on their accountabilities for delivering the overarching government vision. A strong government mandate presents a clearcut route for actioning policy and related activities to deliver on a national vision. Furthermore, it also introduces lines of accountability.

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<sup>9</sup> Institution of Civil Engineers (2023) [Helping Governments Plan Infrastructure Better – Your Input Matters](#)

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An example of where a strong national vision has been translated into policymaking is in Malaysia. In 1991, the Malaysia 2020 Vision outlined a core national vision and areas for development.<sup>10</sup> The national government has since created a development plan every five years to reflect on the progress towards achieving this vision and identify emerging infrastructure priorities. Over time, the core focus of the plans has shifted to accommodate changing needs. For example, the earlier plans focused on the economy and infrastructural needs, while the latter focused on social development and sustainability. Malaysia recently produced its 12th Malaysia Plan 2021, prioritising the economy, wellbeing, inclusivity and sustainability.<sup>11</sup>

In countries with a limited political or operational mandate, where elected representatives have not provided a clear mandate to bureaucratic institutions to plan infrastructure, or where there are fragmented departments with overlapping responsibilities for infrastructure planning, translating a national vision into policy can be more challenging. Where there is no clear lead department for planning or where there are no other bodies with a political mandate to translate a national vision into policymaking, the ability to incorporate a national vision into infrastructure strategic planning and prioritisation will be limited. With no clear pathway, the next steps towards aligning national vision with an infrastructure strategy include strengthening the enabling environment or the supporting context for developing an infrastructure strategy. In some instances, external input has helped to strengthen the incorporation of national needs into policymaking.

An example of where external development support has influenced how a national vision is translated into policymaking is in Curaçao. Between 2016 and 2018, the United Nations Office for Project Services (UNOPS) and the Infrastructure Transitions Research Consortium (ITRC) helped the national government to develop a strategic vision that aligned with the UN SDGs. This enabled them to achieve outcomes in transport and social equity.<sup>12</sup> While these inputs laid the foundations for more coordinated planning, further capacity building is often needed to ensure this process operates in a more streamlined way moving forward.

## 2. Following a systematic approach

A systematic approach is the broader process of coordinated actions for developing and implementing infrastructure strategies and policies. These can be part of existing regulations or through ad hoc interventions such as dialogues.

Countries with clear processes that set out steps for translating an infrastructure strategy and supporting policies into regulation and practice have a higher chance of success. This includes frameworks or roadmaps for integrating and connecting objectives and evidence with project-based outcomes.

In 2008, Infrastructure Australia was set up as a statutory body to advise how the country could address its infrastructure gap. In parallel, independent or semi-independent Statutory Infrastructure Bodies were established in the Australian states, the Northern Territory and the Australian Capital Territory, to guide infrastructure decision-making. Infrastructure Australia and state and territory bodies share insights, knowledge and evidence through the collaborative 'iBodies network'. This is an example of how dialogue has been used to build a systematic approach to developing and actioning policy in Australia. As the iBodies conduct long-term strategic planning that accounts for regional needs, setting up a

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<sup>10</sup> Government of Malaysia (1991) [6th Malaysia Plan](#)

<sup>11</sup> Government of Malaysia (2021) [12th Malaysia Plan](#)

<sup>12</sup> Institution of Civil Engineers (2023) [How Curaçao Used the SDGs to Improve Infrastructure Development](#)

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network for discussing key issues has helped to coordinate and streamline decision-making processes between federal and state governments<sup>13</sup>.

In 2021, Infrastructure Australia produced the second Australian Infrastructure Plan and Reform Priority List outlining an actionable roadmap for public policy reform, complementing the investment-focused Infrastructure Priority List to provide a coordinated approach to addressing the challenges and opportunities identified in the Australian Infrastructure Audit.<sup>14</sup> These coordinated activities have helped to define a systematic approach to long-term infrastructure strategy in Australia.

Even if it is fragmented, following an internal regulatory process that sets out steps for integrating evidence, needs and outcomes into building strategies can be useful. Still, ensuring these are aligned to action and ultimately realise the outcomes may require work.

When there are limited, or no, existing regulatory processes to identify accountability, setting clear actions that respond to a national vision can be challenging as the opportunity for misalignment is high. A lack of coordinated action or regulatory process in government operations can scupper ambitions for setting up a strategic approach.

The Ghana: Roadmap for Resilient Infrastructure in a Changing Climate is an example of where external support was used to help facilitate a systematic approach around Ghana's infrastructure. The Ghanaian government entered a 21-month partnership with four key international players involved in development and knowledge generation. As part of the partnership, the group worked to identify and find solutions to respond to national needs and translate this into policy documentation and an actionable plan.<sup>15</sup> This process was guided by the Capacity Assessment Tool for Infrastructure (CAT-I) to connect objectives and evidence with project-based outcomes<sup>16</sup>.

## 3. Understanding service provision and the condition of your assets

Putting programmes in place to define minimum service levels and to assess the condition of infrastructure assets can assist with developing an informed understanding of infrastructure needs. When paired with an existing needs assessment methodology, it can help streamline the development and refinement of a strategy over time.

The UK's first national needs assessment, developed in 2018, outlined the need for an infrastructure baseline to appraise the condition of the UK's infrastructure assets.<sup>17</sup> This formed a critical precursor to the planning process, where it was essential to establish the quality of existing infrastructure to achieve equity and net zero targets by 2050. Benefits associated with a clear understanding of the condition of infrastructure are: enhanced quality of infrastructure delivered, increased number of options for low-carbon solutions, reduced floods and drought risk, and opportunities for future funding. The UK is now producing its second national infrastructure assessment, enabling it to focus on how long-term infrastructure planning can help meet net zero, climate change and levelling up targets.<sup>18</sup>

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<sup>13</sup> Consult Australia (2018) [iBodies Infrastructure Governance in Australia](#)

<sup>14</sup> Infrastructure Australia (2021) [2021 Australia Infrastructure Plan](#)

<sup>15</sup> Adsheed D, Thacker S, Fuldauer LI, Gall SS, Chow N, Pant R, Russell T, Bajpai A, Morgan G, Bhikhoo N, Boroto D, Palmer R, Caçado D, Jain N, Klöttschen V, Lawal H, Dery P, Twum E, Mohammed G, Hall JW and Agbesi L (2022) [Ghana: Roadmap for Resilient Infrastructure in a Changing Climate](#)

<sup>16</sup> Sustainable Infrastructure Tool Navigator (2023) [Capacity Assessment Tool for Infrastructure \(CAT-I\)](#)

<sup>17</sup> National Infrastructure Commission (2018) [National Infrastructure Assessment](#)

<sup>18</sup> National Infrastructure Commission (2023) [National Infrastructure Assessment](#)



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Policymaking should consider both the definition of minimum infrastructure service levels (outcomes) and the capability of infrastructure assets to meet those service levels. The focus should balance both physical asset requirements and service provision.

Where some structures are in place to assess the condition of infrastructure or where fragmented data is captured, this can provide an impartial understanding. While this can be useful, developing more robust methodologies and data collection would be beneficial.

Where there is no existing data and no processes or methodologies for assessing the condition of infrastructure, steps need to be taken to implement an overarching strategy. In addition, should there be no history of understanding services or conducting a needs assessment, consideration of how these can be developed and implemented is a fundamental prerequisite for developing a well-informed infrastructure strategy that can be used to create impact.

## 4. Acknowledging boundaries in financing

Understanding what fiscal resources are available for infrastructure is essential for having informed conversations about what is affordable in the short and long term. When considered right at the start of the planning process, it can enable transparency around which funding opportunities might help achieve national needs, and can support detailed consideration of returns on investment for costly programmes and projects.

An example of this is the Forward-looking Infrastructure Development Program created by Taiwan's National Development Council. Developing this ambitious programme involved calculating fiscal boundaries and funding requirements. Based on these calculations, for every NT\$1 invested in the programme, it is expected to induce private-sector investment of NT\$0.78 and increase the nation's real GDP by NT\$1.62.<sup>19</sup> On average, real GDP is 0.71 per cent higher per annum because of the programme, creating an average of 108,000 job opportunities annually.

Another example of the benefits of understanding financial boundaries is illustrated in Peru. Calculating fiscal resources strengthened infrastructure planning by allowing the Ministry of Economy and Finance to translate infrastructure and societal needs into bankable infrastructure projects. This involves fiscal resources and funding via external investors.

To facilitate this process, Peru has a state-funded private investment promotion agency called ProInversión which helps action strategic planning by translating needs into bankable projects. Having a strong sense of financial boundaries and infrastructure needs enables ProInversión to package what is needed into attractive offers for external investors. This is housed on an up-to-date, interactive website.<sup>20</sup>

Not assessing the availability of fiscal funds can be detrimental to achieving long-term gains in infrastructure planning. Knowing the limits to national budgets is necessary to control and oversee longer-term plans and to understand how funding and inputs from other sectors can help achieve the national vision, as seen in Peru. Understanding financing boundaries and what is possible with investor support is key to unlocking the potential of national infrastructure.

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<sup>19</sup> National Development Council (2023) [Forward-looking Infrastructure Development Program](#)

<sup>20</sup> ProInversión (2023) [Project portfolio](#)

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## 5. Engaging data meaningfully to inform critical review

Strategic planning and prioritisation must be reviewed periodically to ensure it remains impactful. The review requires robust monitoring and evaluation to capture insights on how well the strategy has been implemented and to what extent it leads to improvements in infrastructure.

Governments can always gather more and more data. What is essential is understanding what data is needed and how it should be used. The latter determines how meaningful it will be towards informing decision-making.

As outlined by the Gemini Principles, a pioneering approach for supporting information management, developed in 2018, the anticipated benefits of using data more effectively include more informed decision-making, resulting in cost savings, improved performance and better outcomes for society and the environment.<sup>21</sup>

Data gathering and analysis regarding existing infrastructure enables planning processes to respond more to emerging needs and changing circumstances. An example is Singapore's transport fare tariff. In 2018, the Singapore Public Transport Council put a transport fare formula and review mechanism in place to ensure the Public Transport Council kept on top of cost changes associated with operation, capacity, energy and growth in the public transport network. Data on the use of public transport, a clear picture of finance boundaries and a strong national agenda enables public transport to keep abreast of operating costs while ensuring fares remain affordable.<sup>22</sup> In 2023, it helped to inform action to address the variability of fares and support cost reductions for vulnerable groups.

The positive impact of more robust information-driven planning can be bolstered through the shareability of data, which can be used across decision-making bodies. Infrastructure network owners should proactively identify the data required to improve investment and operational planning associated with their infrastructure network's services.

In instances where limited data is gathered at the national level, and no activities are in place to monitor and evaluate progress on delivering on infrastructure needs, the impact of infrastructure strategic planning can be hampered over the long term. Where there are no structures for gathering or meaningfully using data, monitoring and evaluation cannot occur. This fundamentally limits the ability to assess impact.

Where this is the case, steps must be taken to ensure that some foundational measurements are captured, with some reporting criteria to develop the next iteration of planning.

**For a complete overview of all the key considerations and comparative descriptions, see our self-reflection tool in Appendix 1.**

## Green Paper consultation on what governments need to know to plan infrastructure better

This Insights Paper has been produced to support consultation on a Green Paper programme which aims to test updated EBI guidance to help government departments plan and prioritise infrastructure to help build sustainable infrastructure project pipelines.

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<sup>21</sup> Centre for Digital Built Britain (2018) [The Gemini Principles](#)

<sup>22</sup> Public Transport Council (2023) [Fare Adjustment and Mechanism Review Report 2023](#)



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We are using our consultation to test the relevance and value of our updated guidance for our users. While we focus on government departments as influential stakeholders in the strategic planning process, we acknowledge the role of other stakeholders in this process.

We want to hear from you if you are involved in any stage of the infrastructure strategic planning and prioritisation process.

## Self-reflection assessment

*Green paper Questions 9 and 10 relate to the self-assessment matrix*

**Question 9:** Do principles, questions and subjective categories provide a reasonable basis for building a self-reflection tool, and what would you change?

**Question 10:** Would you include any additional elements in our self-reflection tool, and why?

To read the Green Paper, follow this [link](#). Written responses can be sent to [policy@ice.org.uk](mailto:policy@ice.org.uk).

The consultation runs until 26 July 2023.

## Output

Insights will be used to strengthen updates to the EBI guidance on strategic infrastructure planning and prioritisation.<sup>23</sup>

## About Enabling Better Infrastructure (EBI)

The EBI programme was initiated in 2019 and is chaired by Sir Michael Bear. The vision behind the EBI programme is a world where infrastructure plays an influential role in creating more equitable futures while helping countries achieve the UN's SDGs.

Towards achieving this, the EBI programme provides strategic insight and support to policymakers and governments in improving their strategic infrastructure planning and prioritisation process, ensuring there is a robust strategic process in place to create stable, sustainable and investable infrastructure project pipelines.

The benefit of improved project pipelines is strengthened global infrastructure systems that can deliver outcomes across society, the environment and the economy, while boosting public and investor confidence in infrastructure.

The programme has already consolidated policymaker insights to support planning infrastructure to meet sustainable development targets through developing the 12 Principles.<sup>24</sup>

We are now drawing on insights outlined in our guidance<sup>25</sup> to foster a collaborative network of national and regional policymakers to strengthen national infrastructure planning in a changing world. Part of this vision includes updating the 12 Principles.

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<sup>23</sup> Institution of Civil Engineers (2019) [Enabling Better Infrastructure report](#)

<sup>24</sup> Institution of Civil Engineers (2022) [Enabling Better Infrastructure Scoping Paper](#)

<sup>25</sup> Institution of Civil Engineers (2019) [Enabling Better Infrastructure report](#)

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## About ICE

The Institution of Civil Engineers (ICE) is a 96,000-strong global membership organisation with over 200 years of history.

It is a centre of engineering excellence, qualifying engineers and helping them maintain lifelong competence, assuring society that the infrastructure they create is safe, dependable and well designed.

Its network of experts offers trusted, impartial advice to politicians and decision-makers on how to improve lives by ensuring the world has the engineering capacity and infrastructure systems it needs to enable our planet, and those who live on it, to thrive.

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## Appendix 1

Overview of the complete self-reflection tool, outlining key considerations and subjective descriptions

CONSIDERATION	QUESTION	1/REQUIRES SUPPORT	2/REQUIRES DEVELOPMENT OR REFINEMENT	3/LIMITED INITIAL WORK NEEDED
<b>Translating your national vision into policymaking</b>	<b>1. How do you integrate your national vision into policymaking?</b>	No lead government department/s or other bodies are mandated to plan infrastructure strategically.	The strategy relies on a limited or fragmented set of departments with a narrow operational or departmental mandate to plan infrastructure strategically.	Specific government department/s, in association with other stakeholders, respond to a clear mandate to integrate the national vision into existing and new policy and decision-making structures.
<b>Incorporating sustainability</b>	<b>2. How do you embed your sustainability outcomes into decision-making?</b>	There are no agreed sustainability goals or outcomes. Limited awareness of sustainability measures is needed for funding and financing.	Some sustainability goals are incorporated into planning on an ad hoc basis. Little understanding of sustainability measures is necessary for funding and financing.	There is a list of clearly defined sustainability goals or outcomes, including awareness of the sustainability measures needed for funding and financing.
<b>Following a systematic approach</b>	<b>3. How does your systematic approach contribute to planning?</b>	There are no departmental or other regulatory processes setting out clear steps for integrating evidence, needs and outcomes for building strategies. There is no existing coordination between government departments.	A fragmented departmental or broader regulatory process identifies steps for integrating evidence, needs and outcomes for building strategies. This process is followed on an ad hoc basis, with limited coordination across government departments.	An existing internal or regulatory process identifies clear steps for integrating evidence, needs and outcomes into building strategies. This process is adaptable and includes responsibilities from across government departments.



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<p><b>Understanding your national characteristics</b></p>	<p><b>4. How do you factor national characteristics and historic concerns into your strategic process?</b></p>	<p>We rely on external sources of knowledge on national characteristics produced by other organisations. We do not consider the outcomes of previous policy interventions as part of our planning and overall strategy development.</p>	<p>We draw on limited existing data and institutional knowledge on national characteristics and outcomes of previous policy interventions. This is included in our planning process and strategy development.</p>	<p>We draw on existing data and institutional knowledge on national characteristics and outcomes of previous policy interventions as part of the planning and overall strategy development. We actively create opportunities for reflection and review to inform strategic planning.</p>
<p><b>Understanding service provision and the condition of your assets</b></p>	<p><b>5. a. How do you understand your needs?</b></p>	<p>Existing data on needs is either not collected or not used; intuition is relied on to understand needs. Limited structures are in place to gather evidence to understand needs better.</p>	<p>We use some available data gathered through existing systems for data collection that are set up to inform evidence-based decision-making. There is some reflection on data needs, but more steps could be taken to meet them. The same methods are followed over time.</p>	<p>We use data gathered through existing structures for data collection that are set up to inform evidence-based decision-making. Data needs are actively reflected on, and steps are taken to meet these needs over time. New methodologies for supporting robust data gathering are used.</p>
	<p><b>5. b. How do you understand the infrastructure services already provided and the condition of your infrastructure assets?</b></p>	<p>There are no individual or routine initiatives to understand service provision and the state of existing infrastructure assets. There are no accessible databases outlining this information and no connection between service needs, state</p>	<p>We rely on incomplete or incorrect data on service provision (accessibility, cost and quality) and the state of existing infrastructure assets as part of routine reporting initiatives. Limited accessible databases are available outlining</p>	<p>We readily draw on existing initiatives and reporting databases summarising service provision (accessibility, cost and quality) and the state of existing infrastructure assets. Available data is readily used to inform decision-</p>

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		of infrastructure and decision-making.	the state of the infrastructure stock. There is weak connection between existing service provision and decision-making.	making, and new methodologies are tested to overcome limitations.
<b>Considering implementation</b>	<b>6. How do you incorporate implementation concerns into your planning process?</b>	Implementation is not considered at any stage of the strategic infrastructure planning process. Stakeholders involved in the implementation stage are not included in the planning process.	Some aspects of implementation are considered in the planning process. Stakeholders involved in the implementation stage are not included in the planning process.	Implementation is always considered in the planning process, where it is considered upfront. Stakeholders involved in implementation are included at the start of the planning process.
<b>Incorporating non-monetary outcomes</b>	<b>7. How do you include non-monetary outcomes (positive and negative) in your planning process?</b>	No non-monetary outcomes are considered at any part of the planning process. Few or no adverse outcomes are considered.	Some non-monetary outcomes are considered in at least one stage of the planning process. Mostly the positive aspects are considered across society and the environment. Financial and corporate interest influence which non-monetary outcomes are considered.	Non-monetary outcomes are considered at the start of the planning process, which relates to both positive and negative aspects irrespective of finances. Corporate interests also support the wellbeing of society and the environment.
<b>Acknowledging boundaries in funding</b>	<b>8. How do you factor budgetary and long-term fiscal concerns into the planning process?</b>	Fiscal limits and budgetary concerns are not considered during the planning process. No boundaries are agreed upon before engaging funding and inputs from other sectors.	Some fiscal limits and budgetary concerns are considered in the planning process. These are used to understand the following steps, including funding and opportunities from other sectors. Figures	Fiscal limits and budgetary concerns are considered right at the start of the planning process. These are well understood and are used to set boundaries for how external funding and

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			are sometimes used to calculate returns on investment for costly projects and programmes on an ad hoc basis.	investments are structured. They are readily used to calculate returns on investment for costly projects and programmes.
<b>Including all stakeholders</b>	<b>9. How do you incorporate inputs from all stakeholders?</b>	No other stakeholders (e.g. private sector and civil society) are involved in programme and project planning. There are no opportunities for public scrutiny of policies, strategies and plans.	Stakeholders from the private sector or civil society are involved in at least one aspect of programme and project planning. Some options for public scrutiny of policies, procedures and plans exist.	Stakeholders from the private sector and civil society are involved in project planning. Opportunities are revisited to ensure balanced insights are used to inform planning. Opportunities for public scrutiny of policies, strategies and plans are used to strengthen outcomes.
<b>Engaging data meaningfully to inform the review</b>	<b>10. How do you embed data capture into developing and accessing policy outcomes?</b>	There are no established structures for data collection and no monitoring and evaluation measures in place. No systems are in place to enhance the accessibility and shareability of data.	We draw on fragmented or imperfect data. Some monitoring and evaluation measures are in place but infrequently match available data or evaluation needs. Some steps are taken to gather, integrate and refine methods to ensure data helps to assess policy outcomes accurately. Structures are in place to enhance accessibility and shareability of data.	We draw on established structures for data collection and monitoring, and evaluation measures. We actively gather, integrate and refine methods to ensure data helps to assess policy outcomes accurately. Systems are in place to enhance accessibility and shareability of data.