

National Infrastructure Commission

Second National Infrastructure Assessment: Baseline Report

GIIA Consultation Response

Friday 4th February 2022

1. Introduction to GIIA

1.1 Global Infrastructure Investor Association (GIIA) is the membership body for the world's leading investors in infrastructure, and advisors to the sector, who collectively represent nearly US\$1 trillion of infrastructure assets under management across 66 countries, one third of which are in the UK. Our members are investing today to provide the smart, sustainable, and innovative infrastructure needed for our communities and economies to thrive.

1.2 The investor member base of GIIA is diverse and ranges from fund managers, pension funds, insurers, corporate investors, and sovereign wealth funds (a list of GIIA members can be found at <http://giia.net/membership>).

1.3 In the UK, GIIA members are responsible for:

- £27bn invested in 158 energy and renewables assets
- 16.2GW of installed capacity across a 210,000 km electricity and gas distribution network.
- Producing 37% of the UK's entire renewable energy capacity.
- Major investments in 17 of the UK's largest 20 airports, which account for 94.4% of total passengers.
- Supporting almost 120,000 jobs in the nation's privately owned ports.
- Supplying 2/3 of UK household's water needs.
- Providing an additional 14 million households with full fibre internet while continuing to invest in 5G technology.

1.4 In addition to these vital sources of foreign direct investment, our research shows that more than 8.5 million UK pension pots are invested in UK national infrastructure via specialist infrastructure funds, helping to deliver a stable return for UK citizens in their retirement. In transport, renewables, utilities, digital and social infrastructure, GIIA members are investing across the UK to deliver the infrastructure needs of UK citizens and supporting the wider economy.

1.5 The National Infrastructure Commission's 'Second National Infrastructure Assessment: Baseline report' has identified nine challenges to be addressed. We congratulate the NIC for the approach it is taking and are keen to provide the perspective of institutional investors in infrastructure to this vitally important exercise. This response therefore acts as a high-level position statement on behalf of the institutional investor community on the issues raised in the paper and associated consultation questions with a focus on the following seven key areas of most relevance to GIIA members invested in UK infrastructure:

- Hydrogen and the energy transition
- Clarity on infrastructure funding models
- Economic regulation
- Nature-based solutions
- Role of the UK infrastructure Bank
- Asset resilience and affordability discussions
- Closing gaps in government policy to increase investor certainty
- International best practice (on all of the above)

2. UK Infrastructure gap

- 2.1 The UK, along with many of the world's leading developed economies, faces a growing infrastructure gap, exacerbated by years of underinvestment by successive governments and an absence of attention paid to the role that private investment can play in relieving the pressure on the public balance sheet and ensuring that the UK gets the infrastructure that it needs for future generations more efficiently and effectively.¹
- 2.2 Research by PwC in partnership with the Global Infrastructure Investor Association and separately by the Committee on Climate Change (CCC) found that the UK needs to spend an additional £40-50bn per annum through the 2020's to meet Net Zero commitments, half of which is not currently covered by existing policy and regulation.²
- 2.3 The scale of the finance required highlights the critical role that private investment will have to play if this gap is to be filled. The UK Government Infrastructure Finance Review states that over the next 10 years, around half of the £600bn infrastructure pipeline is forecast to come from the private sector through electricity networks, digital infrastructure, airports and water and waste.³
- 2.4 This sentiment has been equally echoed by the Baseline Report which finds that significant levels of private investment are needed to meet the three strategic challenges set out around 1) delivering Net Zero 2) climate resilience and 3) to successfully address the societal and economic disparities that exists within the UK through the Government's policy of Levelling-up.⁴
- 2.5 It is therefore imperative that Government and regulators work together with the private sector to create the right enabling environment to deliver the transformational levels of investment that are required to meet future challenges including the strategic agenda for Net Zero, climate resilience, adaptation, and nature-based solutions⁵ in line with the Prime Minister's 10 Point Plan for a Green Industrial Revolution.
- 2.6 In parallel with the need for this long-term investment is a growing concern around the cost of living for consumers, and the need for future costs for consumers of infrastructure services to remain affordable, a theme which is rightly highlighted by the NIC throughout the Baseline Study.

¹ World Economic Forum, The world is facing a \$15tn infrastructure gap, (2019) [URL](#)

² PwC, Unblocking Capital for NetZero Infrastructure, (2020) [URL](#)

³ HMG Infrastructure Finance Review (2019) [URL](#)

⁴ NIC, The Second National Infrastructure Assessment: Baseline report, 2021 ([URL](#))

⁵ Infrastructure investors are supportive of natural capital solutions which can provide a more climate friendly approach than 'grey' infrastructure, with wider benefits and lower whole-of-life cost. But the challenge for investors is that nature-based solutions are fundamentally more uncertain in their delivery than hard engineering solutions/grey infrastructure. Therefore, the role of policy and regulatory frameworks in incentivising investment is central.

3. Private investment in UK Infrastructure

3.1 Since privatisation, over £230bn has been invested in the UK energy and water sectors.⁶ The UK is also one of the cheapest countries in Europe for broadband which has 97% coverage of the UK, thanks in part to high levels of private investment in recent years.⁷

3.2 Table one shows the progress that has been made across a number of core infrastructure sectors since privatisation.

Table one: outcomes in UK infrastructure sectors since privatisation

SECTOR	OUTCOME
WATER	<ul style="list-style-type: none"> ▪ £150bn has been invested in the water sector in England and Wales since they were privatised.⁸ ▪ Ofwat has estimated that average water bills are £110 lower than they would have been under public ownership⁹ ▪ When compared against its peers, the UK water sector has lower charges than Belgium Switzerland, Finland, Australia, and Holland¹⁰ ▪ Productivity growth has been steadily increasing with the water and sewage sector have averaged 2.1% since privatisation¹¹
ENERGY	<ul style="list-style-type: none"> ▪ £80bn has been invested into UK energy networks since privatisation¹² ▪ Since 1990 there has been a 50% reduction in the number of customer interruptions and a 60% reduction in the length of time interruptions take.¹³ ▪ 17% lower network costs than at time of privatisation which are projected to remain flat and fall in the next 10 years¹⁴
TELECOMS	<ul style="list-style-type: none"> ▪ The UK has the cheapest mobile broadband and calls in Europe¹⁵ ▪ Two thirds of the UK's landmass have good 4G coverage from all four operators and includes 97% of the premises in the UK¹⁶ ▪ Full fibre coverage grew from 3% to 10% between 2017 and 2019¹⁷
ROAD & RAIL	<ul style="list-style-type: none"> ▪ £9.5bn has been invested by the private sector since 2006 and 2019 with £1bn alone coming between 2018-2019¹⁸

3.3 Private investment has also delivered tangible benefits for UK airport infrastructure. At London Heathrow, it has enabled the airport to climb the rankings to being rated as one of the top 10 airports by passengers worldwide from being one of the worst.¹⁹ Heathrow has

⁶ GIIA, The Future of Regulation, 2020 ([URL](#))

⁷ *Ibid*

⁸ Ofwat, Affordable for All, 2016 ([URL](#))

⁹ *Ibid*

¹⁰ Water statistics, Total Charges or the Capitals in 2015 for a consumption of 200m3, 2015 ([URL](#))

¹¹ Frontier Economics, Productivity Improvement in the Water and Sewerage Industry in England since Privatisation, 2017 ([URL](#))

¹² Ofgem, Energy Explained video, 2021 ([URL](#))

¹³ Energy Networks, Response to Helm report, 2018 ([URL](#))

¹⁴ *Ibid*

¹⁵ Mobile Broadband Prices in Europe 2018, A study prepared for the European Commission DG Communications Networks, Content & Technology by Empirica and TUV Rheinland.

¹⁶ Ofcom, Supercharging Investment in Fibre broadband, 2019 ([URL](#))

¹⁷ *Ibid*

¹⁸ Wikipedia, Impact of the Privatisation of British Rail, 2021 ([URL](#))

¹⁹ Heathrow (SP) Limited, results for the 9 months ended 30th September 2021 (2021), [URL](#)

also become a global leader in service delivery and has been able to innovate and invest in critical technologies which have allowed it to simultaneously decrease prices whilst delivering passenger savings of over £600m.²⁰ This has delivered a direct benefit to passengers and a clear premium for airlines who operate at the airport. Similar transformations of passenger experience can be seen at other major UK airports under private ownership.

3.4 These long term sustained investments have driven UK infrastructure sectors to new levels of innovation and service delivery, which is clearly recognised by UK citizens who view private capital involvement in UK infrastructure favourably. GIIA's Global Infrastructure Index 2021 finds that, 61% of UK respondents are satisfied with the private sector investing money in infrastructure if it means the UK gets the infrastructure it needs, a testament to the sustainable and innovative asset management that has been conducted throughout these years.²¹

4. Key challenges for UK infrastructure

4.1 Hydrogen and the energy transition

4.1.1 The Commission is right to point to the role of hydrogen and carbon capture as two of the solutions to decarbonising the production of construction materials in infrastructure sectors and that these solutions will require new infrastructure networks across the UK to be realised. Research produced by Global Infrastructure Investor Association and Arup found that 9 in 10 GIIA investor members believe hydrogen has a role to play in the UK's future energy system but that only 16% of those surveyed have already concluded deals or are currently engaged in hydrogen-related infrastructure transactions²².

4.1.2 This low level of uptake is partly due to the fact that currently much of the focus from a policy perspective is on the production and supply of hydrogen but, from an investor perspective, it is important that policy development looks across the whole value chain to examine the issues raised by transportation and storage - and of course end use.

4.1.3 For example, in road, rail and sea transport, hydrogen could provide advantages over batteries because of its higher efficiency density and rapid refuelling time. Hydrogen could also help decarbonise heavy industry and construction which emits large volumes of CO₂, or it could provide a safe and reliable source of energy for heating appliances at homes and workplaces, as well as replacing natural gas in combined cycle gas turbines.

4.1.4 It is clear that hydrogen adoption will therefore take place simultaneously across a range of sectors in the economy and therefore will require unprecedented coordination in terms of strategy, policy and regulation to reduce risks of unintended consequences. For example, a well-intended but overly generous subsidy to decarbonise passenger vehicles could divert hydrogen away from applications where it might reduce emissions in a more efficient manner (e.g., heavy industry).

²⁰ *Ibid*

²¹ GIIA, Global Infrastructure Index 2021, 2021 ([URL](#))

²² GIIA and Arup, Catalysing Hydrogen Investment (2021), [URL](#)

- 4.1.5 The GIIA and Arup report on hydrogen produced the following recommendations for Government that we would urge the Commission to consider in the development of the second National Infrastructure Assessment:
- 4.1.6 Government needs to articulate a clear, time-bound plan with tangible actions to provide the certainty that the private sector needs to make investment decisions, with a clear focus on the end use adoption of hydrogen technologies, to start to provide revenue certainty for long-term infrastructure investors. The UK hydrogen strategy was a welcome step forward in this regard, but it left perhaps the most important issue on the preferred business model open to further consultation, responses to which are currently with Government for a decision.
- 4.1.7 What is required to generate investment is both clarity on the business model, but also a focus on deployment. GIIA investors see no reason why existing models cannot be deployed as required. For example, the following models could be deployed where it makes sense to do so for defined hydrogen projects:
- Public-private partnerships – single projects with a government interface
 - Contracts for Difference – for projects with power price or other market risks
 - Regulated Asset Base – for more complex projects with a consumer element
 - Government on-balance sheet – for complex projects with lots of interface risk
- 4.1.8 Within this deployment, it is important that price certainty should be prioritised to foster demand and encourage growth in the hydrogen supply chain. Given the scale of deployment and ambition for UK offshore wind infrastructure, it would also be desirable for government to seek to place the UK as global leaders in green hydrogen and resulting technologies.

4.2 Infrastructure funding models

- 4.2.1 As well as identifying a suitable business model for hydrogen deployment, it is vitally important that Government sets out a vision for its preferred infrastructure funding models across infrastructure sectors more widely. Clarity on preferred funding models helps investors to properly assess the balance between risk and reward when seeking to make infrastructure investments and therefore reduces uncertainty and catalyses investment. New infrastructure funding models should seek to retain the benefits of previous models, including private sector risk management expertise and value for money for both public and private sectors, and should also seek to learn from international best-practice in their design and delivery²³.
- 4.2.2 GIIA's report with DLA Piper on Public Private Partnerships²⁴ (PPP) provides examples of the ways in which private investment can be leveraged at scale to help deliver infrastructure by easing the financial burden on governments for construction and maintenance of public facilities and place more risk on private entities, whilst raising the incentives to succeed. PPPs also allow the costs of initial investment to be spread over the lifetime of the asset and thus can allow infrastructure projects to be brought forward by years compared with pay-as-you-go financing.

²³ World Bank 2017, [URL](#)

²⁴ GIIA and DLA Piper, PPPs for infrastructure investment, a global perspective (2021), [URL](#)

- 4.2.3 For example, according to the World Bank, there are 267 active PPP projects in Canada, and those that have reached financial close are valued at nearly CAD 123 billion (£72 billion). Independent research indicates that the Canadian PPP portfolio has saved governments as much as CAD 27 billion (£16 billion) and added 115,000 jobs and CAD 5 billion (£3 billion) in additional wages on average per year. These projects are delivered 13% faster than those procured in the traditional way²⁵.
- 4.2.4 PPP's also have a solid track record of on-time, on-budget delivery around the world and the same time as transferring certain risks to the private sector and providing incentives for assets to be properly maintained.
- 4.2.5 GIIA would therefore urge the Commission in the second National Infrastructure Assessment to recommend that Government undertakes a strategic review of infrastructure funding models in the UK with a view to defining a preferred set of models that can help to attract and sustain long-term stable patient capital investment into UK infrastructure.

4.3 Economic regulation

- 4.3.1 As well as providing clarity on funding models, perhaps the most important intervention that the Government can make to attract private capital investment to UK infrastructure is in relation to the system of economic regulation.
- 4.3.2 Recently, positive steps have been taken by the Government to reform the system. For example, it is encouraging to see that the 2020 National Infrastructure Strategy sets out a clear pathway to delivering Net Zero through infrastructure investment and clearly sees regulatory reform as a step towards achieving that²⁶. It is also encouraging to see the establishment of the UK Office for Investment with a clear remit to make the UK the best place in the world for international investors and ensure these investors receive the strongest possible cross-government support to realise their UK investment.
- 4.3.3 Unfortunately, the experience of the delivery of economic regulation on the ground across core infrastructure sectors is directly undermining that positive intent. Regulation remains too heavily focused on short-term outcomes at the expense of long-term investment and has tended to be captured by short-term political interests which has created instability for investors just at the moment at which private investment is needed most.
- 4.3.4 Perhaps most importantly, UK economic regulators have become overly concerned with areas that had hitherto fallen squarely within the remit of independent company decision making and so measures have represented a departure from the established regulatory principle – common across all UK regulators – that regulated private companies are free to determine their own capital structures.

²⁵ World Bank (2017), [URL](#)

²⁶ UK National Infrastructure Strategy (2020): “The government is committed to the model of independent economic regulation but will refine it to ensure it provides a clear and enduring framework for investors and businesses and delivers the major investment needed in decades to come, while continuing to deliver fair outcomes for consumers”.

- 4.3.5 Regulatory price determinations in the water and energy sectors, for example, have adversely affected the perception of the independence of the regulators, with regard to the day-to-day management of their regulated entities, in the eyes of institutional investors. There are also significant concerns in UK broadband regarding regulation which is perceived as reducing competition and innovation from challengers to the incumbent in that sector.
- 4.3.6 The cumulative impact of these changes has had a material impact on the way in which overseas investors now view the investment opportunity in the UK, not just in UK utilities but more broadly in other sectors too.
- 4.3.7 Investors are encouraged by the signal of intent from the recently released Economic Regulation Policy Paper²⁷ particularly given that many of the areas on which GIIA have been engaging with BEIS and HM Treasury have been incorporated into the paper. We would highlight particularly the following areas: consistency of regulatory duties and standards across sectors; the need to prioritise intergenerational equity; a move to simplify regulators duties which have become overly complex and a review of the appeals process which aims for consistency whilst maintaining the merit-based approach.
- 4.3.8 We would urge the Commission to focus on the role of the regulatory framework in delivering the transformational investment required across infrastructure sectors in the UK as part of the second National Infrastructure Assessment and to continue to engage with BEIS and across Government more widely on the next steps for the implementation of the proposals set out in the Regulation Policy Paper.

4.4 Nature-Based Solutions

- 4.4.1 Throughout the Baseline Report, there is a clear focus on the need for infrastructure to prioritise climate resilience and a focus on good asset management and maintenance as a way of delivering this resilience in UK infrastructure. GIIA also agrees with the Commission's approach to focus on the impacts of surface water flooding which affects more than 3.2m homes, greater than the number of homes at risk to river and coastal flooding.²⁸
- 4.4.2 The water sector is already facing multiple challenges relating to the impact of climate change with risks from both flood and drought increasing. In the 2018 report 'Preparing for a drier future'²⁹ the Commission found that England faces serious risks of water shortages particularly in the South and East and called for £21bn of investment over the next 30 years to reduce drought risks. The Commission stated that without this investment the costs in the long-term are likely to rise to around £40bn over the same time.
- 4.4.3 Analysis by the UK Met Office showed that from 2010-19, UK summers were 13% wetter, and winters 12% wetter, with 7 of 11 wettest years on record since 1862 having occurred after 1998.³⁰ Climate projections indicate that winters continue to become wetter and warmer, and that summer and autumn rainfall is expected to become much

²⁷ BEIS, Economic Regulation Policy Paper (2022), [URL](#)

²⁸ NIC, The Second National Infrastructure Assessment: Baseline report, 2021 ([URL](#))

²⁹ NIC, Preparing for a drier future, 2018 ([URL](#))

³⁰ Met Office, State of the UK climate 2019, 2018 ([URL](#))

heavier during extreme weather events which occur in between long periods of drought, further exacerbating the infrastructure and resilience challenges faced by the sector.

- 4.4.4 These issues are further compounded by a lack of public funding for surface water flooding resilience from Government funded agencies such as the Environment Agency whose flood mitigation schemes are not designed to protect against surface water flooding³¹ and are most prevalent in urban areas due to the predominant occurrence of paved drives and road networks which do not absorb water.³²
- 4.4.5 To address these issues, natural capital and natural flood management techniques will be an important part of the policy solution. To deliver nature-based solutions (NBS) in the water sector and begin the task of addressing the Commission's concerns on surface water flooding and asset resilience, it is fundamentally important to begin with a catchment-first approach which looks at the issues within a whole catchment (whether flooding, water quality, improving ecological status etc.) and assesses the mix of interventions which water companies and others need to make to deal with those issues, of which NBS will be one. NBS solutions are prone to be less predictable than 'grey' solutions and the environmental and economic regulatory framework will need to be adapted to place a greater emphasis on encouraging water companies to explore nature-based solutions including blended solutions for the whole catchment.
- 4.4.6 The upcoming Strategic Policy Statement from DEFRA for Ofwat is also a good opportunity to provide a clearer direction to Ofwat that the regulator should act to facilitate the uptake of NBS by focussing on long-term outcomes as opposed to those tied to 5-year asset management periods. This would help to ensure that the regulatory framework for PR24 provides sufficient certainty that NBS driven investment will be appropriately incorporated in both PR24 and beyond, reflecting the commitment to such approaches from investors.
- 4.4.7 This will require a paradigm shift from regulators away from a short-term focus on bill reductions and towards enabling the long-term investment that is needed, whilst keeping bills affordable for consumers. GIIA will be producing a dedicated study in this area in the first part of 2022, and we look forward to the opportunity to share the findings with the Commission as part of the ongoing engagement for the Baseline Study and resultant National Infrastructure Assessment 2.

4.5 Role of the UK Infrastructure Bank

- 4.5.1 The fifth area of focus for GIIA UK infrastructure investors is regarding the role of the UK Infrastructure Bank in the market. As the Commission will be aware, the Bank has been broadly welcomed based upon assurances that its focus will be to 'crowd in' and not 'crowd out' the substantial amounts of private capital already available to invest in infrastructure.
- 4.5.2 To be successful at crowding in and addressing market failures in a meaningful way, particularly in pursuit of ambitious Net-Zero carbon and social goals, with the ultimate objective of being profitable within five years, the Bank will have to take on risk that the

³¹ Flood Protection Solutions, Investment Strategy, Is Surface Water the Biggest Risk, 2020 ([URL](#))

³² *Ibid*

private sector cannot. This presupposes its investments will have a higher risk profile (such as equity stakes in nascent technologies) but if the Bank is to perform commercially, it will need to manage its risk exposure carefully.

- 4.5.3 There is therefore a concern among GIIA investors that, depending on the priority of this objective over other objectives (i.e. in relation to climate change), the mandate of the Bank has been established in such a way that some form of 'crowding out' will be inevitable. It is an open question as to whether the Bank can identify an area of the market where private investors do not currently invest, due to, for example development risks associated with emerging technologies, but where the Bank can play a role whilst still being able to achieve a commercial return.
- 4.5.4 The Bank will need to have a deep understanding of the risk profile of the investments it makes in order to invest where private markets cannot, whilst remaining within the bounds of a commercially viable investment mandate. The key measure of success is whether the Bank can deploy capital to projects that make sense to deliver new investment and provide additionality in the market. Therefore, the mandate for the Bank should be flexible to mitigate against the risk that the Bank's capital fails to get deployed and presents the broadest opportunity for private sector investors to leverage the Bank as new opportunities arise.
- 4.5.5 This is a key lesson learned from the Canada Infrastructure Bank which has struggled to identify projects that align sufficiently with the Bank's mandate and therefore has failed to deploy capital/crowd-in. GIIA feel that there should be an acceptance from the beginning, between the Bank, Government and stakeholders that a portion of the Bank's investments may fail as a natural part of investment. In Canada, the Canada Infrastructure Bank was mandated to lose CA\$15bn over ten years.
- 4.5.6 The development of the Bank's strategy by June 2022 provides an opportunity to ensure that the Bank focuses on the areas in which it can have the greatest impact in providing additionality in the market above and beyond that currently in place from private sources and GIIA looks forward to continuing to engage with Bank teams, Government, stakeholders and the Commission on this.

4.6 Asset resilience and affordability

- 4.6.1 GIIA agrees with the premise set out in key challenge five, 'good asset management' as a means of delivering services in a cost efficient and timely way and to support resilience and remove barriers to investment. Private capital has delivered high levels of service delivery and innovation across a range of infrastructure assets over recent decades, a trend which is accelerating as investors increasingly focus their investment strategies in-line with ESG goals and the UN Principles of Responsible Investment.
- 4.6.2 GIIA member Ashurst, has produced wide-ranging research on 'Resilient Infrastructure'³³ which finds that the pandemic has increased medium to long-term risks attached to investing in infrastructure. Just under 80% of respondents to the research survey believed that the risk had increased to some degree, while nearly one in twelve felt that the risk had increased significantly and the vast majority (80%)

³³ Ashurst, Resilient Infrastructure Report, 2021 ([URL](#))

attribute this to the drive to meet Net Zero³⁴. The report is clear that investors will demand better returns to offset the elevated risk the sector faces in the years ahead.

- 4.6.3 Perhaps most importantly for the second NIA, the report found that respondents see Governments as one of the biggest influences on the sector's response, but also the biggest obstacles to positive change with an absence of coherent government policy as the biggest factor to obstructing change³⁵.
- 4.6.4 Sir John Armit is therefore right that, as a society, we need to have an honest conversation between Government, regulators, investors, companies, and consumer groups regarding the level of asset resilience that we want as a society and accepting that that will lead to increased costs that will need to be paid. A sensible dialogue needs to take place on what we, as a society, are prepared to accept, what we are prepared to pay and what can be delivered in a sensible timeframe.
- 4.6.5 There could also be a role here for the UK Infrastructure Bank to work with the private sector to direct investment towards asset resilience and maintenance for infrastructure that already exists, but which will need to be upgraded and enhanced. The role of regulation in enabling this investment in asset management also cannot be understated.
- 4.6.6 Given the scale of these funding challenges, it will be vitally important that the Commission works to raise the profile of the public debate on the cost of Net Zero, including as part of its upcoming cross-cutting analysis considering the overall affordability of required investment, the distribution of costs and savings across groups in society, and who should pay, and we look forward to continuing positive engagement with the Commission in this area.

4.7 Policy gaps and international best practice

- 4.7.1 The final area we would draw the Commission's attention to is to recommend that Government proactively seeks to close gaps in policy, particularly relating to the transition to Net Zero and the future shape of regulation in the UK. We hope that the Commission will place a strong emphasis on 'investability' as it develops its thinking in these areas and in its ongoing engagement with Government.
- 4.7.2 Secondly, we fully support the Commission's intention to address unanswered policy questions and policy gaps around the Net Zero transition, on issues such as defining the limits of heat pumps for home heating, the role of hydrogen in heat and the future of the gas grid and exploring ways of allocating sufficient investment in road infrastructure through the introduction of road-user charging. However, in order to help these questions, there should be a focus on identifying a system of governance which translates the UK's Net Zero targets into actions. This is vitally important to consider in order to provide investors with much needed clarity whilst also ensuring there is a fair and cost-effective decarbonisation of our economy.³⁶

³⁴ *Ibid.*

³⁵ *Ibid.*

³⁶ ICE, The 3 areas that the UK's next national infrastructure assessment must address, 2021 ([URL](#))

- 4.7.3 The Net Zero Strategy was a welcome step forward and it was encouraging to see that the Treasury Net Zero Review clearly endorsed the case for Net Zero and strengthened understanding of many of the major policy challenges. However, these were not followed through into direct policy decisions and it remains unclear how the Treasury in particular will use the tax system to support the transition to Net Zero, or how it will fill the fiscal gap implied by falling fuel duties. Again, the role of private investment cannot be understated to reduce pressures on the public balance sheet from the transition.
- 4.7.4 Government should also seek to learn lessons from what has worked in other countries, markets and jurisdictions, particularly in relation to the role that clear and innovative funding models can play, such as asset recycling schemes operated in Australia where states can lease, design, build, operate and maintain contracts to the private sector (this generates new revenue for the public sector whilst boosting investment in infrastructure)³⁷ or using the aforementioned example of the role that PPPs have played in Canadian infrastructure delivery.

5 Summary

- 5.1.1 Transformational levels of investment are required to meet future challenges in the UK, including the challenge of meeting Net Zero, delivering climate resilience and adaptation, and levelling up the nations and regions of the UK in line with the Prime Minister's 10-Point Plan for a Green Industrial Revolution. The second National Infrastructure Assessment is right to focus on the importance of new energy technologies, such as scaling the production and end-use of hydrogen and carbon capture, and the vital importance of proper asset management and maintenance of existing assets. The infrastructure of tomorrow exists now and needs to have the right access to private capital to ensure that it is adapted and made more resilient to ever-changing climate conditions.
- 5.1.2 To ensure that this long-term patient capital can be deployed in the UK, Government must work with regulators to implement regulatory and policy frameworks which incentivise innovation, spread the costs across the generations of those who will benefit and move away from a prioritisation of short-term bill reductions as the focus of regulation and towards the transformational investment required. Investment at such scale and pace must be complemented by clear approved funding models and a fully functioning UK Infrastructure Bank which crowds in private capital, levels up the UK and supports nascent technologies to ensure they attain the capital required to deliver the UK's Net Zero ambitions.
- 5.1.3 We look forward to continuing a positive dialogue with the Commission in the build-up to the launch of the second NIA and also to engaging on the upcoming research referenced throughout the Baseline Report considering the affordability of required investment, the distribution of costs and savings across groups in society, and who should pay.

6. Contact details

For more information about GIIA and the contents of this submission please contact

³⁷ Financial Review, Asset recycling 2.0 the way to kickstart the economy, 2019 ([URL](#))

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