

# Built to last

Infrastructure and trust in a changing world

# Contents











### **Effective consultation**

Both civil society and business stakeholders expect to be engaged in discussions about the potential socioeconomic and environmental implications of projects. Avenues should also be set up for feedback and grievance redressal over the lifetime of an asset.

Investors are increasingly focused on allocating resources to infrastructure indirectly through mechanisms such as funds and listed assets. Investor expectations include:

#### **Solid and steady financial performance.**

Infrastructure is a highly illiquid asset class, and long-term investments in it are made under the assumption they will deliver expected shareholder returns over time, without radical changes in the underlying business models that may alter the risk-return profile of the original investment.

Reporting should be timely, transparent, and granular enough to support decision-making processes.

The increasing number of global standards and legal requirements in certain countries should lead to corresponding disclosures on the part of owners and operators.

Shareholders expect to discuss critical societal topics with owner and operators. Recent years have witnessed increasing levels of activism from investors exercising their voting right to influence firms on diverse issues such as climate change, workforce equality, data privacy, and community impact.

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As an important factor in enabling productive long-term relationships with stakeholders, trust not only confers private infrastructure owners and operators with a social license to operate but also assists in building a solid track record, ensuring industry credibility, and establishing organizational resilience.



# Emerging trust challenges: How can owners and operators respond?

The trust landscape for owners and operators is complicated by

## Pandemic recovery

sentiment in several countries. Owners and operators must position themselves strategically and operationally to return to full capacity as quickly as demand and regulation allow.

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1 Airports Council International (ACI). (2021, March 25). **The impact of COVID-19 on the airport business and the path to recovery** Retrieved August 3, 2021.

2 Fitch Ratings. (2021, March 22). **OREDO7ROO5RDG7UDF7UDFNHU48SGDWH** Retrieved August 3, 2021.

3 International Energy Agency. (2021). **OREDO(QHUJ5HYLHZ(FRQRPLF,PSDFWVRI Covid-19** .

4 Pew Research Center. (2021). **People in Advanced Economies Say Their Society Is More Divided Than Before Pandemic**



Asset owners should communicate regularly with investors about the financial impact of the pandemic and the measures being taken to reduce costs and

and storage, particularly for telco assets. If a firm can communicate effectively with government stakeholders about its technical solutions, with an emphasis on data security, they will have a greater likelihood of convincing authorities of their eligibility to own and operate digital infrastructure assets.

Foreign owners and operators need an internal tracking system to identify instances of rising resource nationalism and sources of political and

geopolitical risk. A key task will be intelligence gathering and analysis from a variety of sources. To minimize the risk of negative

# Accelerating impacts of climate change

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10 Ritchie, H., & Roser, M. (2019). **Natural Disasters**. OurWorldInData.org. Data from EM-DAT: OFDA/CRED International Disaster Database, Université catholique de Louvain. Retrieved August 3, 2021.

11 Saha D. (2018). /RZFDUERQLQIUDVWUJWJHSHVHQWLDQVROWLRQWRFOLPDWHFKDOJH"

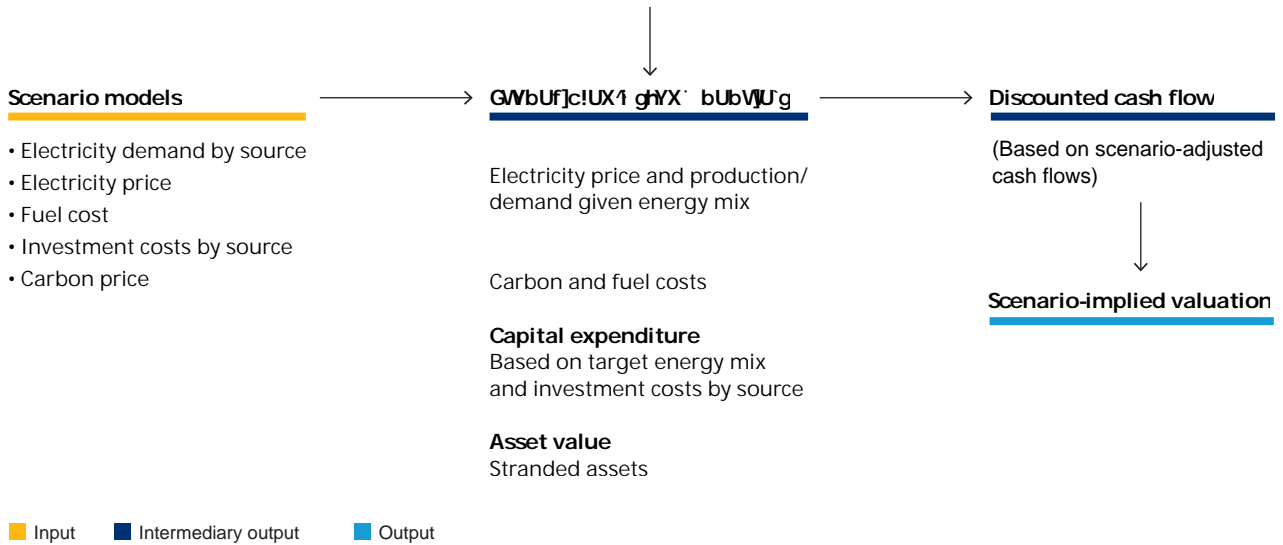
## Infrastructure assets are threatened by the physical impacts of climate change

Infrastructure is often not designed to withstand future and at times current climate conditions. With scientists expecting an increase globally in events such as heatwaves, droughts, wildfires, floods, and tropical cyclones, the threat to infrastructure assets is clear. The 2021 Western North America heatwave delivered extreme temperatures which caused road pavements to buckle, brought public transport

It is also critical for owners and operators to invest in innovative risk transfer solutions, and the



Financials (current and projected) and key metrics (for example, emissions, production)

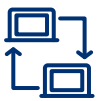


Source: Marsh McLennan Advantage analysis

Outputs from scenario planning exercises can also

## Heightened cyber threats

leaves them with multiple vulnerabilities at a time when cyberattacks on assets are at an all-time high. Protecting operations and customer data is a paramount concern for all stakeholders and involves a coordinated response from leaders, and broader infrastructure ecosystem.

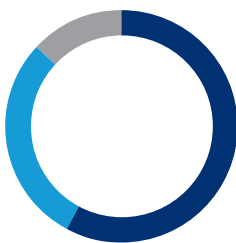


# 50%

of IT security professionals worldwide believe their country's critical infrastructure is susceptible to cyberattacks <sup>22</sup>

## 102% increase

Root causes of data breaches in the transportation industry <sup>26</sup>



Average total cost of a data breach in the energy industry <sup>27</sup>

22 Claroty. (2020). The global state of industrial cybersecurity.

23 Siemens & Ponemon Institute. (2019). &DJW LQWKH&URVVKDLUV&H8WLOLWLHV.HHSLOJ8SZLWKWKH, QG&WULDO&EHU 7 K U H D W "

24 Pew Research Center. (2019). &HULFDQVDQG3ULYDF&ROFHUOHG&RQI&HGDQG)HHOLOJ/DFNRI&ROWURO2YHU7KHLU3HUVRQDO Information

25 Check Point Software Technologies. (2021). 7KH1HZ5DQVRPZDUH7KUHDW7ULSOH ([ W R U W L R Q

26 IBM Security. (2020). Cost of a Data Breach Report

27 Ibid.

Growing digital connectivity due to innovations in technology, such as automation and artificial intelligence, has enabled infrastructure owners and operators to make significant gains in efficiency and costs savings for their assets. However, this increased digitization within an asset's operations, throughout an asset's supply chain and between multiple assets, has meant that there are now numerous points of attack for threat actors – a cyberattack surface that only widens when one also considers the broader vendor ecosystem, such as the cyber risks faced by managed service providers (MSPs). Researchers have estimated that two-thirds of data breaches occur due to third-party vulnerabilities.<sup>28</sup>

A rise in ransomware attacks has highlighted the urgency of preparing for cyber incidents and the importance of minimizing the potential loss from cascading failures. Close to 75% of recorded critical infrastructure ransomware attacks since 2013 have occurred in the past two and a half years.<sup>29</sup> Recently, a cyberattack forced Colonial Pipeline, a leading oil company in the US, to pause supply, disable systems, and ultimately pay \$4.4 million worth of Bitcoin in ransom.<sup>30</sup> As the operator of the largest petroleum pipeline in the country, Colonial Pipeline's data breach pushed gas prices up and led state governments to implement tax policy changes and price gouging laws.<sup>31</sup>

The increased use of new digitally connected devices (smart meters in homes, microgrids at industrial sites, and others) has resulted in a significant surge in the amount of user data being collected. The rise of a black market for data has also meant that many cybercriminal groups have targeted infrastructure

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<sup>28</sup> Carter, S. D. (2020, July 2).

Key stakeholders may also have different expectations regarding cyber risks. For instance, investors may expect a level of data collection to drive strategic decisions and improve profitability, but this may come into conflict with users who are skeptical of and opposed to an increase in the amount of data captured.

Owners and operators should adopt a risk

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