Net zero at the speed of trust

Executive Summary







Ambition alone is not enough

To reach net zero by mid-century, the world needs to build an immense amount of new low emissions infrastructure at unprecedented scale and speed. Unless the way infrastructure is delivered changes, the world won't meet this challenge. It may not even get halfway.

This challenge can only be met by stakeholders involved in delivery (infrastructure participants¹) adopting a new paradigm of project delivery centered around five key shifts in practice (FATR shifts). We describe key elements of this new paradigm in the From Ambition to Reality (FATR) series.

In our fourth paper in the <u>series</u>, we examine the role of trust in delivering the greatest infrastructure challenge humanity has ever faced.

Net zero at the speed of trust

Our research² makes clear that both durable trust between infrastructure participants, and the FATR shifts, can help produce better project outcomes and overcome barriers to net zero delivery. Durable trust here is defined as trust that is both strong and long lasting.

We find that trust in this context is a key condition for paradigm change: trust enables, and is enabled by, adoption of the FATR shifts in a virtuous cycle in which the presence of trust increases shift adoption, which in turn builds trust – and vice versa (Figure 1).

Creating the conditions to initiate this cycle will be critical to reaching the scale and speed that net zero demands – we call this **net zero at the speed of trust**.

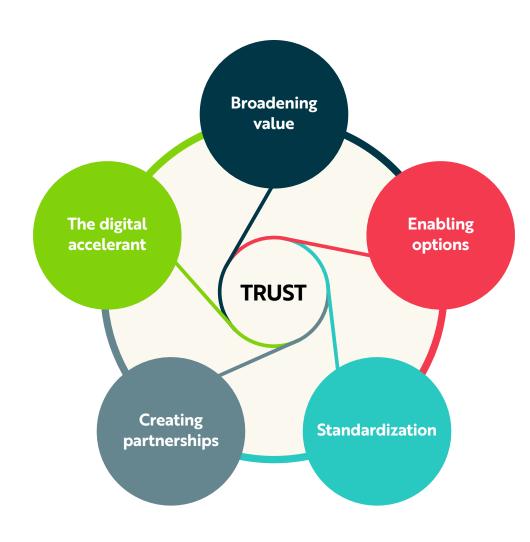


Figure 1 - The virtuous cycle between trust and the FATR shifts.

The paradigm change needle is moving, but too slowly

Data from the annual Princeton Net-Zero Stakeholder Survey, which measures changes in delivery practice, shows that the transformation of delivery practices is not happening fast enough.

Our survey results indicate a lack of trust between infrastructure participants as a primary reason for inertia.

A new focus on the role of trust

Trust's potential to support positive outcomes, and its role in business, community, and science is well recognized. However, understanding of the necessary conditions for durable trust is limited. Many are talking about it, but few understand how to build and leverage it.

The 30+ subject matter experts we consulted ranked trust between infrastructure participants as 'Important' and 'Critical' on a scale of its importance on projects, and more critical if delivery speed is needed (Figure 2). They cited better project outcomes such as fewer regulatory hurdles, and stronger performance on delivery metrics such as schedule and costs, as benefits of higher levels of trust.

But trust alone in this context is not enough. Competency, experience, and the sharing of project risks and benefits are also important levers for success.

Trust is neither simple nor singular. It is influenced by perspectives, cultures, social norms, previous experiences and many other factors. The pathway to durable trust is also influenced by its starting point. In other words, is there existing trust to be maintained? A deficit of trust that means it needs to be earned or enhanced? Or does trust need to be repaired because experiences have created distrust? The starting point is particularly relevant where infrastructure participants have attracted opposition and perhaps even activism due to past positions and actions. Carbon Capture and Storage (CCS) in the United States (US) is a good example.

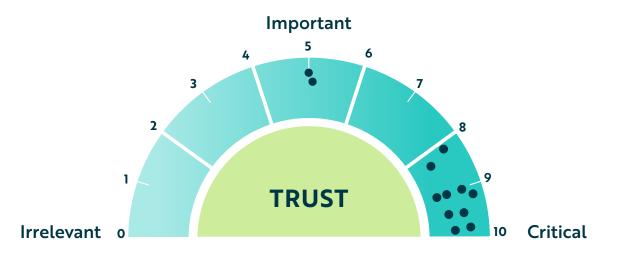


Figure 2 – Importance of trust in delivering projects faster according to our SMEs.

^{1.} Project developers, financiers and insurers, contractors, supply chain providers, equipment manufacturers, policymakers and regulators, communities and non-government organizations, educators, and labor organizations.

^{2.} Based on qualitative and quantitative input from 30+ subject matter experts, 900+ infrastructure participants and 4,200+ broader stakeholders.

The impact of trust on CCS in the US

Expert interviews and a pulse survey of more than 4,200 related stakeholders found most are mistrusting, risk adverse and cautious. The research finds that the public has little knowledge of the technology and perceives moderate levels of risk and benefit associated with CCS.

Participants were asked about their trust in different types of organizations - this was operationalized as confidence in an organization to operate, executive, and communicate about CCS projects (Figure 3).

We found evidence that CCS professionals perceive a greater level of public trust in CCS than our survey of the public suggests (Figure 4), meaning efforts between the two may be misaligned. Just who fills any information gap here is important, as the ability to influence will be impacted by trust, credibility, experience and relevance – the data suggests that the public may look to sources whom they trust more, some of whom oppose CCS.

The data shows some incumbents, particularly corporate leaders and the fossil fuel industry, are burdened by a serious deficit of trust with certain stakeholders. Bridging this deficit will require new and higher levels of information sharing, transparency, scrutiny and collaboration - a new frontier for some.

QUESTION:

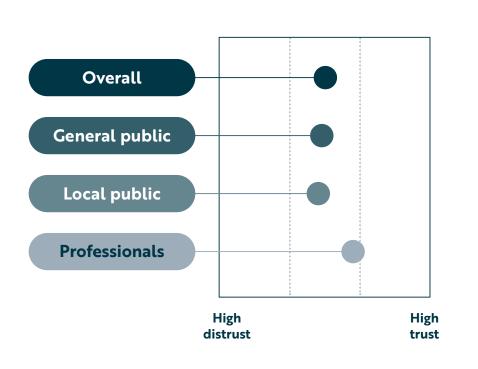
How much confidence do you have in these organizations to execute, run and communicate about CCS?



Figure 3 – Trust in different organizations, from CCS pulse survey. In this and Figure 4, 'Local public' refer to those living close to a CCS project, and 'Professionals' are those work on CCS in some way.

CCS in the US may be poised for high growth, but the data suggests a more precarious future. Infrastructure participants must build trust for CCS to reach its potential to deliver a critical means of cutting carbon emissions.

QUESTION: Does the public distrust CCS?



QUESTION: Why does the public distrust CCS?

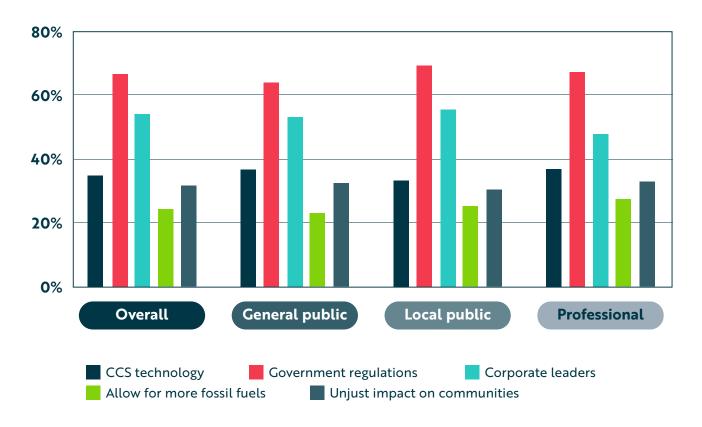


Figure 4 – Perceptions of public trust of CCS, from CCS pulse survey. Figure to right includes data only from respondents who perceive a level of public distrust.

Embracing the power of trust for net zero

Trust is difficult to define, even more challenging to create and rebuild, and easy to lose. The current deficit of trust between infrastructure participants, if not addressed, is likely to slow the achievement of net zero.

CCS in the US is just one example where our research shows a trust deficit impeding progress. As the transition to net zero ramps up, we expect many types of net zero infrastructure globally will face increasing trust hurdles.

To understand how durable trust can be leveraged to drive the world's net zero infrastructure response, more work needs to be done.

One example of how the FATR shift of 'Broadening value' can work together with trust is the focus of a new guide produced by the Worley team. The *Guide to sharing value and building trust to achieve net zero* A precis of the guide is an addendum of FATR4 and the complete guide is available via our website.

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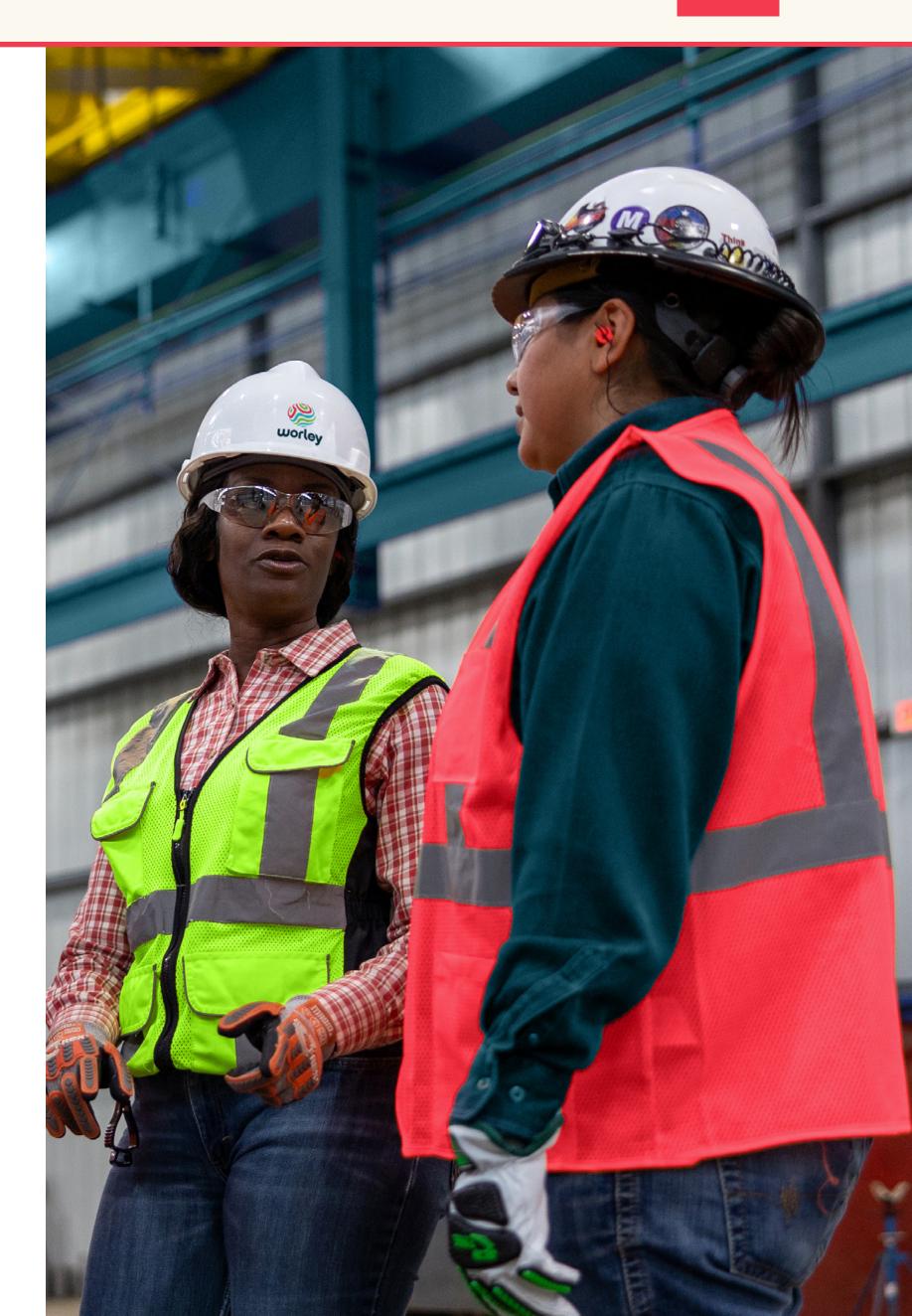
Worley's guide to sharing value and building trust with communities to achieve net zero is available now.

And more broadly, Worley is contributing funds to a new research program at Princeton titled **Net Zero Infrastructure at the Speed of Trust**, to build trust-based frameworks under which infrastructure participants can collaborate to deliver net zero projects. Four key pillars are emerging – engagement, transparency, alignment, and adaptability. The research will consider trust definitions, the conditions required for durable trust, and models that engage stakeholders to overcome reticence. To achieve this, we will seek involvement from a broad range of infrastructure participants.

Durable trust between infrastructure participants can help unlock the FATR shifts and holds a key to delivering mid-century ambitions. Together, infrastructure participants can drive the paradigm change needed to deliver net zero at the speed of trust.

Building trust in technologies and amongst participants de-risks projects and is imperative to speed up project final investment decisions (FID).

Read our full paper for more including research results and analysis, infrastructure participant interviews, progress on FATR3 commitments, and a precis of the guide to sharing value and creating community partnerships.



Thank you for taking a step towards accelerating net zero delivery.

For the full version of this paper and to revisit previous papers, follow this link:

From Ambition to Reality Worley.com

Princeton Net-Zero Stakeholder Survey

acee.princeton.edu

