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ADAPTING THE RAB MODEL FOR ASSET STRANDING RISK

Initial thoughts on how the RAB model could be adapted to mitigate asset stranding risk facing investors in UK gas networks arising from the transition to Net Zero

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Classification: Public

Why is there a risk of asset stranding in gas?

Investments made by Gas Distribution Networks (GDNs) are funded under a Regulated Asset Base (RAB) model. Under this model, investors recover the outstanding capital value through payments for depreciation and a return, which are included in allowed revenues.

The RAB model is sustainable if investors expect that investments in the network can be recouped from customers over a long-term horizon. However, **if the customer base declines because of the UK's planned transition away from gas as part of the path to Net Zero**, which leads to prices that are unsustainably high, then it cannot be safely expected that investments can be fully recouped. In addition, parts of the gas network that cannot be repurposed will need to be decommissioned. The costs of decommissioning will add upward pressure on prices that may already be unsustainably high.

Current and future investors in gas networks therefore face a risk that they may suffer a revenue shortfall, and are unable to recover their investment.

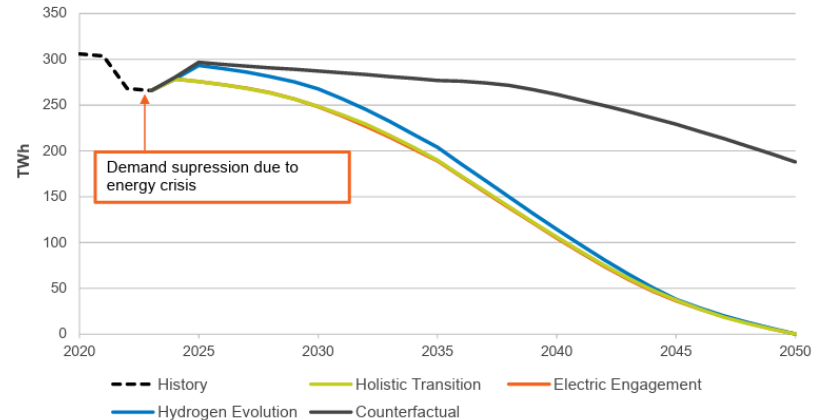
This risk is now accepted by **Ofgem** and **DESNZ**, and is 'priced' by financial markets, with debt costs for gas networks exceeding those of electricity networks.

Ofgem RIIO-3 Final Determinations

In its RIIO-3 determinations, Ofgem states that the decline in gas demand 'introduces the risk where a shrinking base of gas consumers may be left to bear the largely fixed costs of past and ongoing network investments' and 'raises concerns among investors about a perceived risk of asset stranding'. Accordingly, it decided to accelerate depreciation for new additions to the RAV, but acknowledged the concern that this does not fully mitigate the risks, and considered that the government's network cost recovery review is the right place to consider other mitigation options.¹

¹ Ofgem, RIIO-3 Final Determinations Overview Document (December 2025), Chapter 7

Residential annual gas demand for heat under different pathways to Net Zero



Source: Future Energy Scenarios: ESO Pathways to Net Zero (July 2024)

DESNZ Midstream gas system: update to the market

In its update, DESNZ considers that Ofgem's acceleration of depreciation 'allows investment to be recovered more quickly through higher network charges over a shorter period' but 'would also bring challenges, including concerns about the impact on consumers and long-term confidence in infrastructure investment'. It considers that 'there are credible longer-term alternatives to support cost recovery—including those that could distribute costs more fairly—and with coordinated action, and a key role for government, there is time to develop balanced and sustainable solutions.'²

² DESNZ, Midstream gas system: update to the market (June 2025)

Principles for revenue support mechanisms

The RAB model is sustainable if investors expect that investments in the network can be recouped from customers over a long-term horizon. An unmitigated risk of asset stranding without sufficient compensation leaves investors facing an 'unfair bet' under which they cannot expect to earn their required return. This stifles incentives to invest in UK gas infrastructure to support ongoing maintenance, which potentially undermines safety, resilience and capacity of the network.

Under the constraint that the risk of asset stranding should be fully mitigated by ensuring there is no revenue shortfall facing GDNs from the recovery of the RAV and decommissioning costs under any Net Zero scenario, then a **revenue support mechanism** is required. Such a mechanism would socialise the costs of operating gas networks by generating revenue from sources of consumers and stakeholders beyond gas customers, such as a wider group of energy customers, or taxpayers more generally.

In its Midstream gas system update to the market, DESNZ identifies three transitional objectives that may be used to evaluate potential revenue support mechanisms:

- **Ensuring resilience of gas supply and infrastructure**
- **Balancing infrastructure investment and affordability**
- **Managing a planned and orderly operational transition**

Additional criteria against which potential revenue support mechanisms could be evaluated include:

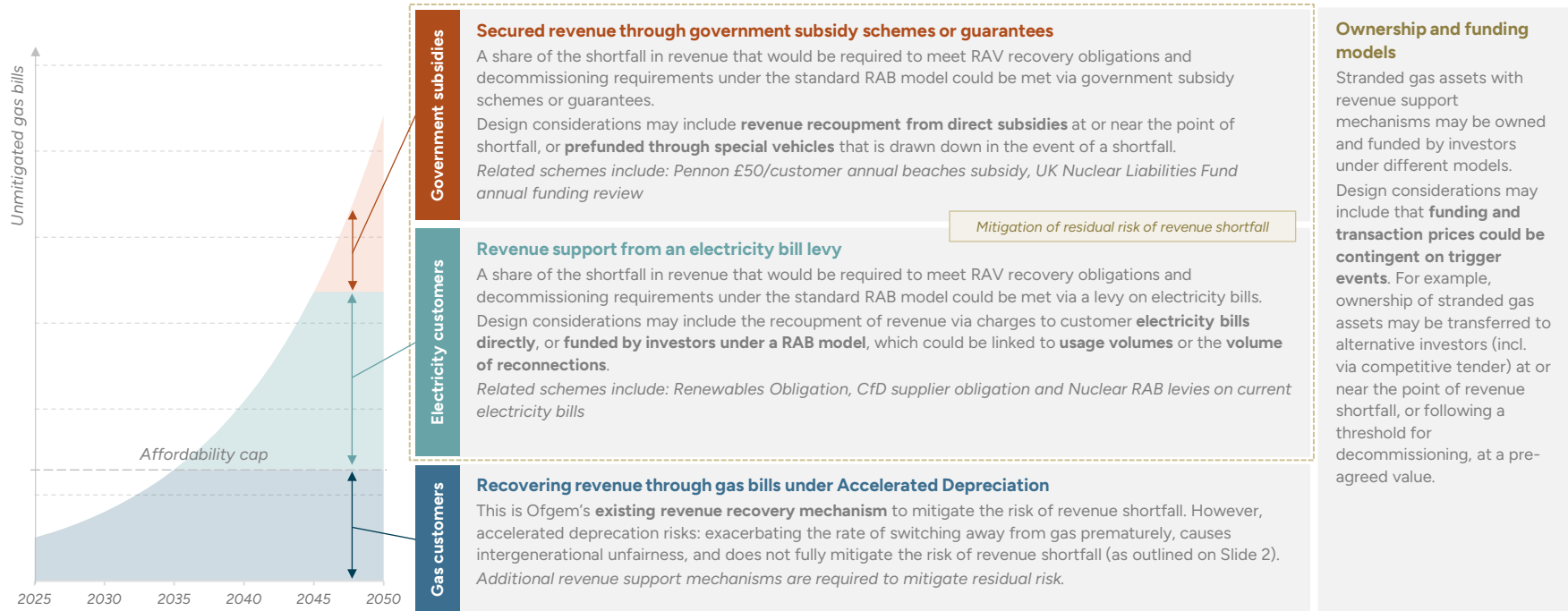
- **Equitability:** The costs of gas network transition, including stranded asset recovery and decommissioning should be allocated fairly across the population,

and should not fall disproportionately on the most vulnerable customers remaining on the network and/or future customers causing inter-generational inequality.

- **Implementability and durability:** Given that the unmanaged stranding risk is currently costing consumers more in bills through higher financing costs (and possibly more in terms of lost value already occurring, given that no cost of equity premium was applied at RII0-3, which may be leading to sub-optimal investment in the gas networks by companies), an option that resolves investor uncertainty quickly and incurs the least amount of institutional change, is likely to be preferable. But it must also be durable in the sense that it is robust to changes in government and policy over a 25+ year horizon.
- **Retains Net Zero optionality:** It is preferable to avoid prematurely foreclosing pathways under which some portion of gas network assets could be repurposed for hydrogen, biomethane, or other low-carbon uses.

Potential options for adapting the RAB model

There are a number of options for adapting the RAB model so that investors can expect to earn their required return on regulated gas assets. Broadly speaking, revenues that support asset values may be recovered from three separate sources: **gas customers, energy customers, and taxpayers through government subsidies**. Assets may also be owned and funded by investors under a variety of ownership models. In principle, options for adapting the RAB model may be generated from particular design specifications under **a combination of one or more of the components of the framework** shown below and assessed against the evaluation criteria shown on the previous slide.





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