

# Stakeholder consultation on our RIIO-GT3 incentives

Shaping the future  
gas transmission system





# Contents

Section	Contents
01	The RIIO framework
02	Introduction to RIIO-GT3 incentive proposals
03	Our ambition for incentives in RIIO-GT3
04	New RIIO-GT3 financial incentive proposals
05	We are seeking your views
06	Capacity Constraint Management Incentive
07	NTS Shrinkage Incentive
08	Greenhouse Gas Emissions Incentives
09	Demand Forecasting Incentive
10	Maintenance Incentive
11	Residual Balancing Incentive
12	Customer Satisfaction Incentive
13	Timeline of activities





# Introduction

The **Stakeholder consultation on our RIIO-GT3 incentives** forms part of our RIIO-GT3 Business Plan Overview (BPO) suite of documents and engagement plans. We're seeking your views on our draft incentives between 25 July and 11 September.



**Business Plan Overview**



**Business Plan Overview:**  
Vision and investments



**Business Plan Overview:**  
Benefits for consumers



**Business Plan Overview:**  
Our credible plan



**Business Plan Overview:**  
Stakeholder consultation on our RIIO-GT3 incentives

We're also running a series of customer and stakeholder engagement webinars. We'll be sending out invitations but you can click an event below to book your space now.

**13 August**  
11am-12pm

Deep Dive on our IT Plan

**16 August**  
2pm-3pm

Deep Dive on Gas System Operations

**20 August**  
1pm-2pm

Our Asset Management Plan (AMP) Explained

**29 August**  
2pm-3pm

Our Business Plan Overview (BPO)





# The RIIO framework

Ahead of each regulatory period, we submit a detailed business plan to Ofgem

## Revenues

### Constraint on revenue set up front to ensure:

- Timely and efficient delivery
- Network companies remain financeable
- Transparency and predictability
- Balance costs paid by current and future consumers

## Incentives

### Deliver outputs efficiently over time with:

- Five year control periods
- Rewards and penalties for output delivery performance
- Symmetric upfront efficiency incentive rate for all costs
- Use uncertainty mechanisms where add value for consumers

## Innovation

### Technical and commercial innovation encouraged through:

- Core incentives in price control package
- Option of giving responsibility for delivery to third parties
- Innovation stimulus gives support and 'prizes' for innovation, building on Low Carbon Networks Fund (LCN) fund

## Outputs

- Outputs set out in licence
- Consumers know what they are paying for
- Incentives on network companies to deliver
- Outputs reflect enhanced engagement with stakeholders



## How we're regulated

As the owner of the National Gas Transmission network in Great Britain, we're classed as a 'natural monopoly'. We're regulated by the energy regulator, Ofgem, which simulates the effects of competition by setting price controls – a ceiling on the amount we can earn from charges to use our network.



# Introduction to RIIO-GT3 incentive proposals

This pack is a part of our wider engagement to help us deliver a stakeholder-led RIIO-GT3 business plan and provide you with the opportunity to review our incentive principles and proposals as part of this plan.



Over the past 12 months, we have engaged via Ofgem Incentive Working Group discussions and our stakeholders to develop a revised suite of incentives.

They are focussed on areas our stakeholders value the most.



We welcome your feedback on our individual incentives to help shape the final submission.

You can respond by using the QR code or clicking the link on slide eight, emailing us at [box.riiogt3@nationalgas.com](mailto:box.riiogt3@nationalgas.com) or requesting a meeting to give more detailed feedback



Our proposed package is ambitious, reflective of the changing landscape we are operating within, reflects our unique role and delivers the intended consumer value.





# Our ambition for incentives in RIIO-GT3

Focus on areas that matter most to consumers and customers, and are advocated by them.

01



03



Promote investment and innovation.

Stretch us to deliver ambitious performance.

02



Consistent with the whole RIIO-GT3 submission.

04



We'll achieve this by **retaining our current package** and **enhancing** with a small number of new schemes aligned to what our stakeholders have told us is important.



# New RIIO-GT3 financial incentive proposals

During our engagement, consumers and stakeholders have told us our suite of incentives have provided value to them and consumers, and enabled us to take the right actions.

Therefore we believe that retaining the current set of incentives is the correct approach as they drive the right behaviours, and provide customer benefit, as well as reflecting the increased importance of the environment.

## Our RIIO-GT3 proposal is to:

- **retain the current RIIO-T2 incentives with recalibrated performance measures;**
- **introduce a NTS Shrinkage incentive providing assurance of efficient trading; and**
- **introduce two new Greenhouse Gas incentives to further reduce our emissions whilst optimising pipeline and customer outage planning and meeting our customer's requirements. This in turn should reduce customers wholesale gas and environmental costs which will focus our efforts to support the Government's target to achieve net zero by 2050.**

## RIIO-T2 Incentive Schemes

- Capacity Constraint Management
- Residual Balancing
- Day Ahead Demand Forecasting
- Maintenance
- Customer Satisfaction
- Greenhouse Gas Compressor Emissions
- Environmental Scorecard

## Proposed RIIO-GT3 Incentive Schemes

- Capacity Constraint Management
- Residual Balancing
- Day Ahead Demand Forecasting
- Maintenance
- Customer Satisfaction
- Greenhouse Gas Compressor Emissions
- Greenhouse Gas Pipeline Emissions
- Greenhouse Gas Fugitive Emissions
- NTS Shrinkage



# We are seeking your views

We look forward to receiving your views on our RIIO-GT3 draft incentives.

Please provide your comments by 11 September 2024. We will review and consider all feedback ahead of the final Ofgem submission deadline in December.

You can respond by using the QR code or clicking the link.

You can also email us at [box.riiigt3@nationalgas.com](mailto:box.riiigt3@nationalgas.com) with comments or to request a meeting to give more detailed feedback.



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# Capacity Constraint Management (CCM) Incentive

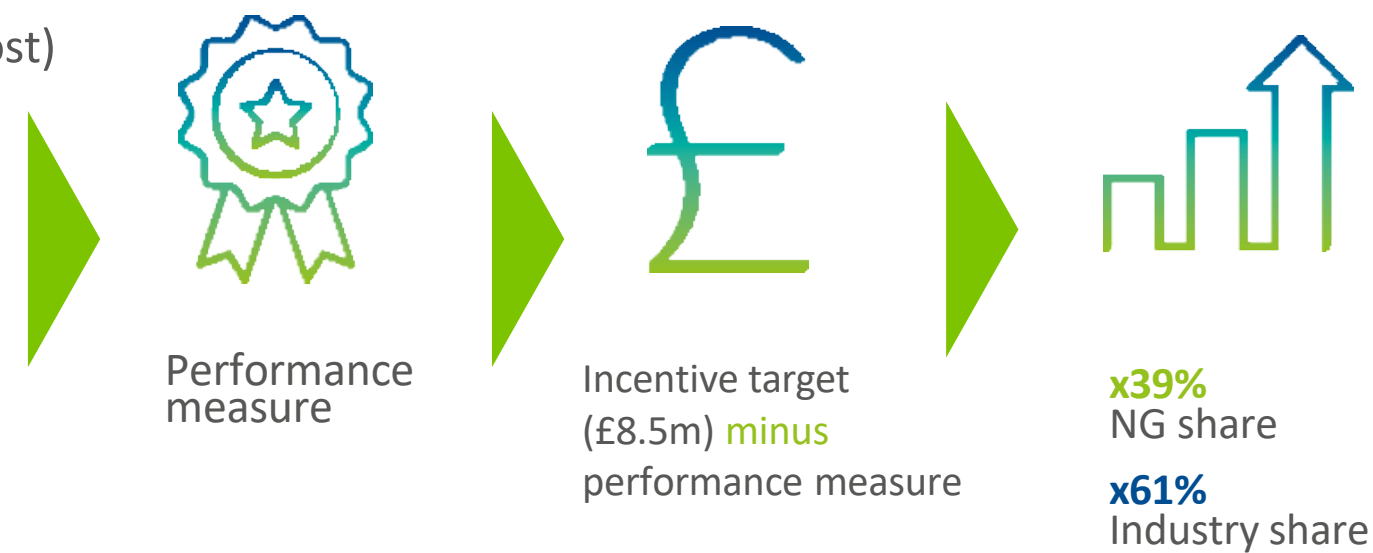


# Capacity Constraint Management (CCM) Incentive

**RIIO-T2 scheme purpose:** to maximise use of the network by minimising disruption to customer flows and selling additional capacity

## CCM components and calculation

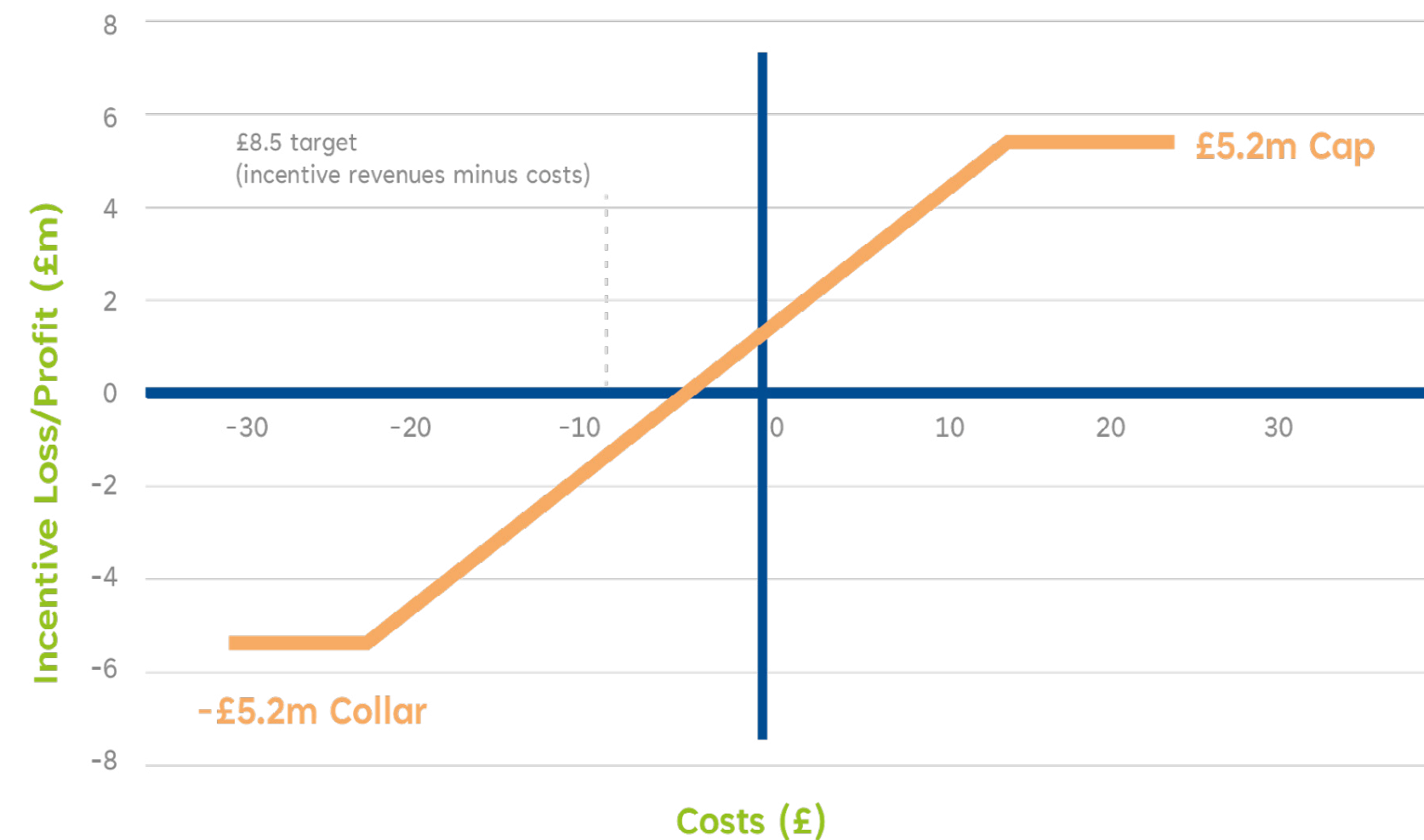
- Non-Obligated capacity sales (revenue) x 14%
- Constraint Management Agreements (cost)
- Locational Sell actions (revenue)
- Locational Buy actions (cost)
- Buy Back actions (cost)



## Our performance

Financial Year	Non-obligated capacity released (mcm)	No of constraint days	Financial Performance (key contributors)
2021/22	3,814	2	£5.2m (£4m excluding revenue from locational sell action)
2022/23	7,054	1	£4.8m (£4.1m excluding revenue from non-obligated capacity at Bacton Exit)
2023/24	5,640	0	£3.8m (less demand for non-obligated capacity, no locational actions)

## Capacity Constraint Management





# Consumer Value



## Non-obligated capacity release

- Bespoke strategies in place to maximise non-obligated capacity release according to customer needs and changing market conditions.
- An example of how we have delivered this was the non obligated exit capacity released at Bacton with an estimated customer value of £1.1bn in summer 2022.



## Capacity Constraint Management strategy

- Proactively identifying and mitigating emerging constraints.
- Minimising impact when constraints materialise to ensure swift and cost efficient constraint resolution in order to:
  - minimise the commercial and operational impacts on customers
  - minimise impact of constraints on wholesale prices.
- An example of how we have delivered this was management of asset issues and pipeline strike at no industry cost.



## Risk mitigation

- Contracts in place to ensure swift operational on-site resolution and resilience.
- Mandatory bid validation introduced to prevent erroneous bid entry.



## Improved modelling

- More accurate risk modelling.
- Modelling assumptions adjusted to reflect the historic market response to constraints.
- Model inputs amended to use latest capability curves.
- Constraint risk model adapted to accommodate different methods of resolving constraints.



## Information provision

- Improving transparency of information.
- Industry webinar held re UK Transit approach and impacts at Bacton Exit IP.
- RAG indicator implemented to inform potential future non-obligated capacity release at Bacton Exit.
- Industry webinar held to address exit customers' constraint queries.



# Our proposals for RIIO-GT3

Proposal	Justification
<b>Retain the incentive in a similar form.</b>	<p>We believe that the structure of the incentive is underpinned by the right principles. Our baselines are set to reflect the maximum theoretical physical capability under peak conditions, and as such, cannot necessarily be met 365 days of the year.</p> <p>This means that there is an inherent risk that we manage on a daily basis specifically when forecast flows/flows are expected to exceed capability or there are issues on the network. The incentive supports effective and efficient management of that inherent risk on behalf of our customers and stakeholders.</p>
<b>Potentially retain the existing cost and revenue components of the scheme.</b>	<p>Performance is determined by summing up several cost and revenue components over the year, comparing the value to the target and applying a sharing factor (subject to cap and collar).</p> <p>The target has historically (and in our view should continue) been determined by the estimated cost of forecast constraints in the RIIO-GT3 period. We believe that the current cost and revenue elements that are utilised in the incentive calculation remain valid in the RIIO-GT3 period.</p>
<b>Increase revenue from sales of Non-obligated capacity.</b>	<p>The proportion of non obligated revenue that is utilised in the CCM scheme should be reviewed to better align with the customer value associated to it.</p>
<b>Incentive parameters: Cap, collar, target TBC.</b>	<p>The incentive parameters will be determined once we have completed our RIIO-GT3 risk analysis, which is still in progress. Based on historic data, compressor reliability, network capability ranges, compressor reliability, maintenance, future investments and future flow prediction our risk modelling forecasts the number of potential constraint events and their costs. The predicted cost of constraints becomes our cost target.</p>



# Our approach to risk modelling

01

## Intact Network Risk:

This looks at risk associated to supply and demand patterns and assumes the whole network is available 100% of the time.

02

## Compressor reliability:

Our compressors are not available all the time and may not start when we need them. Using our RIIO-T2 compressor reliability data (as per our ANCAR publication), we ran risk analysis to quantify the associated risk from unplanned compressor failure.

03

## Maintenance:

We need to deliver a significant amount of maintenance on the network in the RIIO-GT3 period. We will make assumptions regards to the level of funding available to us to deliver the essential works and overlay it to assess the level of risk it may create.

04

## Total (proposed approach):

Combining each of the three layers above into a single analysis rather than adding up the risk associated to each of the three layers.

Probability of constraints

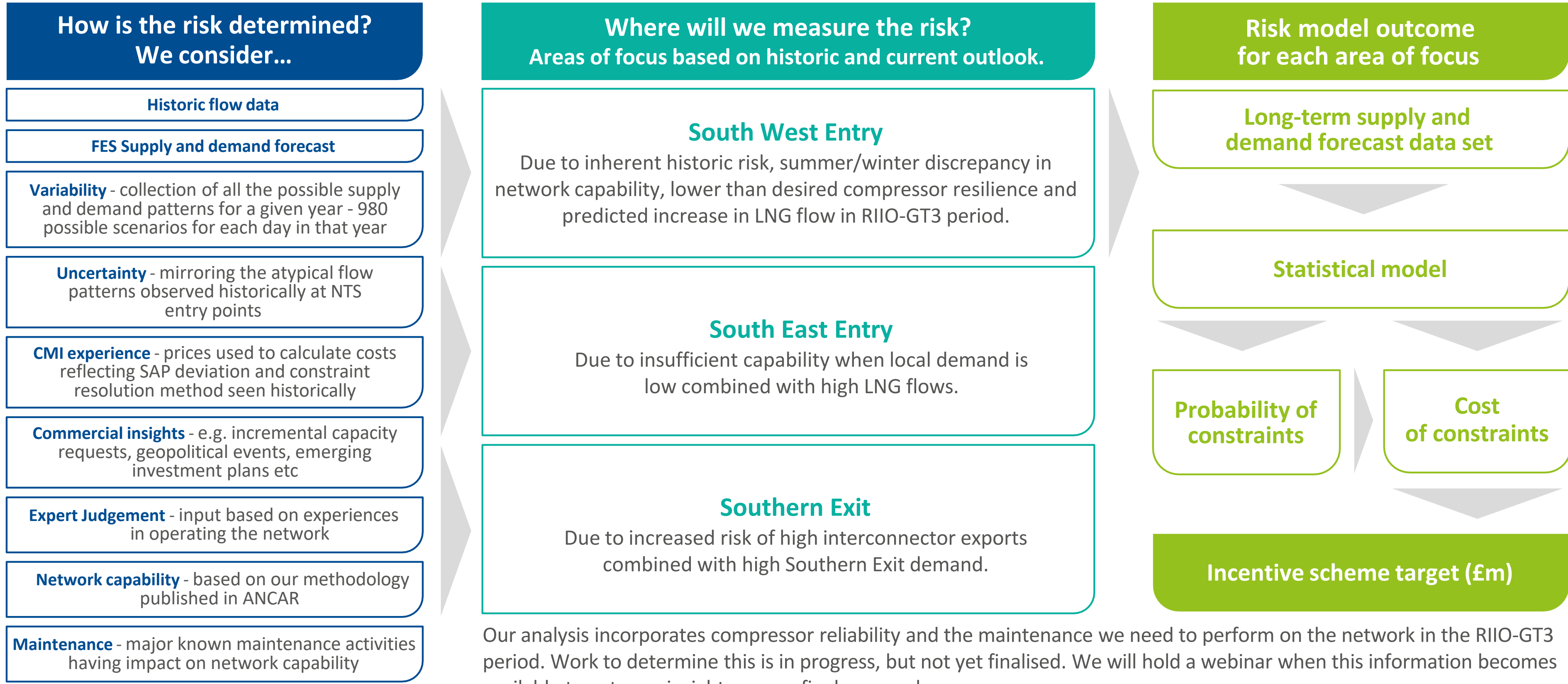
Cost of constraints

Incentive scheme target (£m)



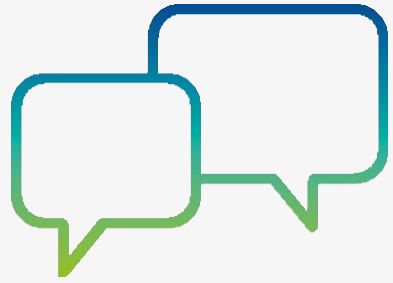


# Our approach to risk modelling for CCM



Our analysis incorporates compressor reliability and the maintenance we need to perform on the network in the RIIO-GT3 period. Work to determine this is in progress, but not yet finalised. We will hold a webinar when this information becomes available to get your insights on our final proposal.





# Consultation questions

## CCMQ1

Do you agree with our proposal to retain the principles of the scheme in a similar format to RIIO-T2 (target/cap/collar)?

## CCMQ2

Do you agree with our approach to risk modelling to update the scheme parameters?

## CCMQ3

How important is the release of non-obligated capacity to you as a business?

## CCMQ4

Do you think the incentive delivers customer value?

## CCMQ5

Do you think markets developments (e.g. blending/100% hydrogen network, CCUS) could lead to a review of the scheme parameters in the future?



# NTS Shrinkage (SH) Incentive



# NTS Shrinkage (SH) Incentive



**RIIO-T2 scheme purpose:** to deliver savings to consumers through efficient procurement of shrinkage energy

**Description:** Shrinkage refers to gas which is used in the physical and commercial operation of the network.

## Incentive History

### RIIO-T1

The Shrinkage Incentive for RIIO-T1 was a financial incentive based upon an overall cost minimisation scheme.

A cost target based on a derived market reference price was compared to the actual costs based on pre-defined volume targets incurred by National Grid Gas (now National Gas Transmission) in order to determine incentive performance, it is also worth noting that the scheme included a winter Triad avoidance element which incentivised us to minimise the running of electric compressors during such periods.

- Cap/Collar +/-£7m. With 44% Sharing Factor.

### RIIO-T2

The Shrinkage Incentive, for RIIO-T2, is reputational only. Annual gas procurement cost is compared to benchmark costs: best case scenario, worst case and average (22/23 onwards). Calculation of benchmark costs is set out in the Gas Volumes Methodology.

Benchmarks based on forecast and actual volumes, and market prices.

## RIIO-T2 Gas Procurement Costs

RIIO Period	Financial Year	Gas Procurement Costs (£m)
RIIO-T2	21/22	149.1
RIIO-T2	22/23	629.9
RIIO-T2	23/24	136.7





# Consumer Value



## Managing pass through costs

- We develop and execute efficient procurement strategies, that deliver an appropriate balance between cost minimisation and management of price risk.
- Aim to minimise the overall cost of shrinkage we incur in our role as NTS Shrinkage Provider through efficient system operation and energy procurement.

## NTS Shrinkage Trading strategy

- We balance the risk of energy costs with a mixture of long and short term procurement.
- Continued review of the strategy to ensure we adjust for market conditions.

## Risk mitigation

- A balance of forward and prompt purchasing helps support effective competition by protecting the market from price volatility.
- This is a cost minimisation incentive with a target derived from gas market prices.

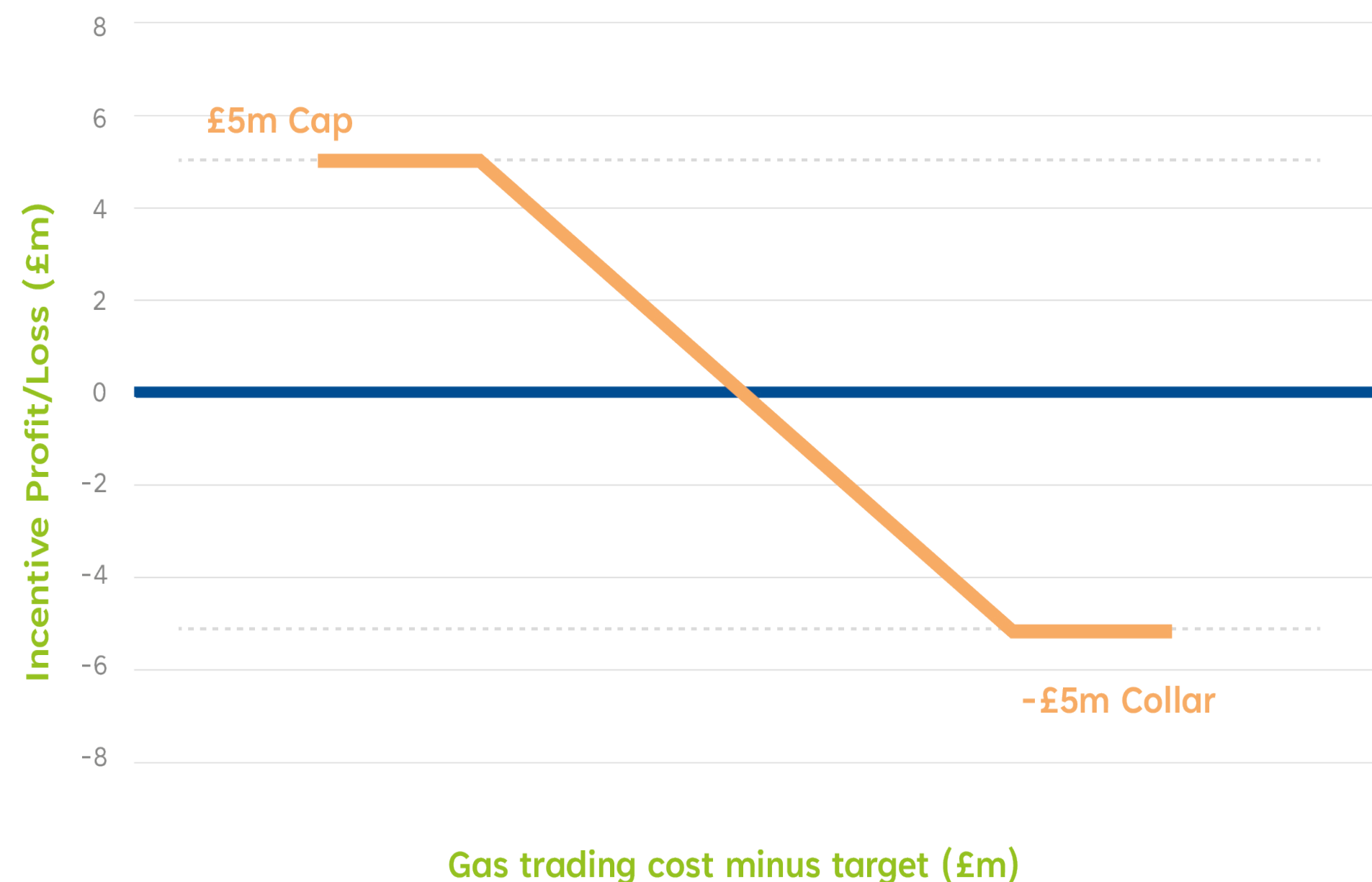




# Our proposals for RIIO-GT3

- Return to a financial incentive based around the purchasing of the NTS Gas Shrinkage requirement including both Forward and Prompt contracts.
- The incentive will focus the aspects of Shrinkage where we have direct control or influence, which is primarily our efficient procurement (wholesale market purchasing of gas).
- The mixture of Forward and Prompt trading works as a risk management tool to help smooth costs and manage the risks that can be seen when there are sudden market movements related to the changing supply/demand balance picture or market dynamics.
- A financial incentive provides additional focus on gas procurement performance and changes the risk reward balance which directly benefits customers.
- The proposed new scheme methodology measures our gas trading against market metrics ensuring the performance is shared with customers, reducing their costs.
- The scheme will also include a Cap/Collar (to be determined) with an agreed Sharing Factor.

### NTS Shrinkage Forward Gas Trading Parameters

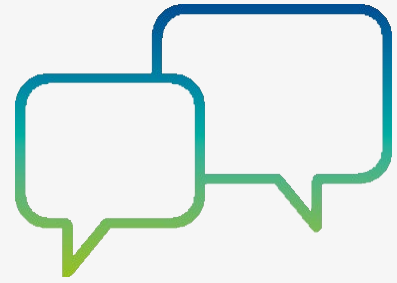




# Our proposals for RIIO-GT3

Proposal	Justification
<b>Description</b>	<p>Shrinkage refers to energy which is used or lost in the operation of the transportation network, it comprises, calorific value shrinkage, unaccounted for gas and compressor fuel use (which may be either gas or electricity).</p> <p>When we replace this energy in our role as NTS Shrinkage manager, as part of this we propose to be incentivised to minimise the costs we incur through efficient energy procurement.</p>
<b>Create new Financial incentive scheme</b>	<p>Ofgem and our Stakeholders have requested the creation of new scheme as increasing market uncertainty has increased NTS Shrinkage costs, see table RIIO-T2 Gas Procurement Costs.</p> <p>Costs associated with National Gas' procurement of NTS Shrinkage are directly passed through to users via our charges.</p>
<b>Scheme based on what is in our control</b>	<p>The incentive will focus the aspects of Shrinkage where we have direct control or influence, which is primarily our efficient procurement (wholesale market purchasing of gas).</p> <p>We have less control over NTS Shrinkage volumes, these will be excluded from the incentive.</p>
<b>Manage gas costs</b>	<p>Assess performance of gas trades against market metrics.</p> <p>We propose the re-introduction of caps/collars tied to a performance measure, with sharing factors applied.</p>
<b>Manage customers' risk</b>	<p>This benefits our consumers as a long-term focus and strategy with a mixture of long and short-term procurement on forwards and prompt markets provides assurance of risks and cost.</p> <p>Effective trading ensures costs are reduced and not passed through to customers via our charges.</p>





# Consultation questions

## SHQ1

Do you agree with our proposal to return to a financial incentive for NTS Shrinkage Gas?

## SHQ2

Do you agree on focusing on performance of gas trades?

## SHQ3

Do you agree with our proposed incentive range target?

## SHQ4

Do you agree with a incentive sharing factor?





# Greenhouse Gas (GHG) Emissions Incentives



# Overview of our Greenhouse Gas (GHG) Emissions suite of incentives for RIIO-GT3

The Greenhouse Gas (GHG) emissions suite of incentives are separate and independent of each other. They have their own performance measures but share similar objectives in delivering customer and stakeholder value. They support our 2050 glide path to achieve net zero scope 1 and 2 emissions and are designed to expand our emissions reductions opportunities by encouraging us to go beyond business-as-usual activities.

## The proposal consists of:

### 1. Greenhouse Gas Compressors (GHGC) Emissions

GHGC is a pre-existing incentive scheme with recalibrated performance targets and measures.

### 2. Greenhouse Gas Pipeline (GHGP) Emissions

GHGP and GHGF are new incentive proposals designed to optimise the planning, availability, and deployment of the mobile recompression units alongside the additional capability units. This is designed to re-inject the maximum amount of gas back into live sections of pipeline. And to further reduce the emissions from the expanded fugitive methane detection and analytics programme for increased monitoring and efficient repair.

They will ensure we are incentivised to maximise the opportunities afforded by Net Zero Pre-Construction Work and Small Net Zero (NZASP) projects going beyond the outcomes assessed via consultation.

### 3. Greenhouse Gas Fugitive (GHGF) Emissions



# Greenhouse Gas Compressor (GHGC) Emissions Incentive Scheme

**RIIO-T2 scheme purpose:** to reduce the amount of natural gas vented from our compressors, thereby reducing the effect of our operational activities on the environment.

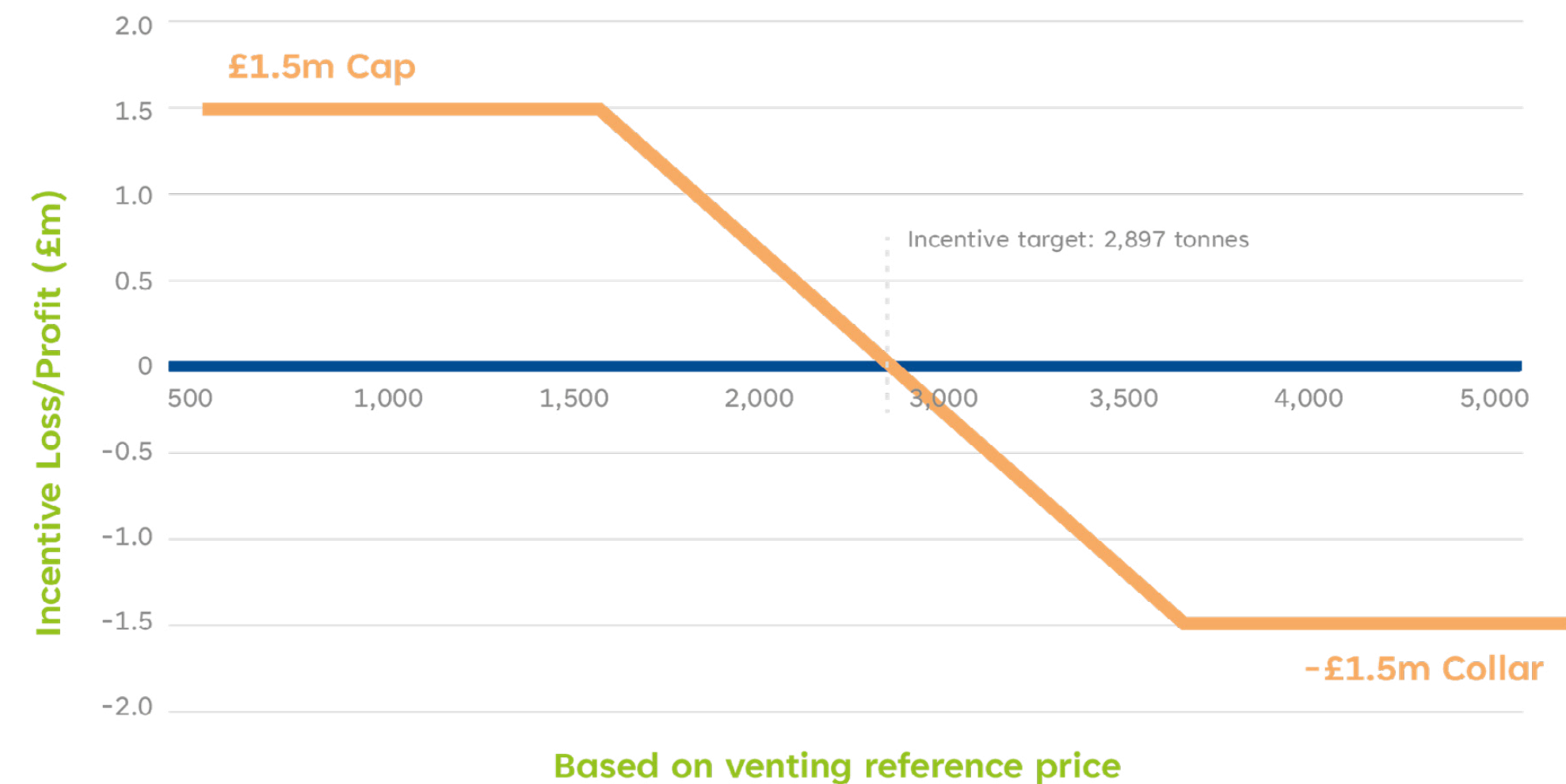
## Our performance

Financial Year	Incentive Target (tonnes)	Incentive Performance (tonnes)	Financial Performance (key contributors)
2021/22	2,897	2,061	*+£1.5m (ref price £1,916 per tonne)
2022/23	2,897	2,287	+£1.3m (ref price £2,104 per tonne)
2023/24	2,897	2,293	+£1.4m (ref price £2,419 per tonne)

\* Capped performance

The chart opposite is an example of how the RIIO-T2 Incentive scheme works, with a symmetric target and maximum reward (cap) and maximum penalty (collar), and venting allowance.

## Greenhouse Gas Compressor (GHGC) Emissions





# Consumer Value



## A reduction in venting helps improve local air quality

- Supporting the Government's target of net zero by 2050.
- Further reduce our operational environmental damage.
- Ensuring that we minimise emissions from venting is important as methane has 28 times the global warming potential of carbon dioxide.
- For example, we have delivered this by reviewing the compressor availability in the summer and placing some units in stasis which removed the need for test running and the associated venting.



## Helps lower consumer bills

- A reduction in venting results in lower volumes of shrinkage and reduced carbon associated with emissions avoided which leads to a direct reduction in customer bills.



## The incentive is a great driver for discovery projects and new technology

- Innovation and changes to working practices have saved ~300 tonnes of emissions from compressors per year.
- An example of how we have delivered this was the development of new decision support tools to optimise standby time.
- The incentive also drives us to design and investigate new technology to help further minimise venting as seen in our Greenhouse Gas Investigative Mechanism (GHGIM), Monitoring of Real Time Emissions (MORFE) and NZASP projects.



## New GHG incentives for pipeline maintenance and fugitive leakage reduction

- The proposed new schemes will:
- Maximise availability of recompression sets.
  - Optimise mobile recompression for pipeline maintenance.
  - Implement a more efficient fugitive repair programme.
  - Further saving emissions and NTS replacement Shrinkage costs.



# Our proposals for RIIO-GT3 (GHGC)



Proposal	Justification
<p><b>Retain the Greenhouse Gas (GHGC) emissions in a similar form:</b></p> <ul style="list-style-type: none"> <li>• Symmetrical incentive structure.</li> <li>• Utilising the established GHG calculation methodology.</li> <li>• Reference price based on government central carbon cost calculations.</li> </ul>	<p>The customer feedback we've received confirmed that our GHGC is highly valued by our customers and they wanted to see a recalibrated target due to recent improved performance and to push us to identify more reduction opportunities.</p> <p>We continue to believe that a symmetrical incentive is appropriate as it supports the fundamental incentive principles, as it reflects the elements of emissions within our control.</p>
<p><b>Reduce our existing target allowance from 2897 tonnes to 2600 tonnes. (Target allowance, in tonnes of natural gas) calculated as the aggregate amount of Natural Gas Vented from all Compressors.</b></p>	<p>Over the past 12 years our target has reduced by 110 tonnes, a ~300 tonne reduction is in line with our improvement activities seen over the last 2/3 years. The target will still be challenging and we will need to identify new opportunities, continue with current improvement activities, whilst operating the NTS to meet our customers' requirements, as well as legislative and safety requirements.</p>
<p><b>We are proposing to update the Methane CO2 conversion from 1:25 to 1:28.</b></p>	<p>The change will bring us in line with current European standards which changes the calculation of Co2 emissions.</p>
<p><b>Retain existing annual external verification statement.</b></p>	<p>The Independent audit will continue to provide assurance that we are operating in a manner consistent with our GHG calculation methodology.</p>
<p><b>Cap and Collar</b></p>	<p>We believe that an upside and downside encourages us to continue to utilise existing initiatives, identify and investigate new innovative solutions or technology. As well as allowing a cost benefit analysis of any new investment. We believe that the cap and collar provides continued focus to maintain our performance and reputation which in turn provides Ofgem, stakeholders and customers with confidence that we will seek to reduce the impacts of our business on the environment.</p>



# Our proposals for RIIO-GT3 (GHGP)



Proposal	Justification
<p><b>Greenhouse Gas Pipeline (GHGP) Emissions (new incentive)</b></p>	<p>The proposed scheme is designed to ensure that we make the appropriate decisions to optimise the maintenance, availability and use of the mobile recompression units to run concurrently with the additional capability units. This will enable us to reinject previously vented gas during our pipeline maintenance activities following the delivery and commissioning of the RIIO-T2 and NZASP funded units.</p>
<p><b>Symmetrical incentive structure with a Cap and Collar</b></p>	<p>We believe that a new symmetrical incentive is appropriate as it supports the fundamental incentive principles to reflect our control of emissions and guard against penalising for events outside of our control.</p>
<p><b>&gt;1bar of recompression.</b></p> <ul style="list-style-type: none"> <li>• <b>Currently vent at 7 bar.</b></li> <li>• <b>Two new set of mobile recompression units/additional capability units to take recompression to 1bar. In line with our funding submission.</b></li> <li>• <b>High bar to achieve any incentive payment, risk of penalty on currently non incentivised activity.</b></li> </ul>	<p>We propose an incentive that rewards us for going beyond our ambitious investment assumptions of recompression to 1bar.</p> <p>Mobile recompression and additional capability units need to work in parallel as a set to achieve new targets.</p> <p>The performance measures will start at 1 bar or less which will encourage us to innovate practices to capture otherwise vented gas.</p>
<p><b>We propose that the first year of RIIO-GT3 is for data gathering and incentive setting.</b></p>	<p>These is new technology that needs testing and commissioning to assess the real performance operation data against design data. Expected delivery date of April 2026 for second set of recompression units.</p>
<p><b>Reference price based on government central carbon cost calculations and Methane CO2 conversion 1:28.</b></p>	<p>Based on government published prices. The conversion is in line with current European standards.</p>

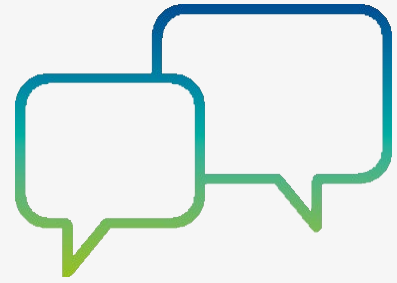


# Our proposals for RIIO-GT3 (GHGF)



Proposal	Justification
<p><b>Definition</b>  <a href="https://www.iogp.org/bookstore/wp-content/uploads/sites/2/2022/03/Methane-Emissions-Glossary.pdf">https://www.iogp.org/bookstore/wp-content/uploads/sites/2/2022/03/Methane-Emissions-Glossary.pdf</a></p>	<p>Fugitive emission - Leaks due to tightness failure and permeation.</p> <p>Permeation does not occur on the National Transmission System, this is applicable to gas distribution networks where permeation occurs on polyethylene pipelines. An example fugitive emission on the NTS would be the release of natural gas from a valve stem where the valve seals or packing are beginning to fail and natural gas is passing to atmosphere via the valve stem.</p>
<p><b>Greenhouse Gas Fugitive (GHGF) Emissions (new incentive)</b></p>	<p>We are currently collating data to establish base level emissions for incentive parameters, we propose to consult and provide details of the scheme in year 1 or 2 of RIIO-GT3.</p> <p>We would envisage that the scheme will have a target for us to reduce fugitive emissions with cap and collar beyond our expanded fugitive methane detection and analytics programme funding.</p> <p>Our current defect funding covers a proportion of the fugitive leakage repairs following a 4 yearly measurement survey at Terminals and Compressor stations.</p> <p>We intend to increase this to include an additional 509 NTS AGI's and change the frequency to an annual continuous fugitive detection/measurement-based assessment. This will increase the detected fugitive leakage monitoring and volumes and subsequent repairs. The incentive will encourage us to use the methane detection and analytics programme for more efficient identification and repair.</p>
<p><b>&gt;10% reduction in baseline = outperformance, underperformance = increased volume v baseline</b></p>	<p>The incentive will address the difference in the new defect funding requirements from the increase in monitored assets and timeframe, and seek to go beyond our investment funding estimation for expanded fugitive methane detection and analytics programme to reduce fugitive leakage by &gt;10% of established baseline fugitive emissions per year.</p>





# Consultation questions

## GHGQ1

Do you agree with our proposal to retain a financial incentive for GHGC and reduce the target allowance?

## GHGQ2

Do you support our new GHG incentives (GHGP and GHGF) and the associated scheme parameters?

## GHGQ3

Do you support us continuing to explore the potential for a GHGF Scheme with a potential consultation in year 1 or 2 of RIIO-GT3, once we have an established emissions baseline?



# Demand Forecasting (DF) Incentive



# Demand Forecasting (DF) Incentive

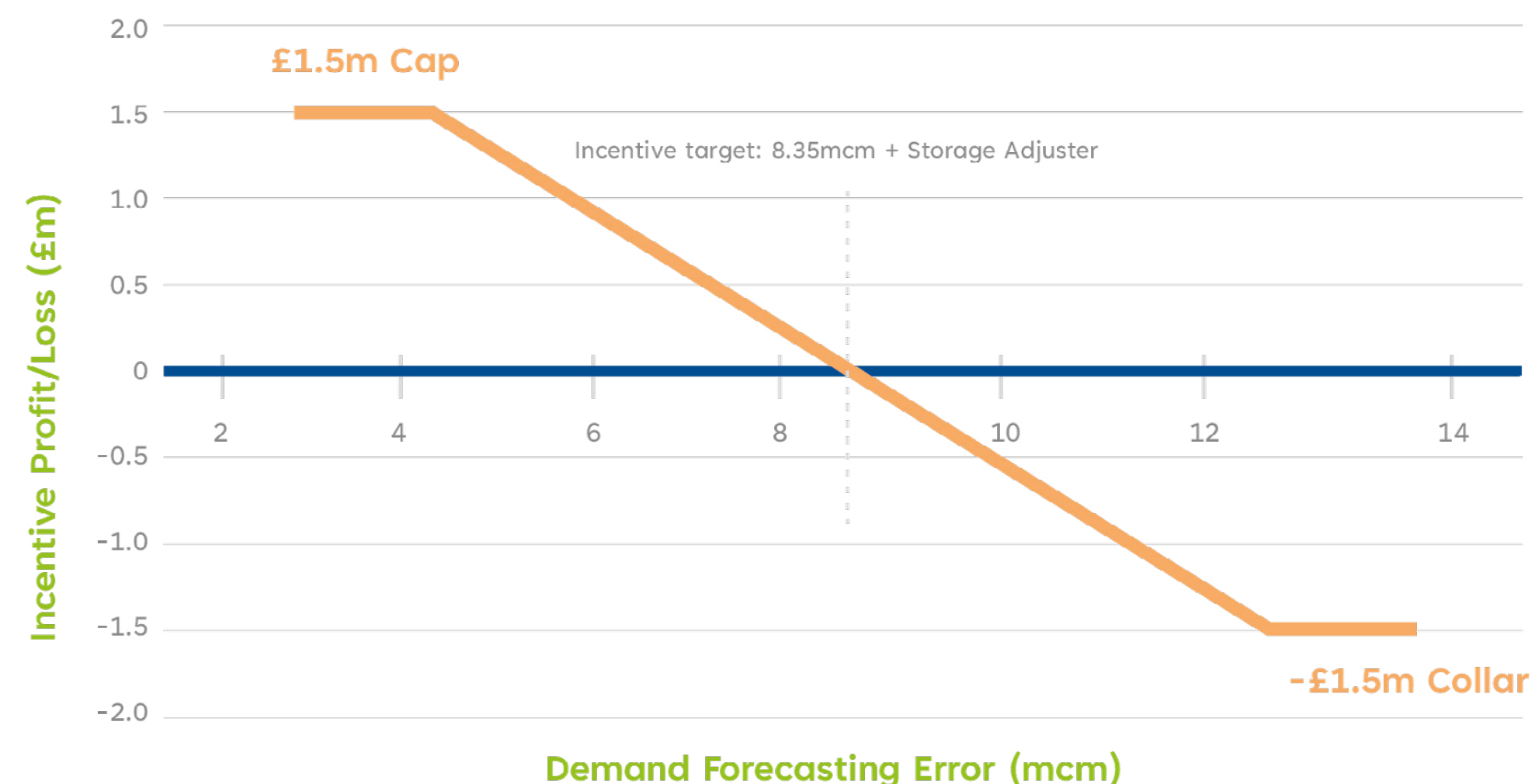
**RIIO-T2 scheme purpose:** to provide NTS demand forecasts over a range of timescales to help the industry make informed physical and commercial decisions.

- Day ahead (financial)
- 2 to 5 days ahead (reputational)

## Our performance

Year	D-1			D-2 to D-5		
	Target (8.35mcm + storage adjuster)	Performance	Financial performance £ (m)	Target	Performance	Financial performance £ (m)
2021/22	8.97	8.52	0.17	13.70	12.37	no financial incentive
2022/23	8.48	8.97	-0.19	13.70	13.95	no financial incentive
2023/24	8.52	7.86	0.26	13.70	12.89	no financial incentive

## Demand Forecasting - Day Ahead Scheme Parameters





# Consumer Value



## Procure forecast

- Without access to our demand forecast Shippers need to choose whether to purchase it from other sources (which might be costly) or develop internal forecasting capability.
- Customers with their own demand forecast capabilities have told us they value our forecast to validate their internal outcomes.



## Short term procurement

- By correctly anticipating the level of demand (based on our forecast) Shippers have an opportunity to purchase gas at better price/minimise their costs by not purchasing gas at short notice.
- Imbalance charges – by having access to accurate forecasts Shippers are able to better balance their position therefore avoiding unnecessary imbalance charges.



## Level playing field

- By making our forecast free to all we ensure no market participant is disadvantaged therefore we remove a barrier to entry and promote fair competition.
- We have adapted our models and processes to keep up with the changing market conditions (volatility) and ensure our demand assessments remain as accurate as possible.

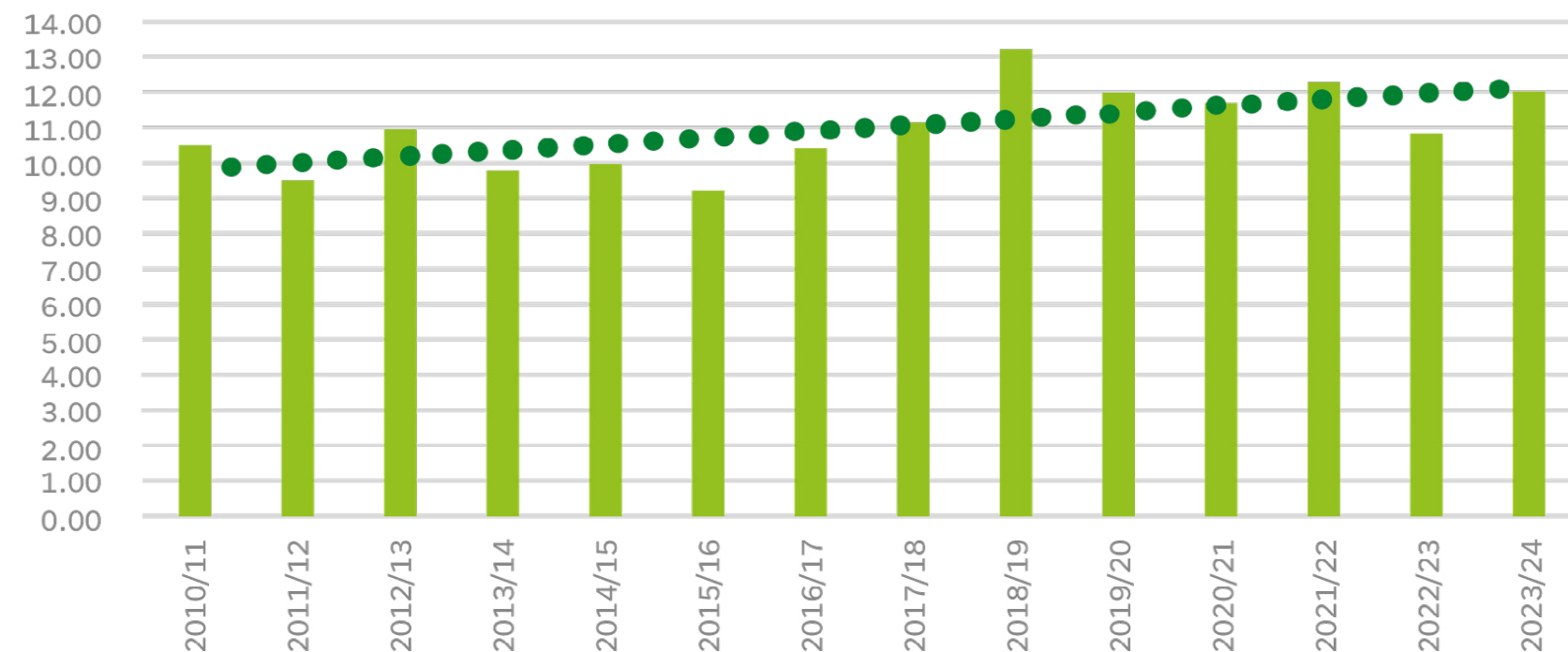




# Our proposals for RIIO-GT3

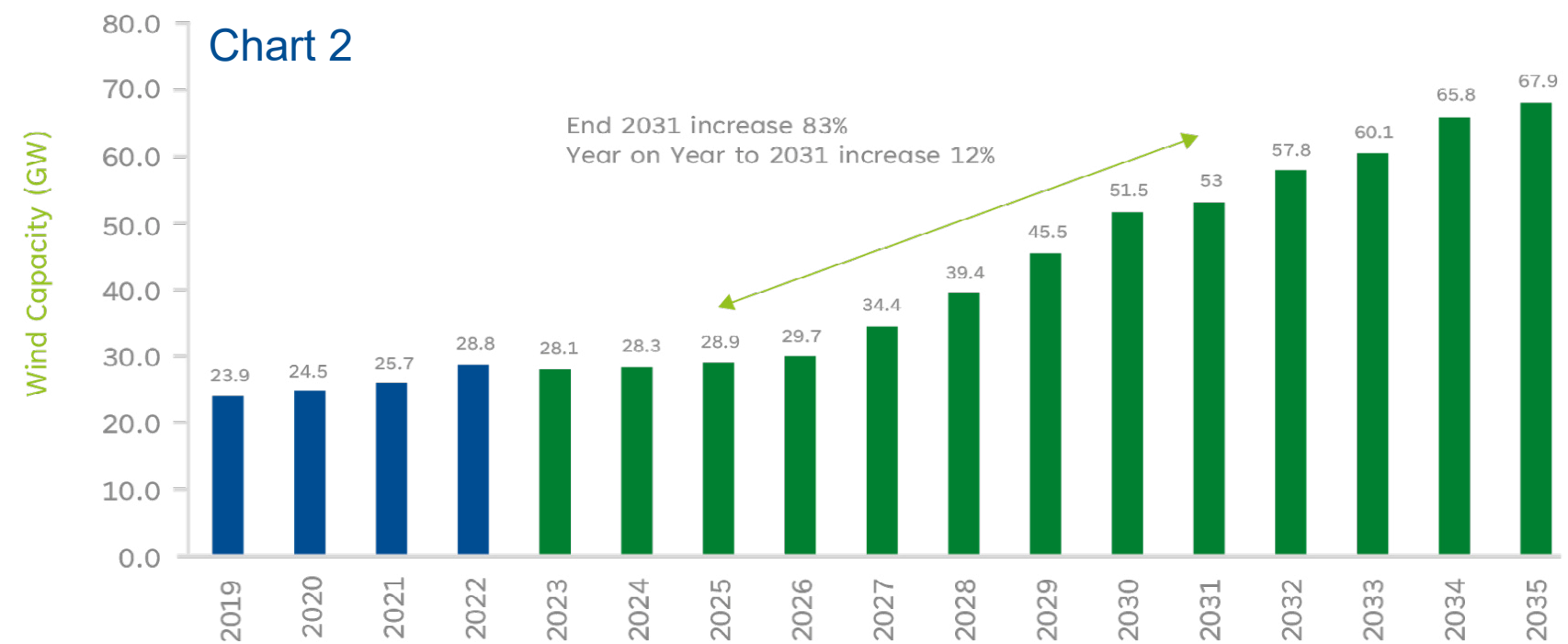
Proposal	Justification
<b>Retain the D-1 and D2-5 schemes in a similar form</b>	The customer feedback we've received confirmed that our D-1 and D2-5 demand forecasts are valued by our customers and that the schemes provide customer value.
<b>Increase target from 8.35 to 8.82 for D-1 and 13.7 to 14.62 for D-5</b>	These targets reflect more volatile market conditions (see chart 1) that have been experienced. Changes in weather patterns and increase in renewable generation have and will continue to cause increasing fluctuation in gas demand. Adjusting the target will align it with the changes we have seen in the market in RIIO-T2.
<b>Remove the weighting effect from the target error calculation (use arithmetic absolute mean)</b>	This will simplify the scheme and be more aligned with the market characteristics observed in the RIIO-T2 period i.e. where the volume of demand is no longer a dominant determinant of forecast error.
<b>Replace the storage adjuster with a wind adjuster</b>	Although storage remains a factor of forecasting volatility, it's no longer the primary source given the changes in the overall supply sources/demand. We expect the predicted growth in installed wind capacity (see chart 2) and associated impact on power demand volatility will play a much greater role as we progress now through RIIO-GT3.

Chart 1



Demand forecast volatility – Standard deviation - year on year change

Chart 2



Predicted Wind Capacity Growth - Wind Capacity Growth FES Falling Short Scenario 2019 to 2035





# Consultation questions

## DFQ1

Do you agree with our proposal to retain a financial incentive for day ahead demand forecasts?

## DFQ2

Do you agree with our proposed incentive target and for the weighting to be removed?

## DFQ3

Do you agree with our proposal to replace the storage adjuster with a wind adjuster for the level of renewable wind generation?

## DFQ4

Do you agree with our proposal to retain a reputational incentive for D-2 to D-5 demand forecast?

## DFQ5

Do you believe there is value to the market of an incentivised D2 to D5 Demand forecasting scheme?





# Maintenance (MA) Incentive



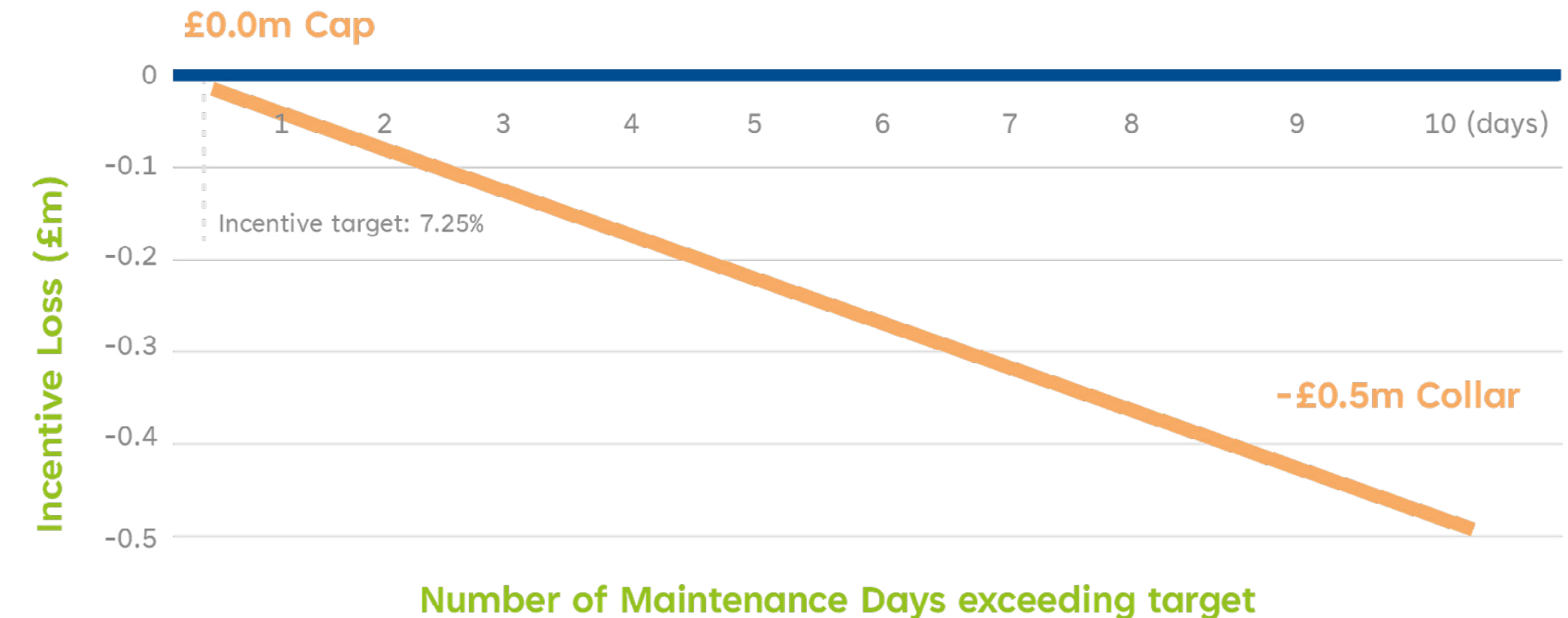
# Maintenance (MA) Incentive

RIIO-T2 scheme (1) purpose: to reduce the impact of our maintenance activities on customers.

## Our performance

1) Change Scheme	No of maintenance days delivered	7.25% target in days	Performance (days)	Financial performance (£m)
2021/22	161	11.7	0	0.0
2022/23	125	9.1	0	0.0
2023/24	242	17.5	0	0.0

## Maintenance – Changes to Maintenance Plan





# Maintenance (MA) Incentive

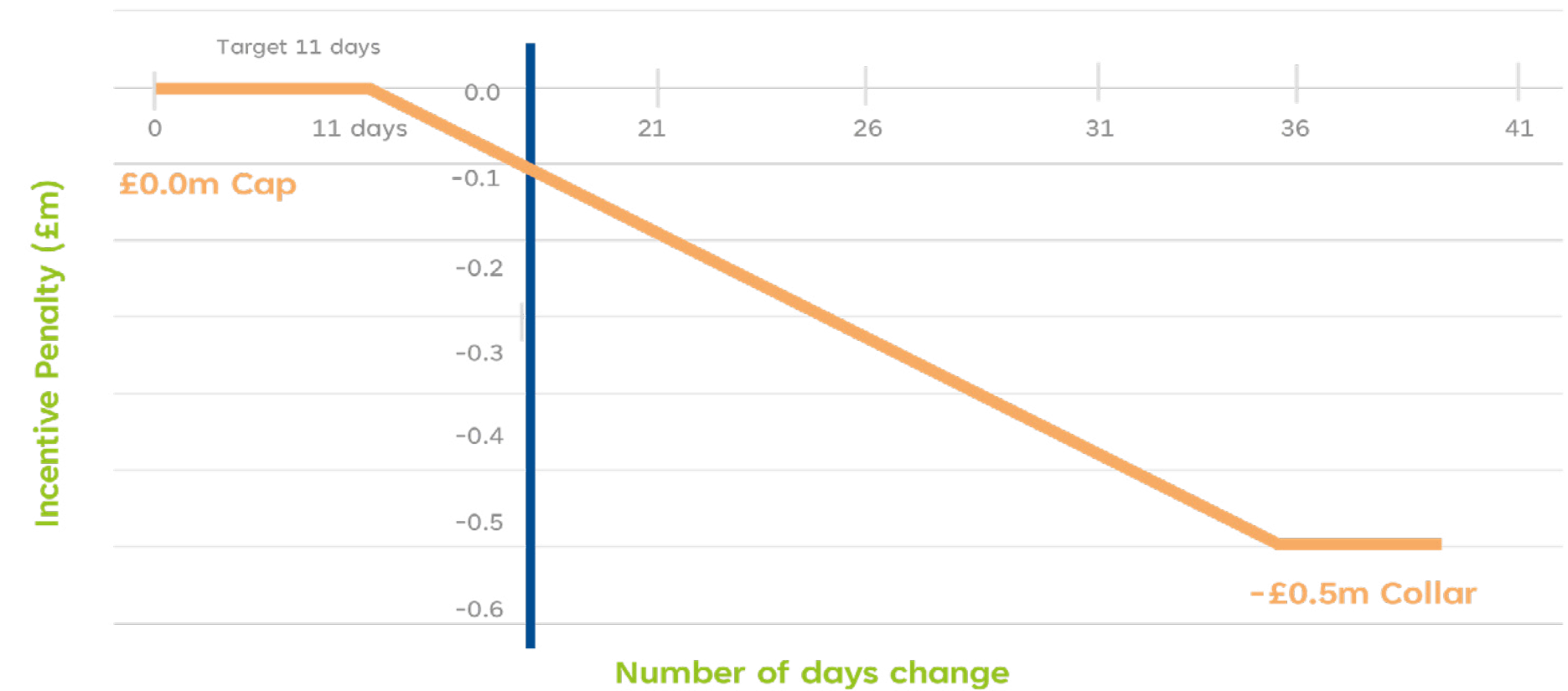
RIIO-T2 scheme (2) purpose: to reduce the impact of our maintenance activities on customers.

## Our performance

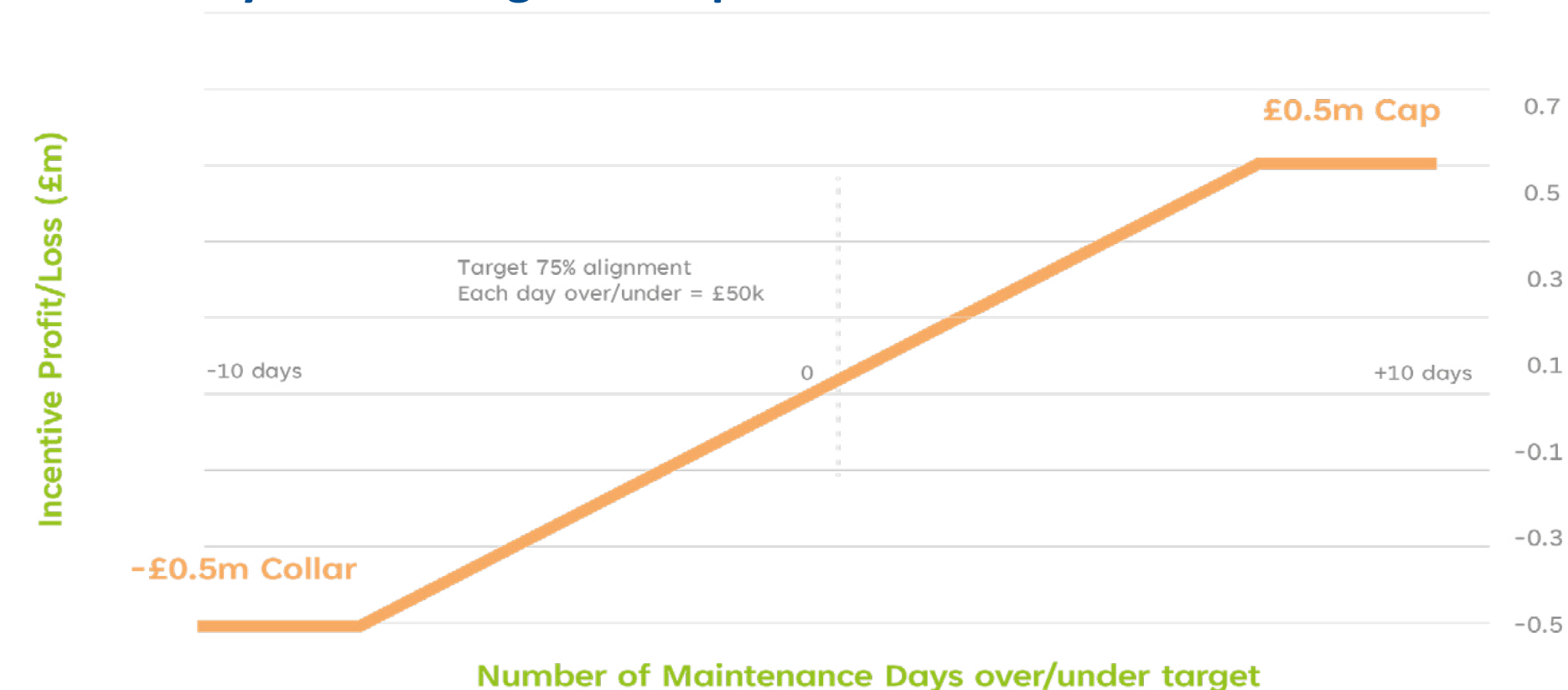
2) Remote Valve Operations (RVOs)	No of RVO days delivered	Use of RVOs Target	Days used RVO	Financial performance (£m)
2021/22	28	11	1	0.0
2022/23	28	11	1	0.0
2023/24	48	11	1	0.0

3) Non-Remote Valve Operations (non-RVOs)	No of non-RVO maintenance days	75% alignment target in days and %	Days used non-RVO	Financial performance (£m)
2021/22	133	127 (95%)	6	0.5
2022/23	95	87 (92%)	8	0.5
2023/24	194	194 (100%)	0	0.5

## Use of Days - Valve Operations



## Use of Days - Excluding Valve Operations





# Consumer Value



## Alignment of maintenance work

- We've estimated that every day we align maintenance with a customer it conservatively saves between £500k - £4m of plant downtime compared to if we had to turn a customer off, leading to reduced costs passed through to consumers.
- An example of how we delivered this was when activities were at risk of being delayed during planned ILI run in North East i.e. worked extra hours in difficult weather conditions to deliver on time.

## Minimised customer interruption

- Striving to minimise changes to our published maintenance plans ensures our customers experience limited or no interruptions with regards to what they can flow on and off the network.
- On occasions have delivered this via exploring more novel ways of working including undertaking works live with a managed pressure restriction to allow customers to continue to operate as normal.

## Feedback to date

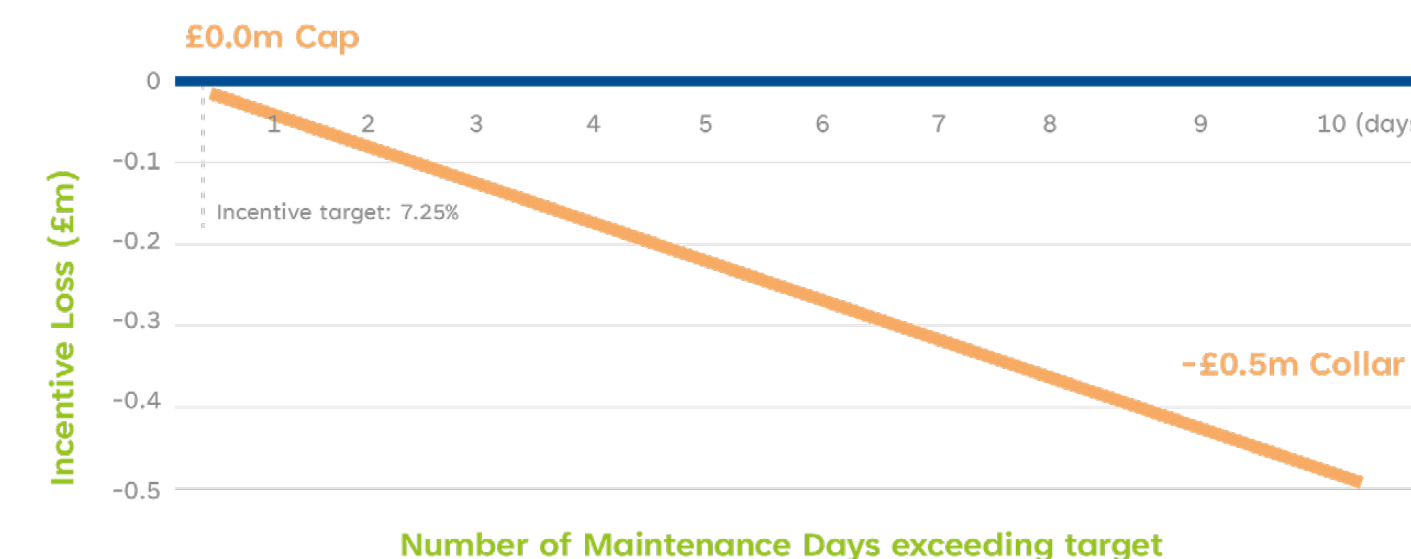
- 'National Gas should be financially rewarded for keeping the impact of maintenance activities to minimum as we don't have a choice but to accept the consequences of maintenance.'
- 'Customers cannot re-route flows, and NG's actions might have a direct impact on your business and may lead to loss of revenue.'
- 'We should do anything possible to reduce the customer impact, which may make maintenance suitable for a balanced incentive.'



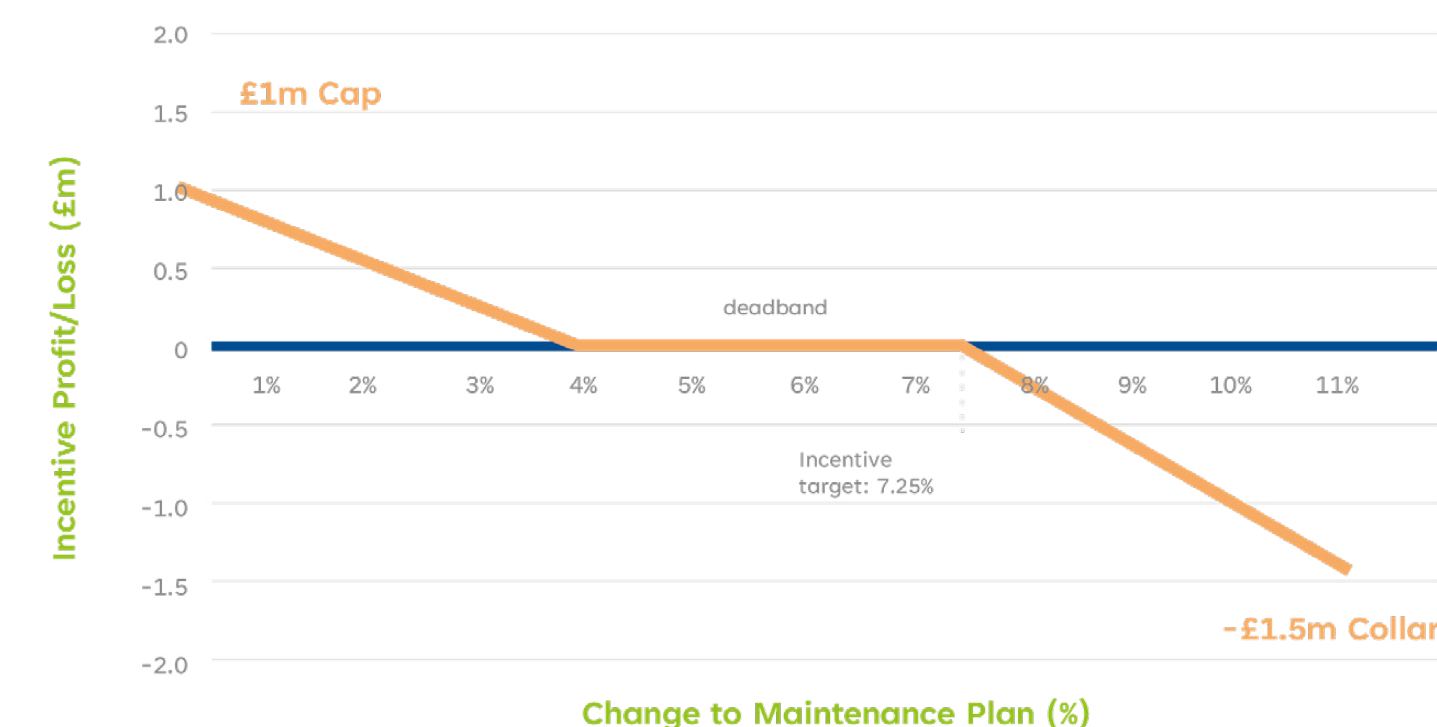
# Our proposals for RIIO-GT3

Proposal	Justification
<b>Retain the scheme in a similar form i.e. keep all three elements of the scheme</b>	The customer feedback we've received confirms that the incentive continues to deliver value to our customers and that we should continue to be incentivised to minimise the impact of maintenance works on customers wherever possible.
<b>Change scheme</b>	
<b>Introduce cap and deepen the collar by £1m (see charts)</b>	Introduce an upside (and deeper downside) due to more risk involved (and effort required) in aligning a growing number of maintenance activities planned for RIIO-GT3 and increase in customer benefit.
<b>Introduce a deadband (4% - 7.25%)</b>	We recognise that we should only reach the cap when we make no changes to published maintenance plans. The introduction of a deadband ensures we do not benefit from performance close to target.
<b>Switch to daily reward/penalty per % change outside the deadband</b>	Currently the daily reward and penalty is fixed at 10 days. Switching to a % will align the daily reward/penalty with the overall target and make it more reflective of any future changes in the number of maintenance days delivered.
<b>Routine Valve Operations (RVOs)</b>	
<b>Tighten the target from 11 to 5 days</b>	Reflecting good performance in RIIO-T2 and to encourage continued focus on future performance.
<b>Non-Routine Vave Operations (non RVOs)</b>	
<b>Tighten the target to 85% from 75%</b>	Reflecting good performance in RIIO-T2 and to encourage continued focus on future performance.
<b>Switch to daily reward/penalty per % change above/below the target</b>	As per Change scheme.
<b>Extend the Maintenance Window</b>	Extend the Maintenance Window from Apr-Oct to Mar-Nov reflecting regular early start and finish of maintenance works and to encourage alignment of work throughout the year (subject to UNC change).

## Maintenance – RIIO-T2 Changes to Maintenance Plan



## Maintenance – RIIO-GT3 Changes to Maintenance Plan







## Consultation questions

### MA1

Do you agree with our proposal to extend the maintenance window and therefore the period our incentive performance is measured against?

### MA2

Do you agree that cap/collar in the change element of the incentive should be amended?

### MA3

Do you agree with our proposal to tighten the targets for remote valve operations (RVO) and non-RVO works, but not change?

### MA4

Do you agree that the daily reward and penalty for change and non-RVOs should be based on a percentage?



# Residual Balancing (RB) Incentive



# Residual Balancing (RB) Incentive

RIIO-T2 scheme purpose: to balance supply and demand on the gas day and to minimise the impact it has on the market.

## Our performance

Target	2021/22		2022/23		2023/24	
	Average daily performance	£'s	Average daily performance	£'s	Average daily performance	£'s
1.50%	1.84%	£23.1k	3.96%	-£322.5k	0.90%	£185.7k
2.8 mcm/d	2 mcm/d	£556.6k	2.5 mcm/d	£280.4k	1.8 mcm/d	£649.6k
<b>Total:</b>		<b>£579.7k</b>		<b>-£42.1k</b>		<b>£835.2k</b>

## Residual Balancing - Price Performance Measure



## Residual Balancing - Linepack Performance Measure





# Consumer Value



## Shipper Imbalance

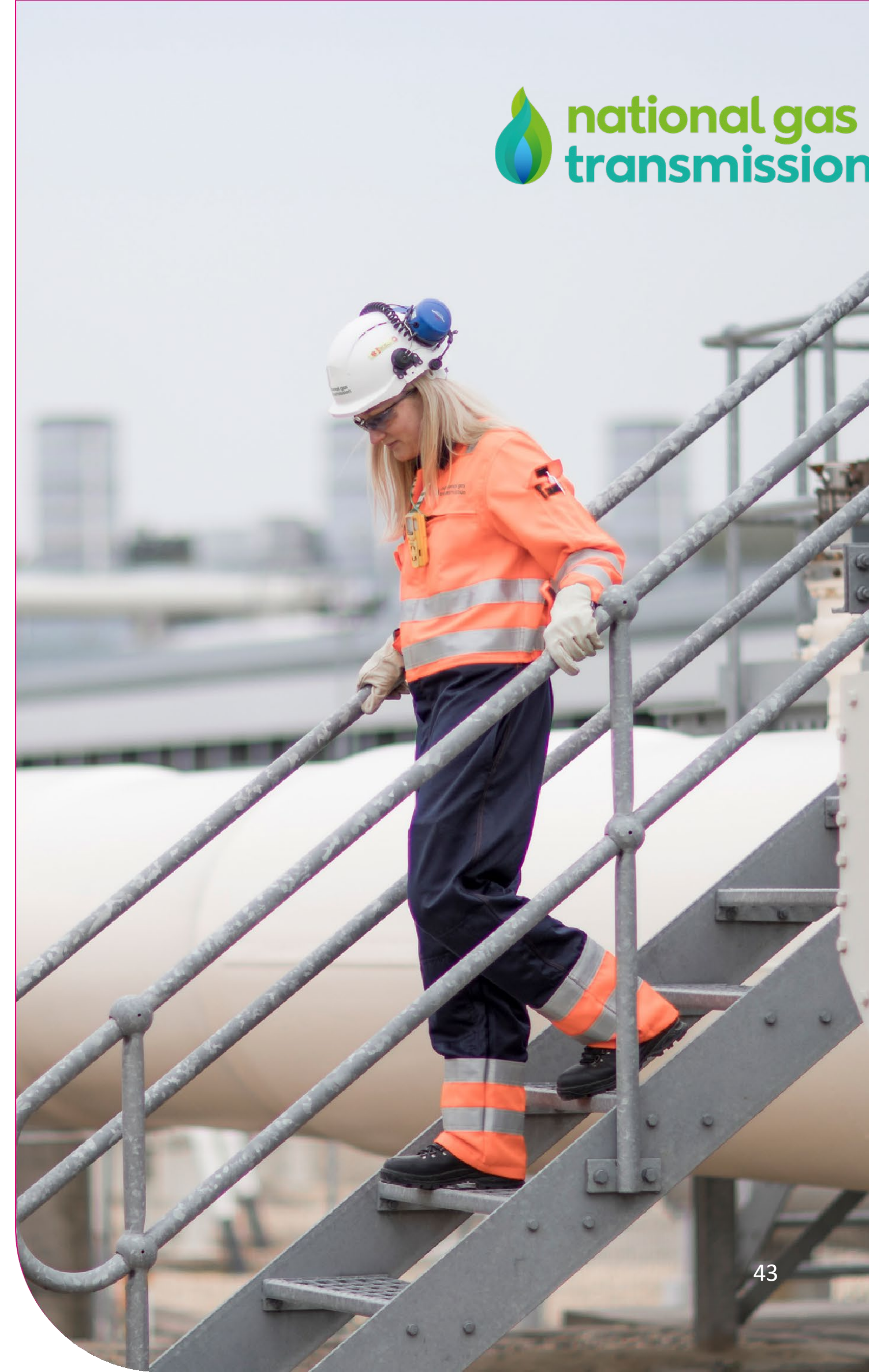
- Shippers have an incentive to balance inputs and outputs each day. Shippers are commercially exposed if their energy account is not balanced at the end of the Gas Day and are subject to imbalance/cashout charges.
- If the system is imbalanced, National Gas has a right to enter the market in its residual balancer role to ensure that the NTS remains within efficient operational limits.

## Residual Balancing Activity

- Our role as the residual balancer is critical in the wider context of the GB gas transmission market.
- Delivering this responsibility as efficiently as possible means we maintain transmission system security and a balanced gas market, helping to ensure a reliable supply of gas at cost-effective prices to end consumers.

## Residual Balancing Incentive

- The incentive means that when we enter the market as a residual balancer, we do so in a measured way to avoid incurring unnecessary costs and by minimising residual balancing actions, we benefit the consumer by not unduly moving market prices.
- We take a cost and risk-based approach on the day to avoid entering the market (for example, in 2023/24 we avoided entering the market on 125 days and in 2022/23 we avoided entering the market on 92 days, despite the volatile market we were operating in).



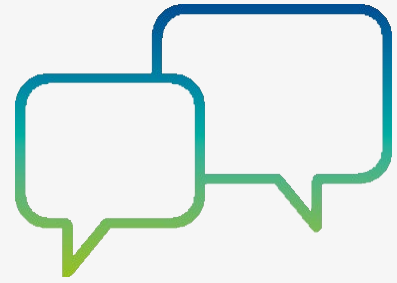


# Our proposals for RIIO-GT3

Proposal	Justification
<b>Retain the scheme in its current form with the same targets for both the price and linepack performance measures.</b>	The incentive targets are fit for purpose. Historic performance shows we have had periods where we have not achieved the targets (both over a year and for days within each formula year). Equally, we had periods where we have performed ahead of the targets. On this basis we think the targets are stretching, but fair.
<b>Retain the linepack shoulder months.</b>	The shoulder months continue to compliment the efficient and safe operation of the NTS i.e. gaining linepack approaching Winter and reducing linepack approaching Spring.
<b>Increase the cap and collar based on SAP inflation.</b>	To reflect the value/impact our residual balancing actions have as energy prices rise, increase the schemes annual and daily financial caps and collars in line with SAP inflation from 2019/20 to 2023/24, calculated using the average annual SAP for both of those years. <ul style="list-style-type: none"> <li>• 29.3 p/therm in 2019/20</li> <li>• 85.9 p/therm in 2023/24</li> </ul> Please see the comparison of RIIO-T2 to proposed RIIO-GT3 cap/collar values below.

	Current (RIIO-T2)		Proposed (RIIO-GT3)	
	Cap	Collar	Cap	Collar
<b>Daily Linepack</b>	£3,200	£24,000	£6,176	£46,320
<b>Daily Price</b>	£1,200	£24,000	£2,316	£46,320
<b>Annual</b>	£1,600,000	£2,800,000	£3,088,000	£5,404,000





# Consultation questions

## RBQ1

Do you agree with our proposal to retain a financial incentive for residual balancing?

## RBQ2

Do you agree that the size of the scheme (cap and collar) should be increased based on SAP inflation?



# Customer Satisfaction Survey (CSAT) Incentive



# Customer Satisfaction Survey (CSAT) Incentive

**RIIO-T2 scheme purpose:** to drive continuous improvements of our quality of services for customers and users of the network.

## Financial incentive:

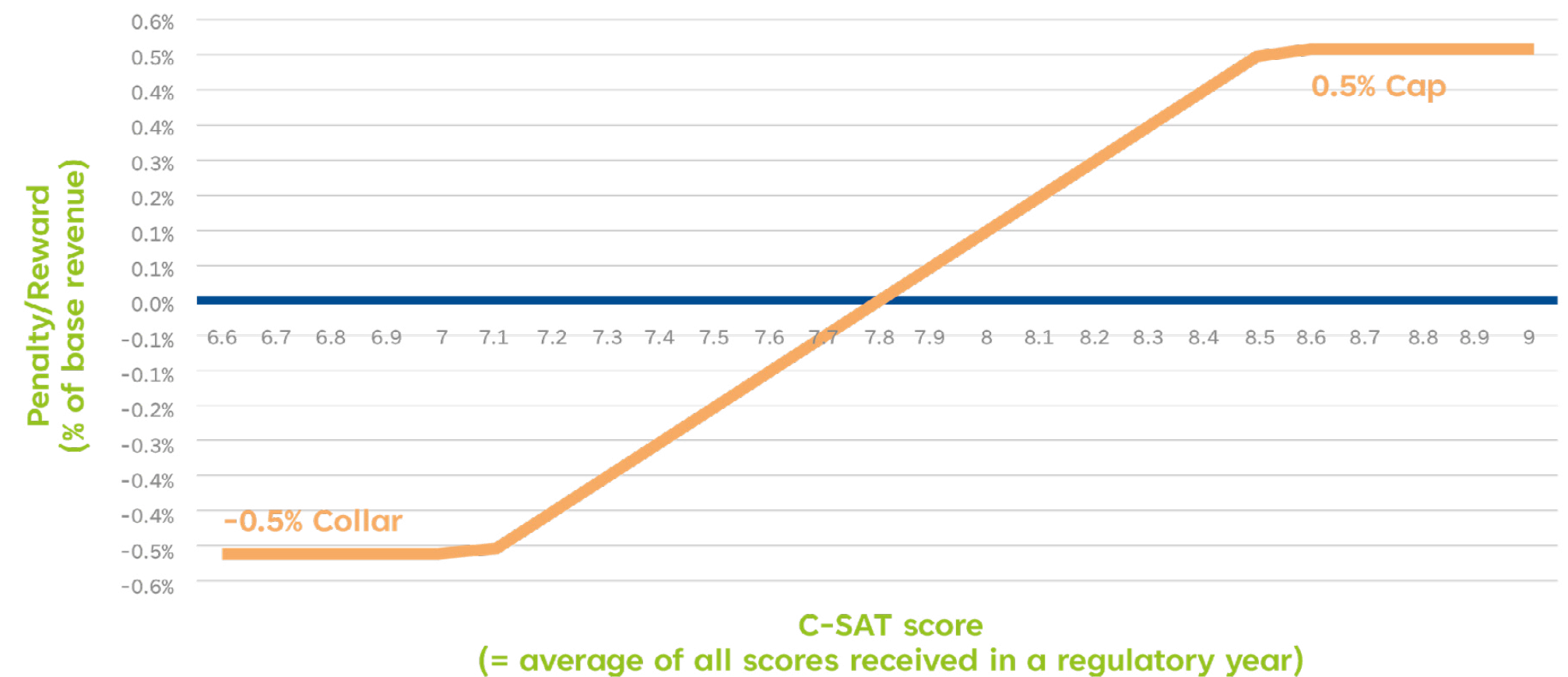
The financial element of the incentive is applied based on the average score. In RIIO-T2 any deviation from the target score of 7.8 triggers a reward/penalty as a share of base revenues against a cap and collar of 7.1 and 8.5 respectively.

## CSAT Performance History

	2020/21	2021/22	2022/23	2023/24
<b>CSAT score</b>	<b>8.17</b>	<b>8.63</b>	<b>8.60</b>	<b>8.55</b>
Target	7.8	7.8	7.8	7.8
Cap	8.5	8.5	8.5	8.5
Collar	7.1	7.1	7.1	7.1

Customer feedback is collected through a third-party administered survey. This gauges customers' satisfaction on the service they recently received on a scale of 1 to 10.

## CSAT Penalty/Reward Parameters



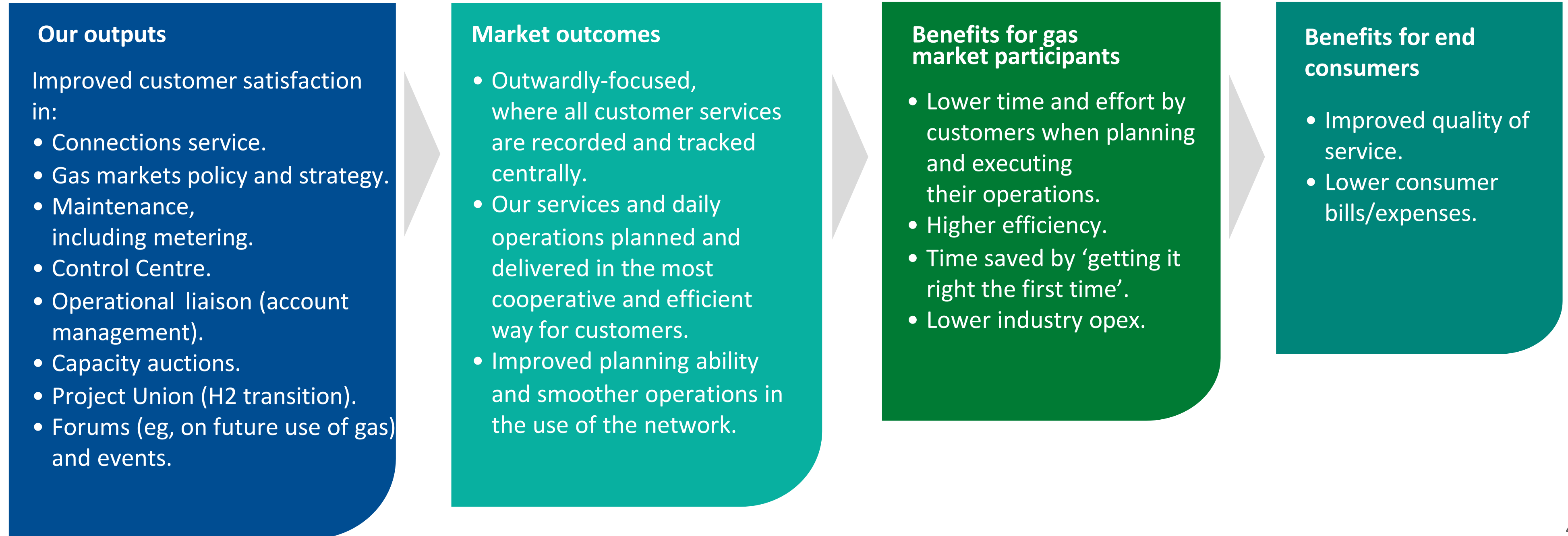


# Customer Benefit

Higher quality and more efficient services from NGT reduces our customers' operating expenditure, which reduces the cost of the services and goods they offer to end consumers in Great Britain.

The financial incentive encourages our business teams to actively seek and act on customer feedback.

## Illustration of customer and consumer benefit





# Our proposals for RIIO-GT3



Proposal	Justification
<p><b>Retain the incentive in a similar form, but split over 4 survey areas</b></p>	<p>Continue to extend a satisfaction survey to our customers after each meaningful interaction via an independent research agency to gather feedback, focusing on desired improvements.</p> <p>Split the incentive across 4 survey areas as opposed to having a single score to incentivise continuous improvement in each area.</p>
<p><b>Reduce survey areas from 9 to 4 to improve visibility of service levels and more easily identify trends</b></p>	<p>The reduction in survey areas simplifies reporting by working nature for the business and externally. Doing so, will allow us to easily identify survey area improvement needs and statistically significant changes and trends in feedback by survey area.</p> <p>Proposed survey areas: Long-term customer activities, market facilitation, day-to-day customer activities, other activities and events.</p>
<p><b>Retain annual financial incentive of 0.5% of baseline, with equal value for main survey areas, with a symmetric penalty/reward</b></p>	<p>All survey areas stand at equal importance to us, so we propose 30% of the total incentive value to be attributed to each of the 3 main survey areas and 10% of the value for other activities &amp; events.</p> <p>Not equally weighting the target across the survey areas may drive the wrong behaviours within the business affecting validity of data and limiting total system view of feedback. This proposal is in line with CSAT incentive structures of other gas distribution networks (GDNs).</p>
<p><b>Recalibrate target scores for each survey area to ensure continuous improvement:</b></p> <ul style="list-style-type: none"> <li>• <b>Long-term customer Activities: 8.2</b></li> <li>• <b>Market Facilitation: 8.6</b></li> <li>• <b>Day-to-day customer activities: 8.5</b></li> <li>• <b>Other activities &amp; events: 8.4</b></li> </ul>	<p>Taking an average performance over the previous five years as the new target, challenges us to increase in target score of 0.4-0.8 depending on survey area (target for RIIO-T2 was 7.8).</p> <p>In addition, year-on-year increasing customer service expectations and diminishing room for improving already high scores will make this target all the more challenging. Varying scores per survey area will also allow us to focus on improvements per survey area relative to historical performance.</p> <p>Events related to technical feedback or support would remain with relevant survey areas, while more general events would sit within the “other” category ensuring feedback is best placed with the correct team to work on improvements/action plans.</p>



# Our proposals for RIIO-GT3 (continued)

Proposal	Justification
<b>Narrow the cap and collar from +/- 0.7 to +/- 0.5</b>	<p>Narrowing the cap and collar sets an ambitious and challenging range meaning we can only achieve mainly 9s and 10s to reach the caps of the proposed targets.</p> <p>Historically, none of the new survey areas have achieved their proposed cap and the collar is within 0.15 of the minimum score achieved over the past 5 years for each survey area.</p>
<b>Implement a minimum volume target for the first 3 survey areas on a reputational basis, ensuring regular cadence of feedback collection from customers</b>	<p>Implementing a minimum volume target in line with historical values applies pressure on us to continue to achieve our existing level of responses and feedback from our surveys.</p> <p>Upon reviewing our historical volumes, we believe we are achieving the right level of interaction as a business which differs from GDNs given differences in our customer base so aligning targets with historical performance is appropriate.</p> <p>Internal meetings have confirmed, all meaningful interactions are being surveyed subject to our 90-day rule of not surveying customer twice within that period. Increasing this volume could compromise the quality of feedback received, skew results, or cause survey-fatigue with customers, by capturing less meaningful interaction's feedback.</p> <p>Therefore, we propose this parameter to be set on a reputational basis due to the volume variability of meaningful interactions being an external/customer-dependent factor.</p>

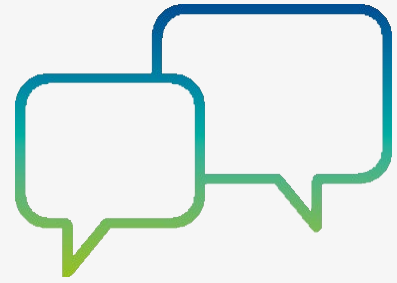


# Survey areas proposed

Current survey areas	New proposed survey areas	Minimum Response Target	Average nb of responses*	Average scores*	Proposed		
					Target	Cap	Collar
Connections	1. Long-term customer activities	30	30	8.2	8.2	8.7	7.7
Project Union							
Markets and Strategy							
Energy Balancing	2. Market facilitation	17	20	8.6	8.6	9.1	8.1
Capacity Auctions							
GNCC	3. Day-to-day customer activities	30	26	8.5	8.5	9.0	8.0
Maintenance Service							
Operational Liaison							
Events	4. Other activities and events	None**	19	8.4	8.4	8.9	7.9

Note: \*Over the last 5 financial years; \*\*Events will be held on an ad hoc basis as communication needs arise and therefore do not have a minimum survey target





## Consultation questions

### CSQ1

Do you agree with our proposal to retain a financial incentive at the current cap and collar range, but assessed on a survey area basis?

### CSQ2

Do you agree with the proposed groupings of the survey areas?

### CSQ3

Do you agree with our proposed target, cap, and collar scores for each survey area?

### CSQ4

Do you agree with the proposed minimum response target for each survey area and for it to be introduced on a reputational basis?



# Timeline

Stakeholder consultation on incentives published on our website	25 July
Stakeholder consultation on our RIIO-GT3 incentives window	25 July to 11 Sept
Draft BPDT submission Draft EJP submission Draft CBA submission	31 July
Full Business Plan Overview (BPO) suite published on our website	12 Aug
Final Business Plan to Ofgem	11 Dec
Final Business Plan published online	18 Dec
Open Call for Evidence	18 Dec
Close Call for Evidence	10 Feb 2025
RIIO-GT3	Apr 2026 to Mar 2031

## Share your views

The consultation period will be open between 25 July and 11 September 2024 and we look forward to receiving your feedback on our draft incentives.

You can respond using the QR code or by clicking the link below. Alternatively you can email us with comments or to book a meeting at [box.riiogt3@nationalgas.com](mailto:box.riiogt3@nationalgas.com).



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# Thank you

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