



RE-
DEFINING
RIIO

Investor seminar: Re-defining RIIO

London, Tuesday 6 August 2013

nationalgrid



Cautionary statement

This presentation contains certain statements that are neither reported financial results nor other historical information. These statements are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements include information with respect to National Grid's financial condition, its results of operations and businesses, strategy, plans and objectives. Words such as 'anticipates', 'expects', 'should', 'intends', 'plans', 'believes', 'outlook', 'seeks', 'estimates', 'targets', 'may', 'will', 'continue', 'project' and similar expressions, as well as statements in the future tense, identify forward-looking statements. These forward-looking statements are not guarantees of National Grid's future performance and are subject to assumptions, risks and uncertainties that could cause actual future results to differ materially from those expressed in or implied by such forward-looking statements. Many of these assumptions, risks and uncertainties relate to factors that are beyond National Grid's ability to control or estimate precisely, such as changes in laws or regulations, announcements from and decisions by governmental bodies or regulators (including the timeliness of consents for construction projects); breaches of, or changes in, environmental, climate change and health and safety laws or regulations, including breaches arising from the potentially harmful nature of its activities; network failure or interruption (and National Grid's actual or perceived response thereto), the inability to carry out critical non network operations and damage to infrastructure, due to adverse weather conditions including the impact of Superstorm Sandy and other major storms as well as the results of climate change or due to unauthorised access to or deliberate breaches of National Grid's IT systems or otherwise; performance against regulatory targets and standards and against National Grid's peers with the aim of delivering stakeholder expectations regarding costs and efficiency savings, including those related to investment programmes and internal transformation projects (including the US foundation programme); and customers and counterparties failing to perform their obligations to the Company. Other factors that could cause actual results to differ materially from those described in this presentation include fluctuations in exchange rates, interest rates and commodity price indices; restrictions and conditions (including filing requirements) in National Grid's borrowing and debt arrangements, funding costs and access to financing; regulatory requirements for the Company to maintain financial resources in certain parts of its business and restrictions on some subsidiaries' transactions such as paying dividends, lending or levying charges; inflation; the delayed timing of recoveries and payments in National Grid's regulated businesses and whether aspects of its activities are contestable; the funding requirements and performance of National Grid's pension schemes and other post-retirement benefit schemes; the loss of key personnel or the ability to attract, train or retain qualified personnel and any significant disputes arising with the National Grid's employees or the breach of laws or regulations by its employees; and incorrect or unforeseen assumptions or conclusions (including financial and tax impacts and other unanticipated effects) relating to business development activity, including assumptions in connection with joint ventures.

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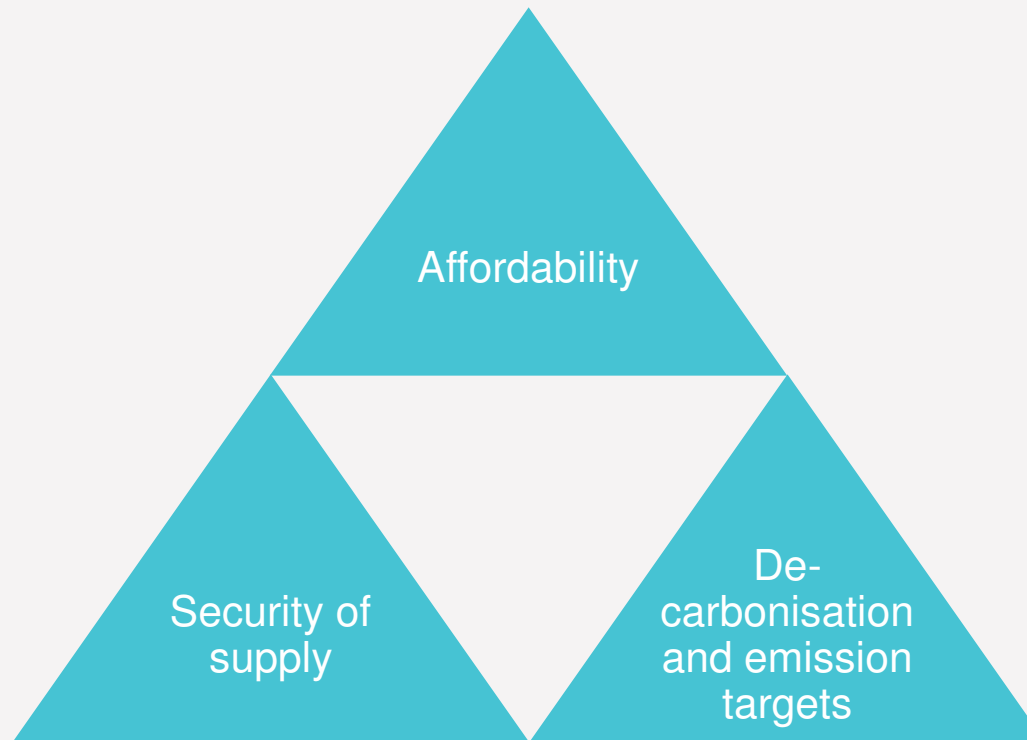
Nick Winsor
Executive Director, UK

London, Tuesday 6 August 2013

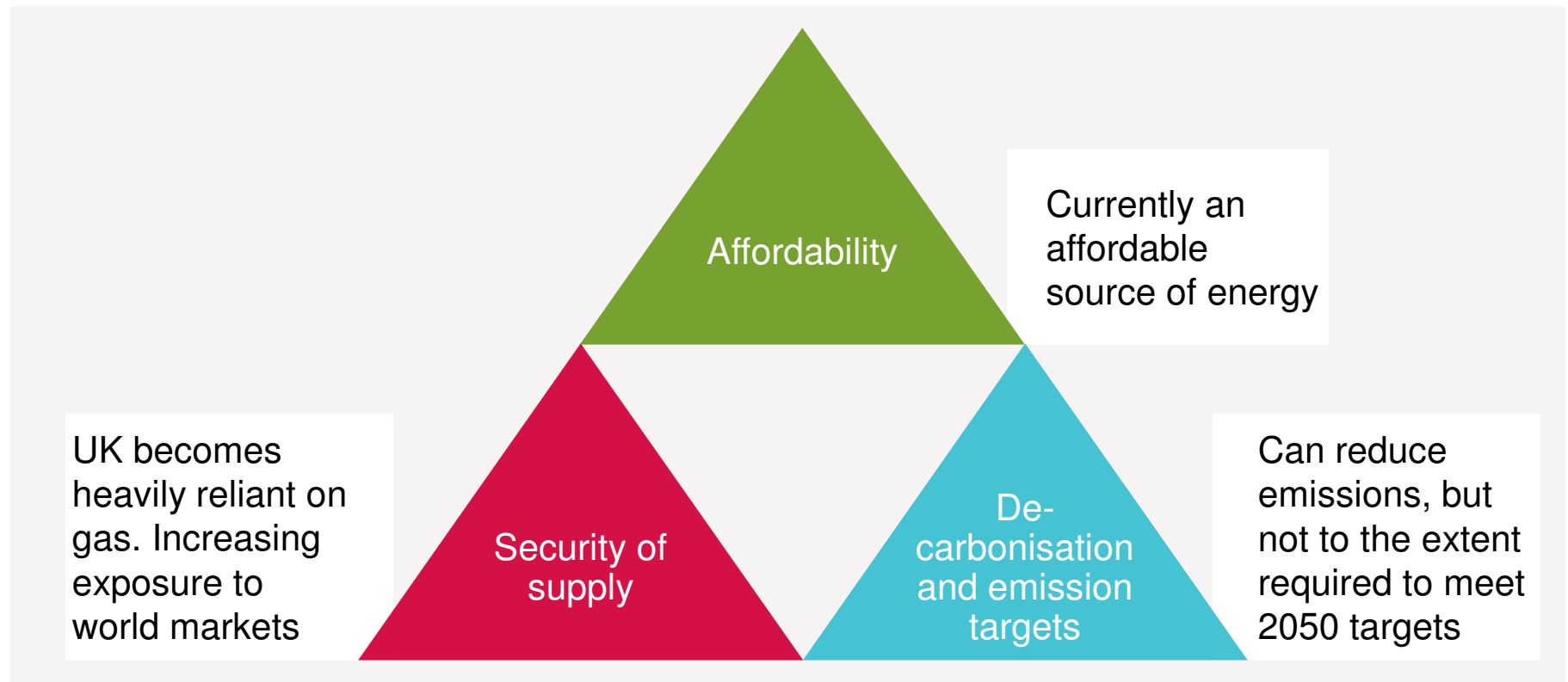
Drivers of investment

- Carbon emission targets and legislation
- Decline of UK continental shelf gas
- Aging plant needs replacement
- Existing transmission infrastructure nearing the end of its useful life
- Development of a single European energy market – a greater level of interconnection with Continental Europe

Energy trilemma



Energy trilemma – Shale example



Electricity Market Reform (EMR)

Energy Bill

[AS AMENDED IN GRAND COMMITTEE]

CONTENTS

PART 1

DECARBONISATION

1 Decarbonisation target range
2 Matters to be taken into account
3 Further duties of the Secretary of State
4 Meaning and calculation of "carbon intensity of electricity generation in the United Kingdom"

PART 2

ELECTRICITY MARKET REFORM

CHAPTER 1

GENERAL CONSIDERATIONS

5 General considerations relating to this Part

CHAPTER 2

CONTRACTS FOR DIFFERENCE

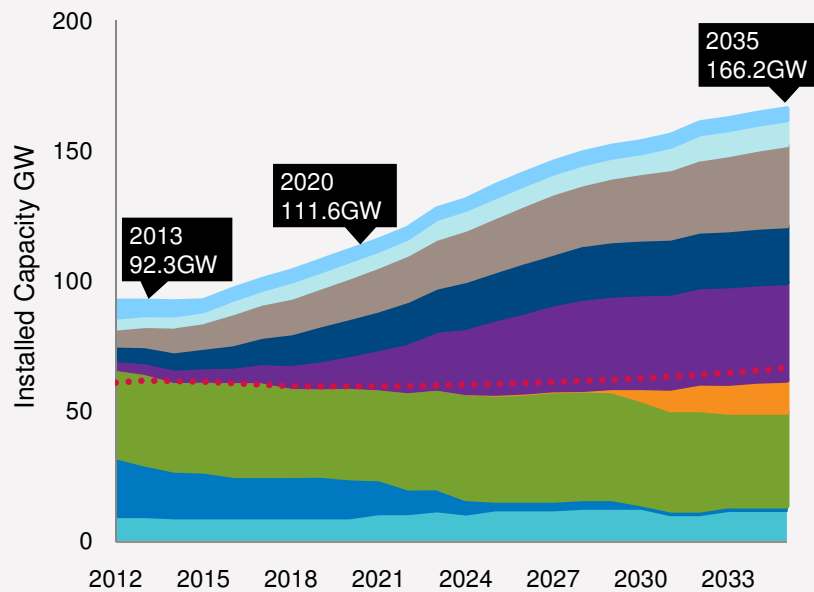
6 Regulations to encourage low carbon electricity generation
7 Designation of a CFD counterparty
8 Duties of a CFD counterparty
9 Supplier obligation
10 Direction to offer to contract
11 Payments to electricity suppliers
12 Application of sums held by a CFD counterparty
13 Information and advice
14 Functions of the Authority
15 Regulations: further provision
16 Enforcement
17 Order for maximum cost and targets
18 Consultation
19 Shadow directors, etc.

HL Bill 48 55/3

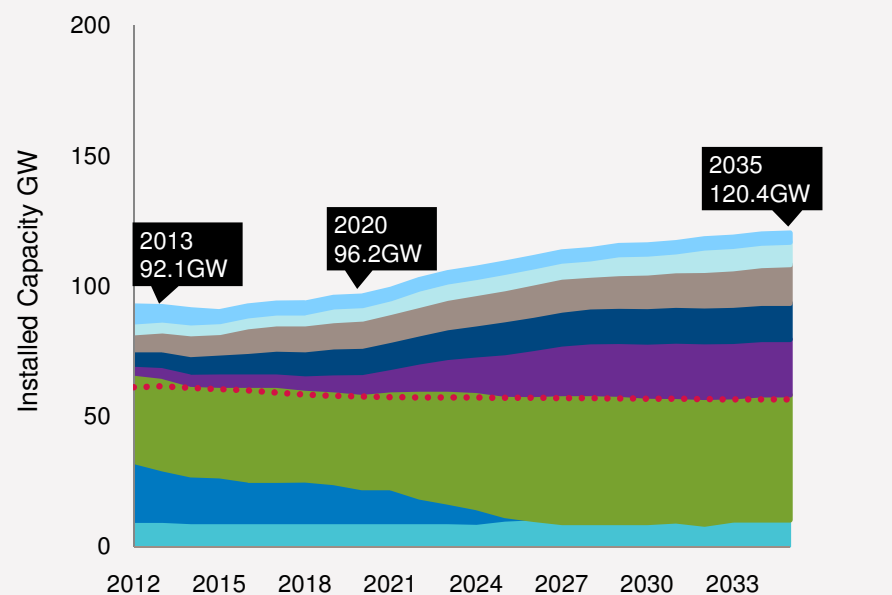
- Analysis and advice to the Secretary of State
- Contract for difference (CfD)
- Capacity auctions

EMR & National Grid

Gone Green – Installed Capacity

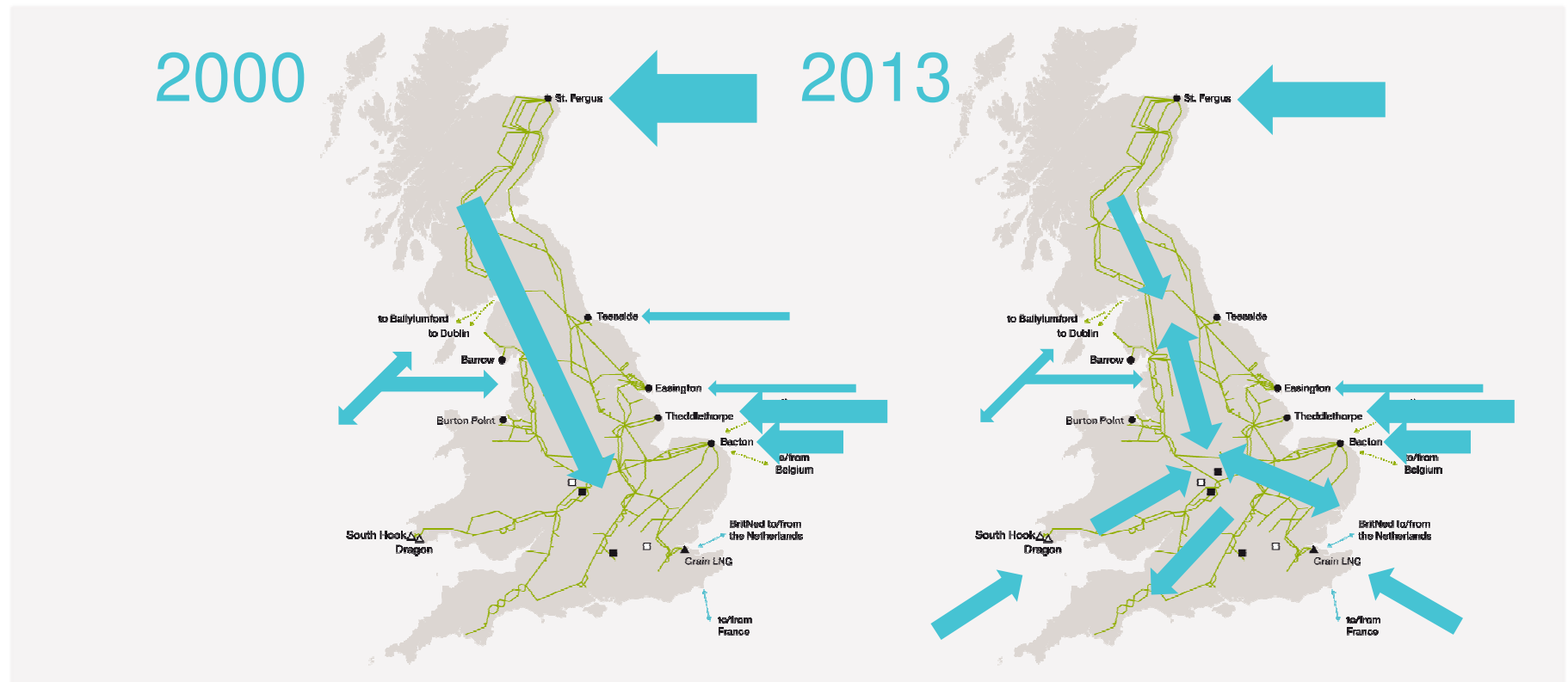


Slow Progression – Installed Capacity



■ Nuclear
 ■ Coal
 ■ Gas/CHP
 ■ CCS
 ■ Onshore wind
 ■ Offshore wind
 ■ Other renewables
 ■ Interconnectors
 ■ Others
 --- Transmission peak demand

The future of gas



Europe

- Clear benefits to interconnection with Europe
- National Grid is member of European Network of System Operators for electricity & gas (ENTSO-E & ENTSO-G)
- Promote National Grid's interests at a European level
- Further implications for National Grid include:
 - Potential interconnection
 - Increased role in supplying information to inform decisions

National Grid's role

Two key roles in electricity and gas transmission:

- Facilitating the energy markets
- Delivering the transmission infrastructure that these energy markets require
 - It is important for customers that there is a clear proposition for investors – so that the right investments are made at the right time



John Pettigrew
Chief Operating Officer UK

London, Tuesday 6 August 2013

Objectives

Insight

- How the UK business will deliver for both our customers and investors over the next eight years

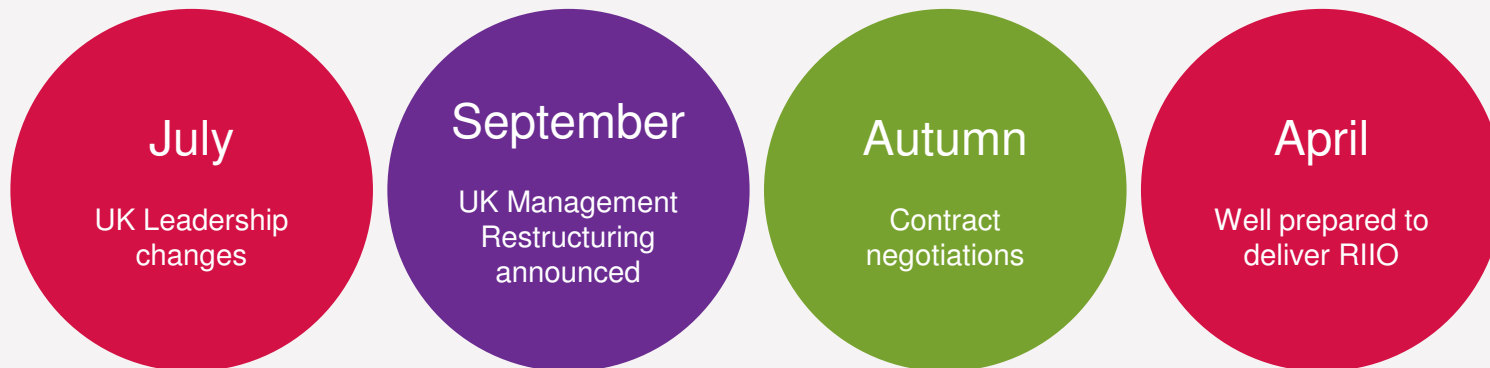
Teamwork



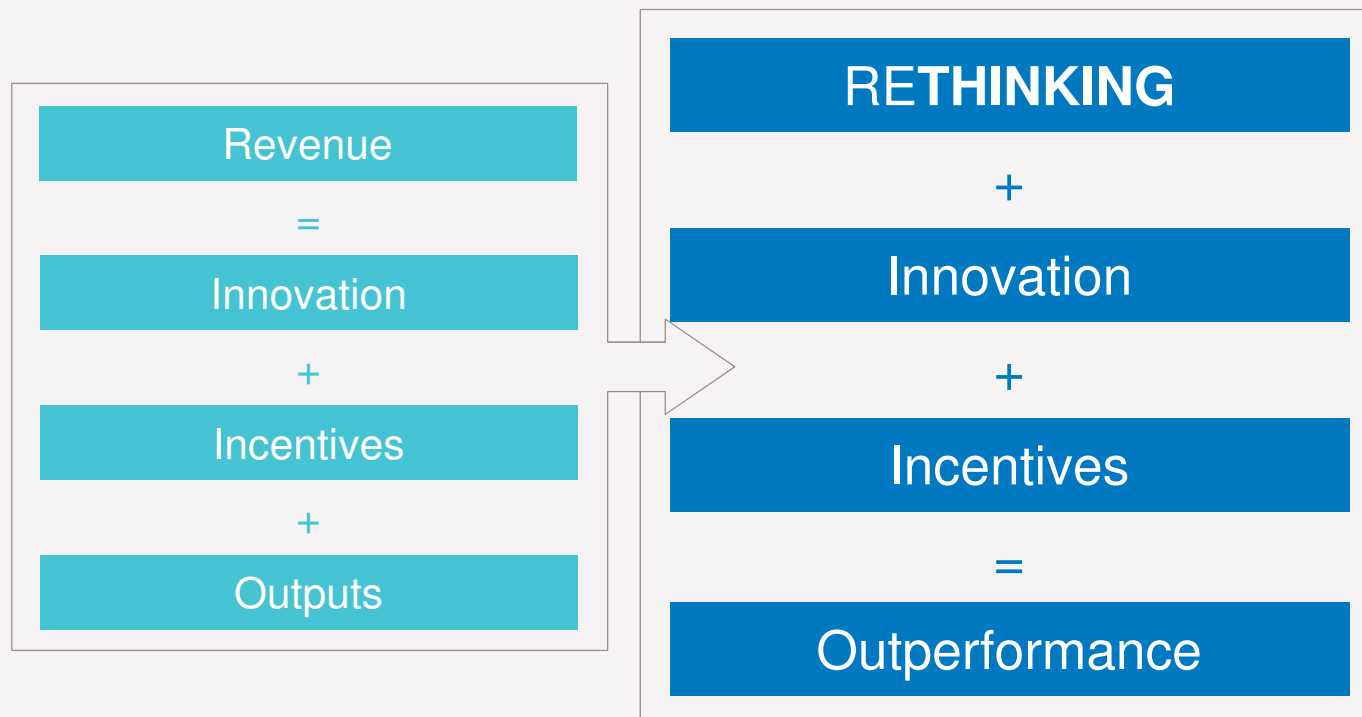
Agenda

- Key actions to build foundations for RIIO
- New concepts & opportunities
- Key areas of focus for outperformance
- Critical success factors

Journey started over 12 months ago



Redefining RIIO



Agenda

- Key actions to build foundations for RIIO
 - **RETHINKING** our business
- New concepts & opportunities
- Key areas of focus for outperformance
- Critical success factors

RETHINKING our business

REORGANISING

- Gas Distribution
 - Process started in 2011
 - Focused on improved customer service and efficiency
- Significant benchmark performance improvements
 - Returns
 - Customer Service
 - Unit cost efficiencies

RETHINKING our business

REORGANISING

- Transmission UK Operating Model
 - Over 20% management reduction completed
 - Staff underway, c.10% reduction
- RIIO delivery team
 - Identifying outperformance opportunities

RETHINKING our business

REORGANISING

RENEGOTIATING

- Key contracts
 - Gas Distribution – unit cost reductions of over 20%
 - Revised Transmission Capital Delivery contracting strategy
- Internal terms and conditions

RETHINKING our business

REORGANISING

RENEGOTIATING

REENGINEERING

- Delivery processes & plans
 - Delivering outputs and spending less
 - Maximise our incentives

Redefining RIIO

REORGANISING

RENEGOTIATING

REENGINEERING



RETHINKING

+

Innovation

+

Incentives

=

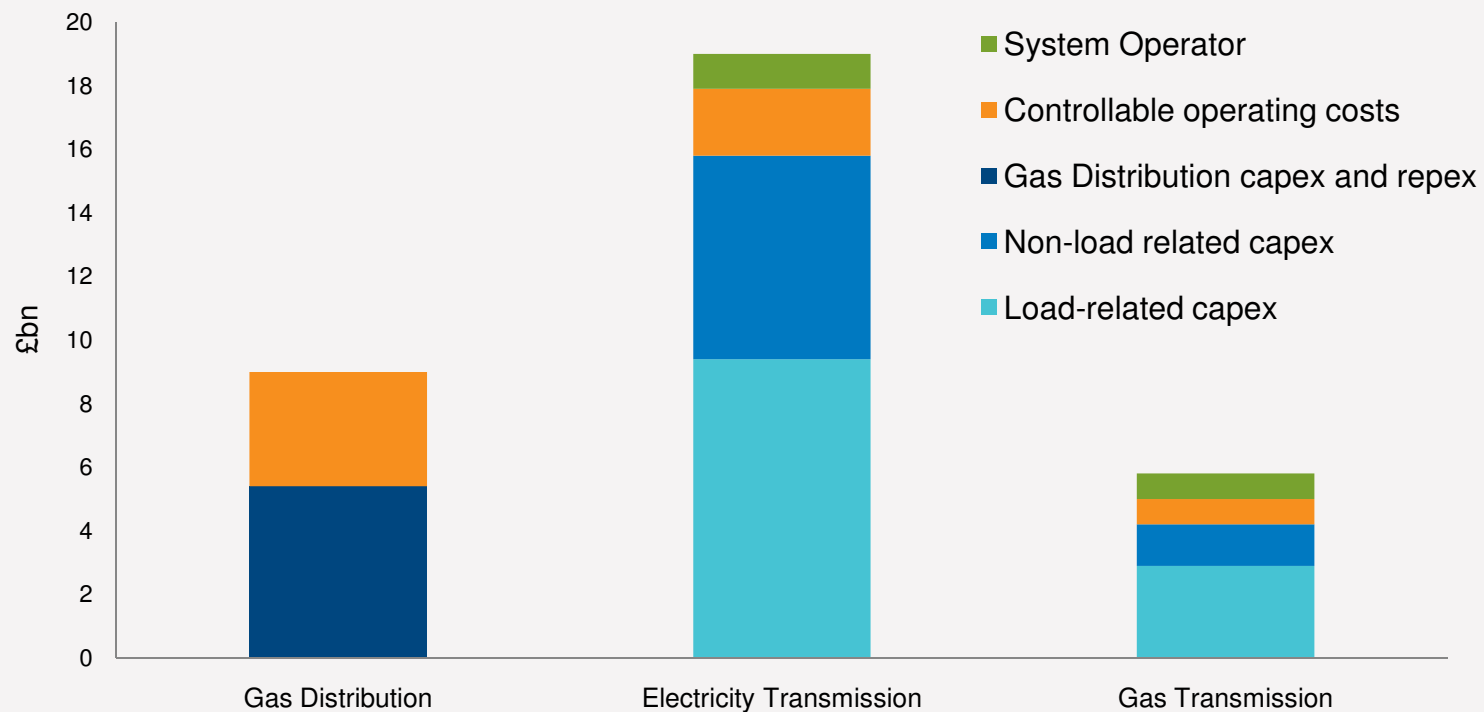
Outperformance

Agenda

- Key actions to build foundations for RIIO
- New concepts & opportunities
 - Output focus
- Key areas of focus for outperformance
- Critical success factors

Output focused allowances

Ofgem Final Proposals Best View RIIO 8-year Controllable Spend



Output focused allowances

- Allowances will change based on outputs delivered
 - Load related in particular
 - Final allowances only determined when outputs are delivered
- Clarity around recovery before we spend

Outputs driven by stakeholder requirements

e.g. Electricity Transmission



Output focus: Business implications

- Flexible organisation
- Performance is a function of outputs delivered and spend
- Deliverables defined, *how to deliver* is flexible

Agenda

- Key actions to build foundations for RIIO
- New concepts & opportunities
 - Output focus
 - Reward for improved cost performance
- Key areas of focus for outperformance
- Critical success factors

Totex Incentive Mechanism

- Capex and opex equally incentivised
- Increased benefit from capital efficiencies



Andy Agg
UK Chief Financial Officer

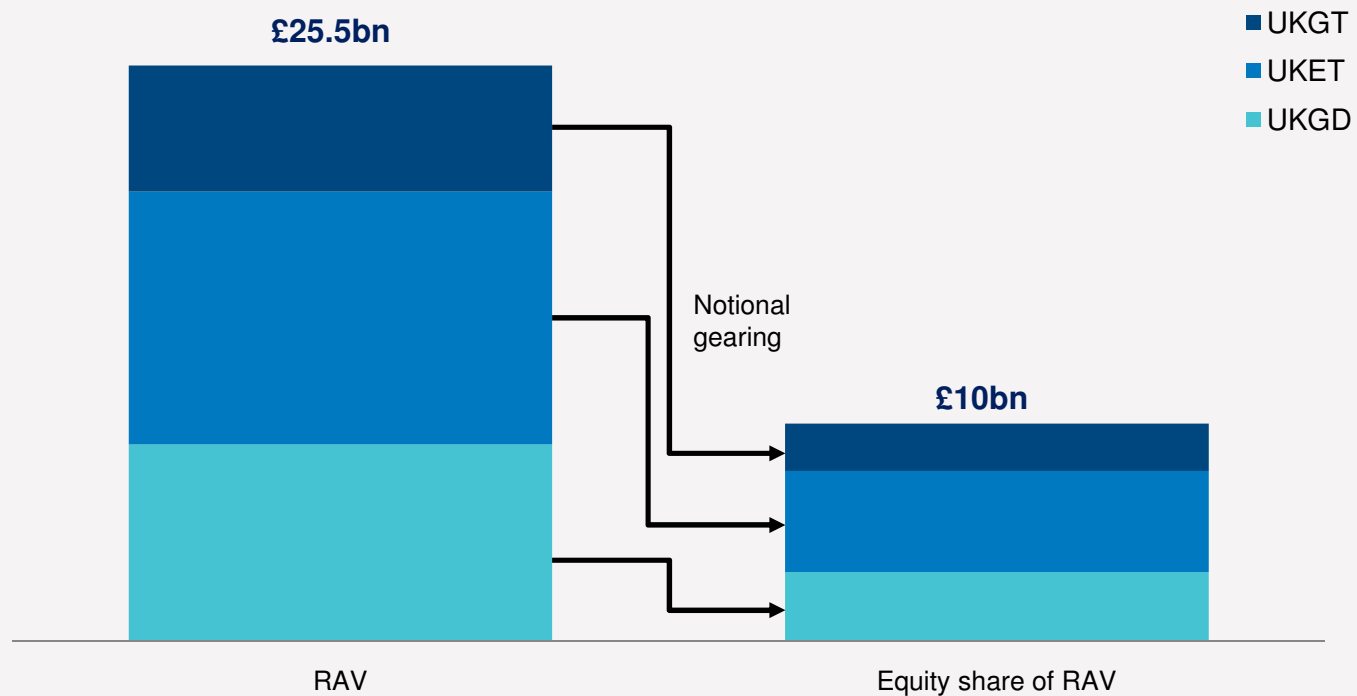
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Agenda

- Totex incentive mechanism
- New language and IFRS financial reporting
- Key value driver

Performance context

31 March 2014 estimate

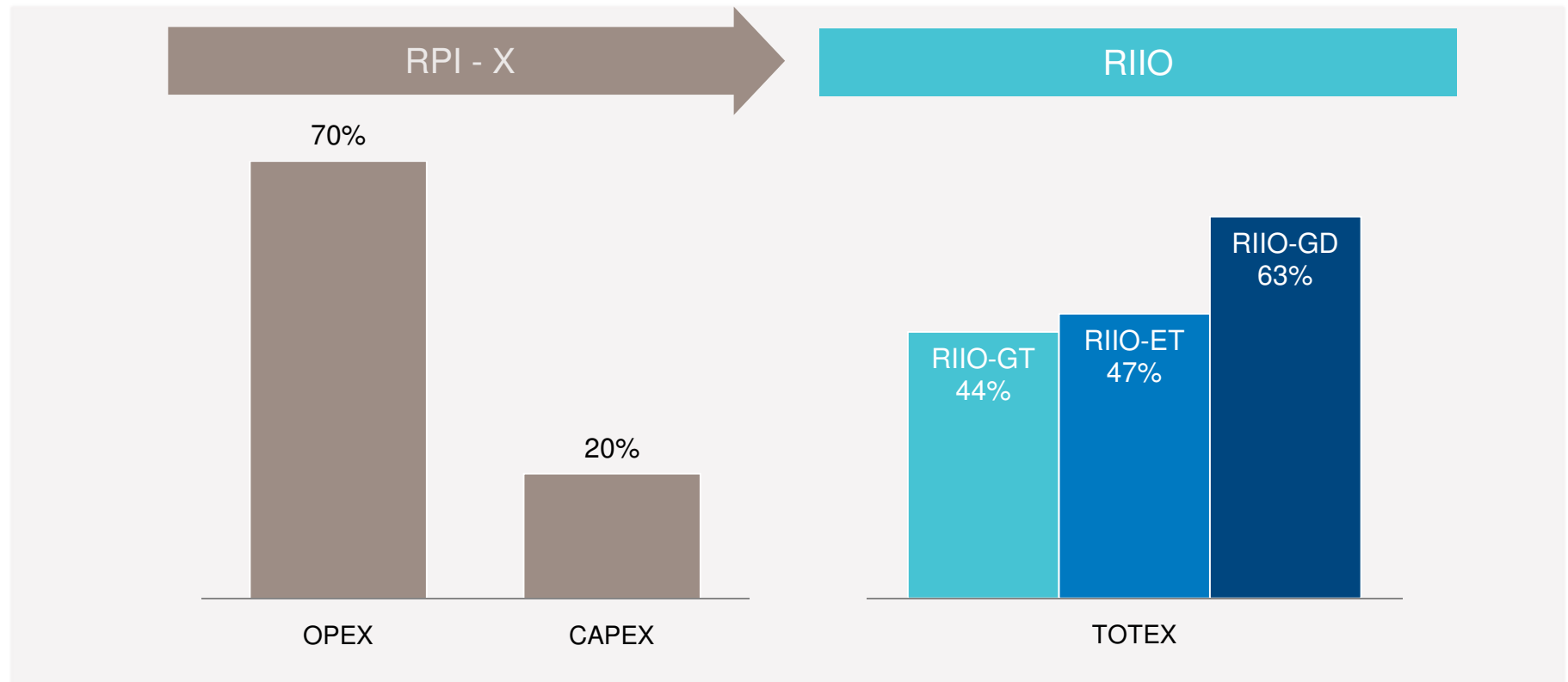


Performance context – traditional incentives



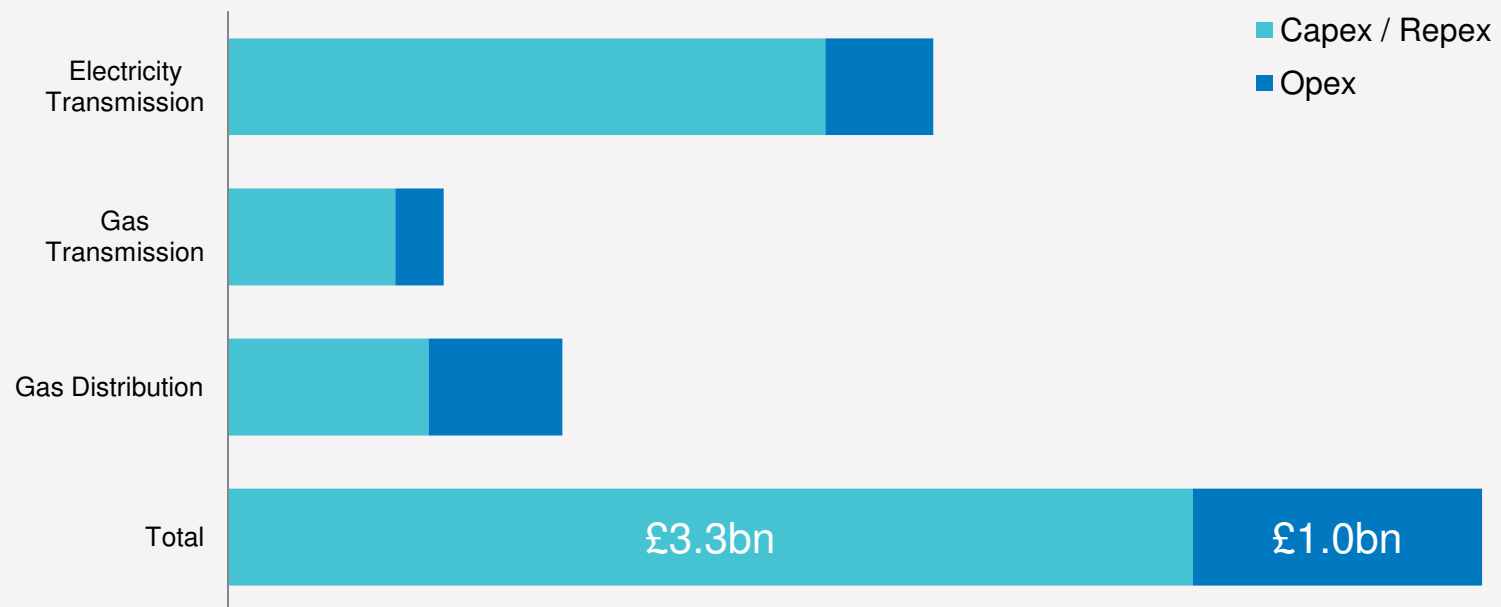
Based on March 2014 RAV estimate

Changes to efficiency incentives

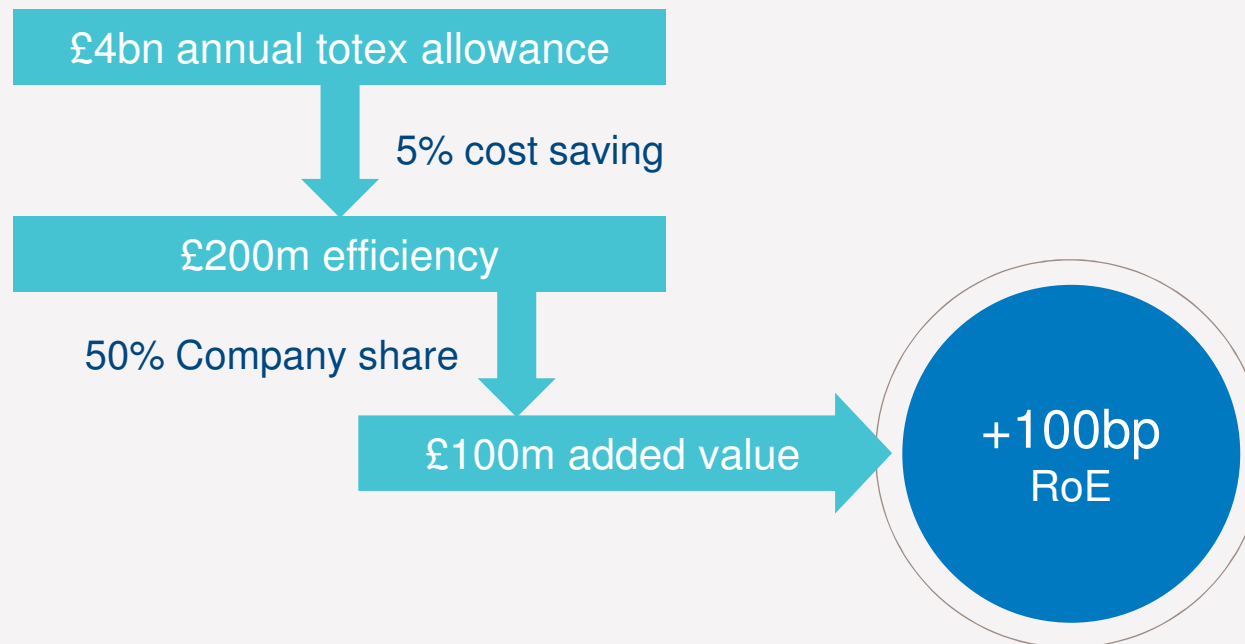


Performance opportunity

Ofgem “best view” annual controllable spend



Performance context – totex incentive

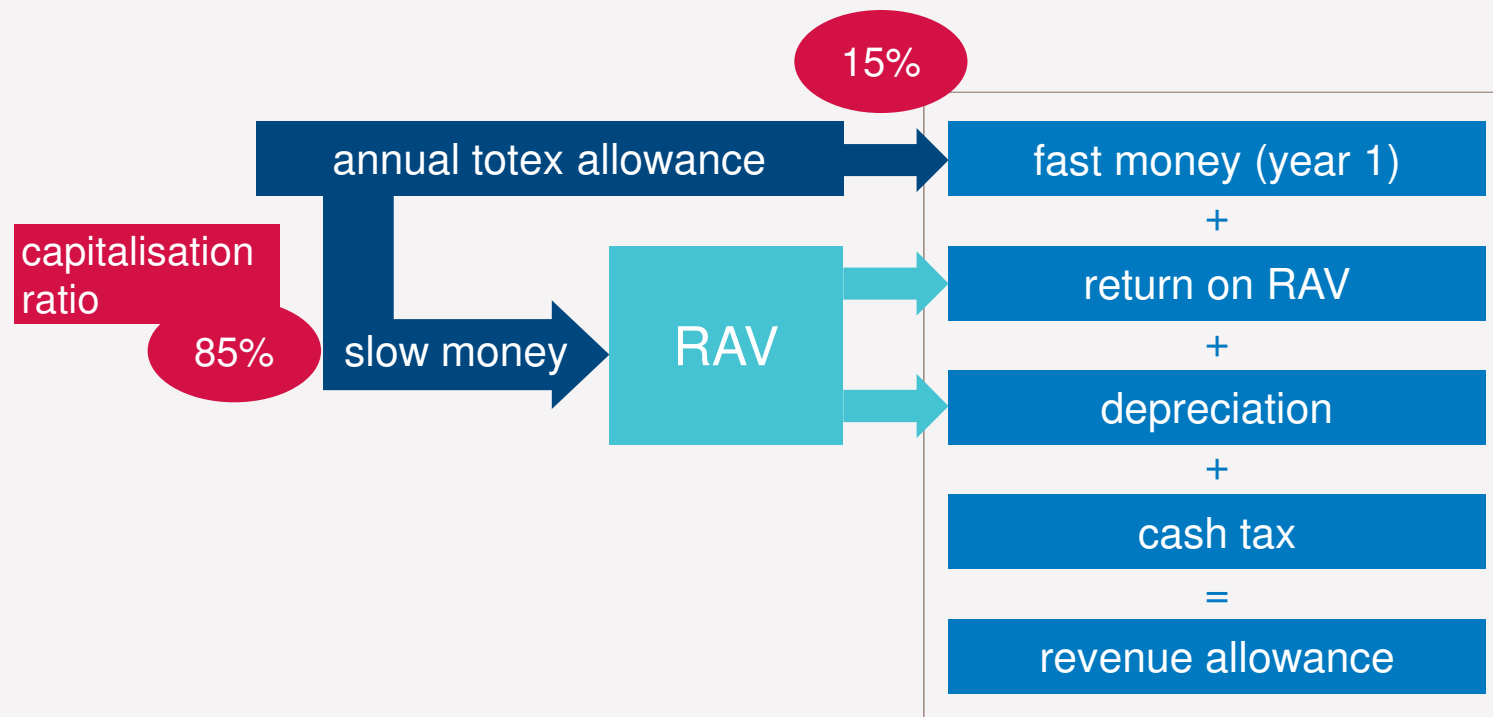


Based on March 2014 RAV estimate

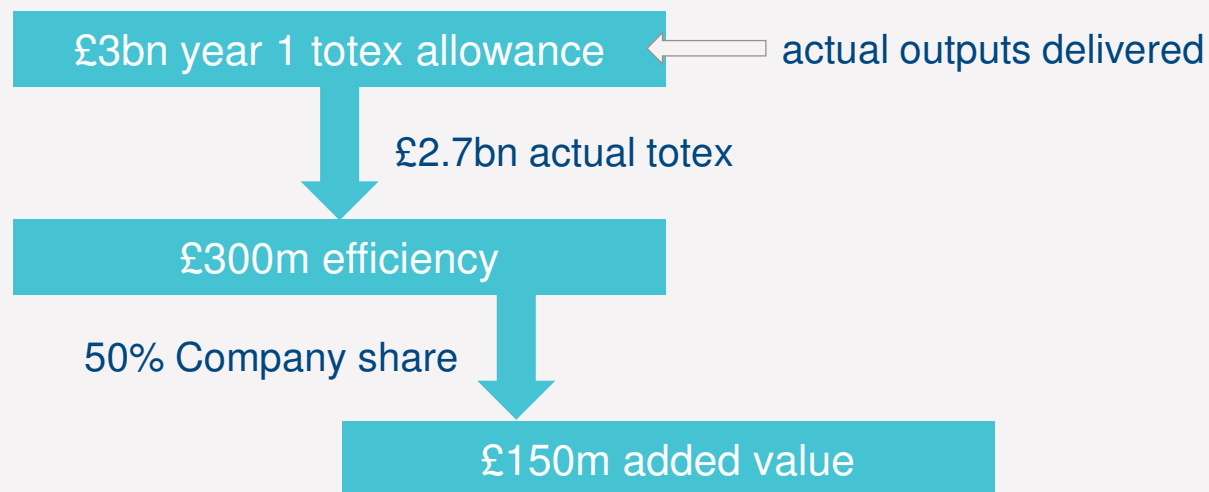
Clear value driver

deliver outputs at the lowest
sustainable cash cost

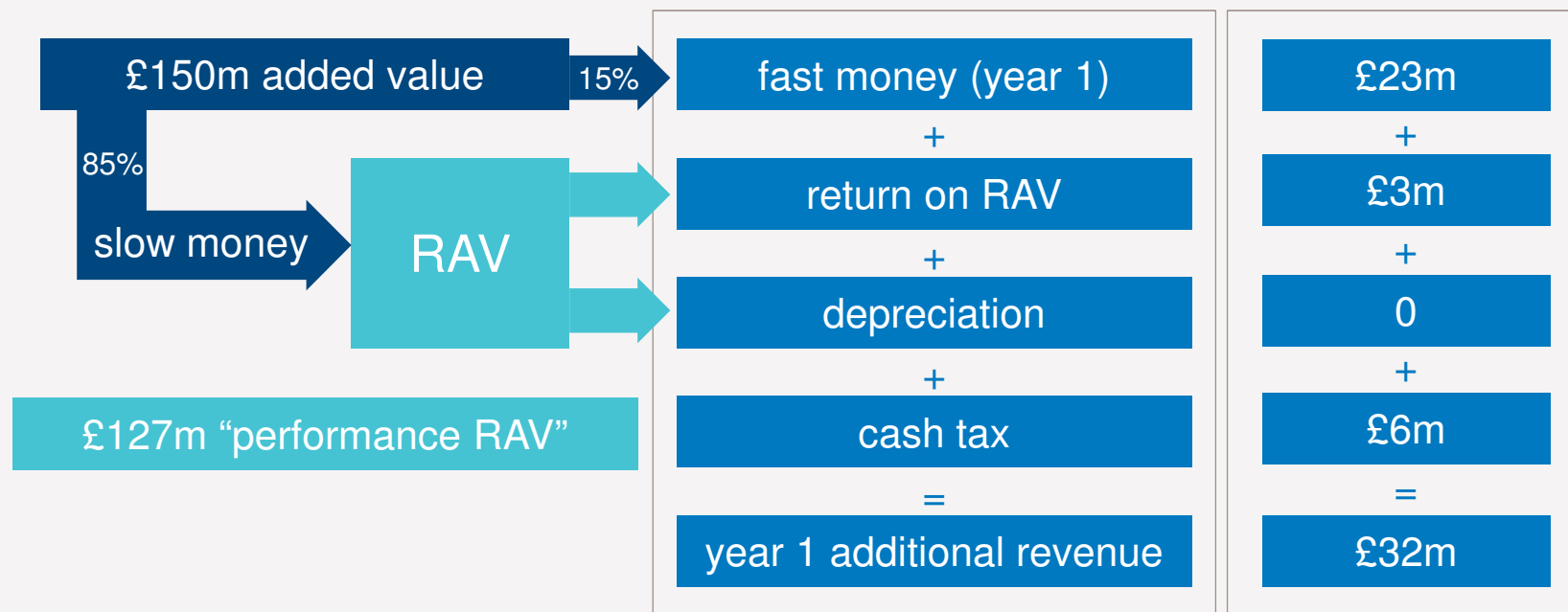
Building blocks



Example



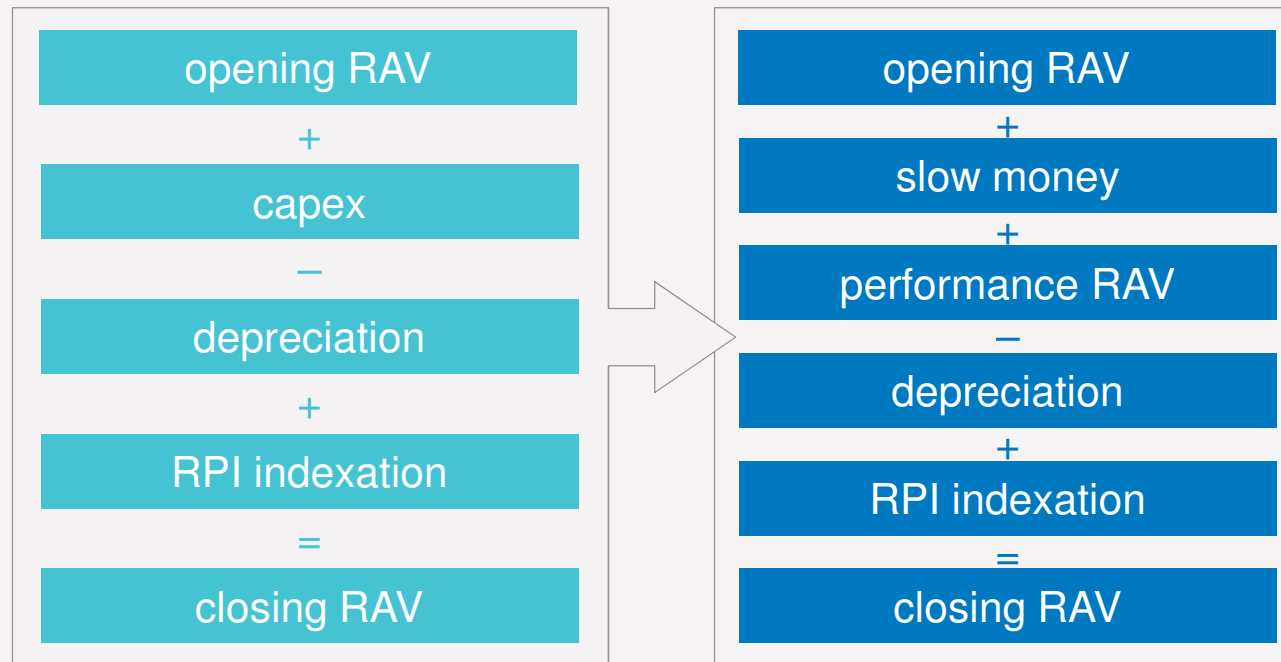
Efficiency benefit realised through mixture of revenue and RAV



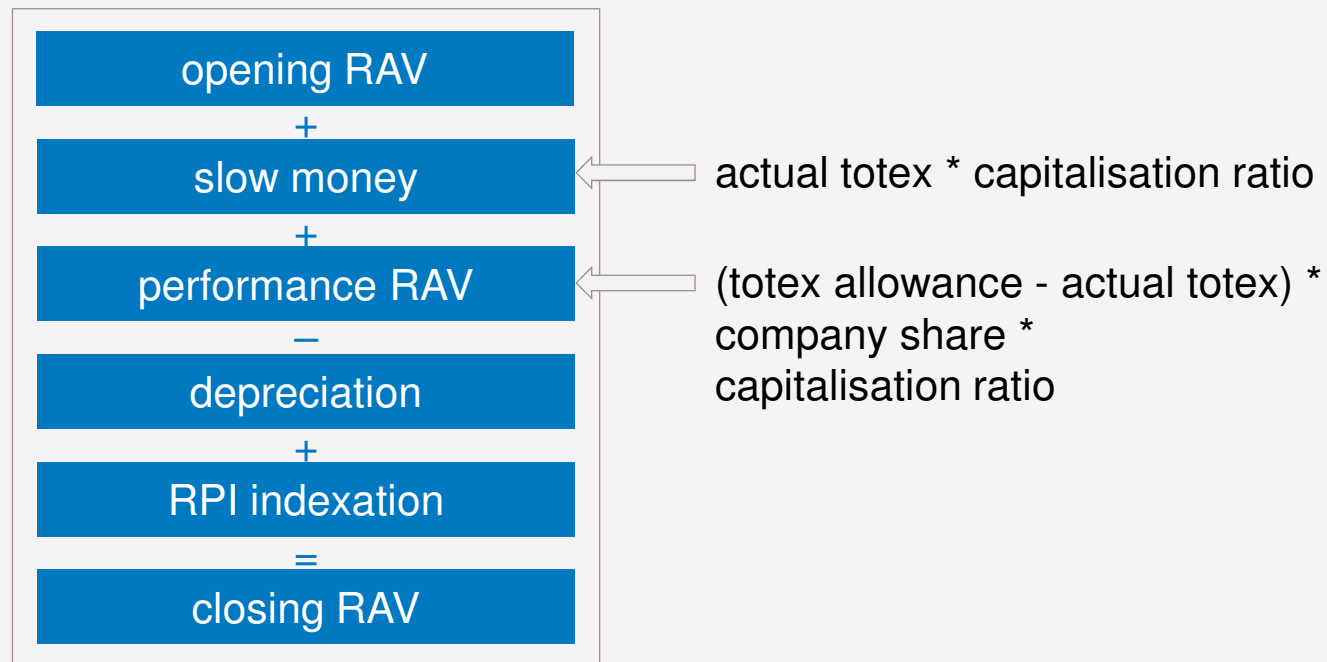
Totex efficiency drives additional return in the year achieved

$$\frac{\begin{array}{l} \text{year 1 additional revenue} \\ \text{less cash tax} \end{array} + \text{performance RAV}}{\text{Equity share of Regulatory Asset Value}} = \text{RoE}$$

RAV roll forward



RAV roll forward

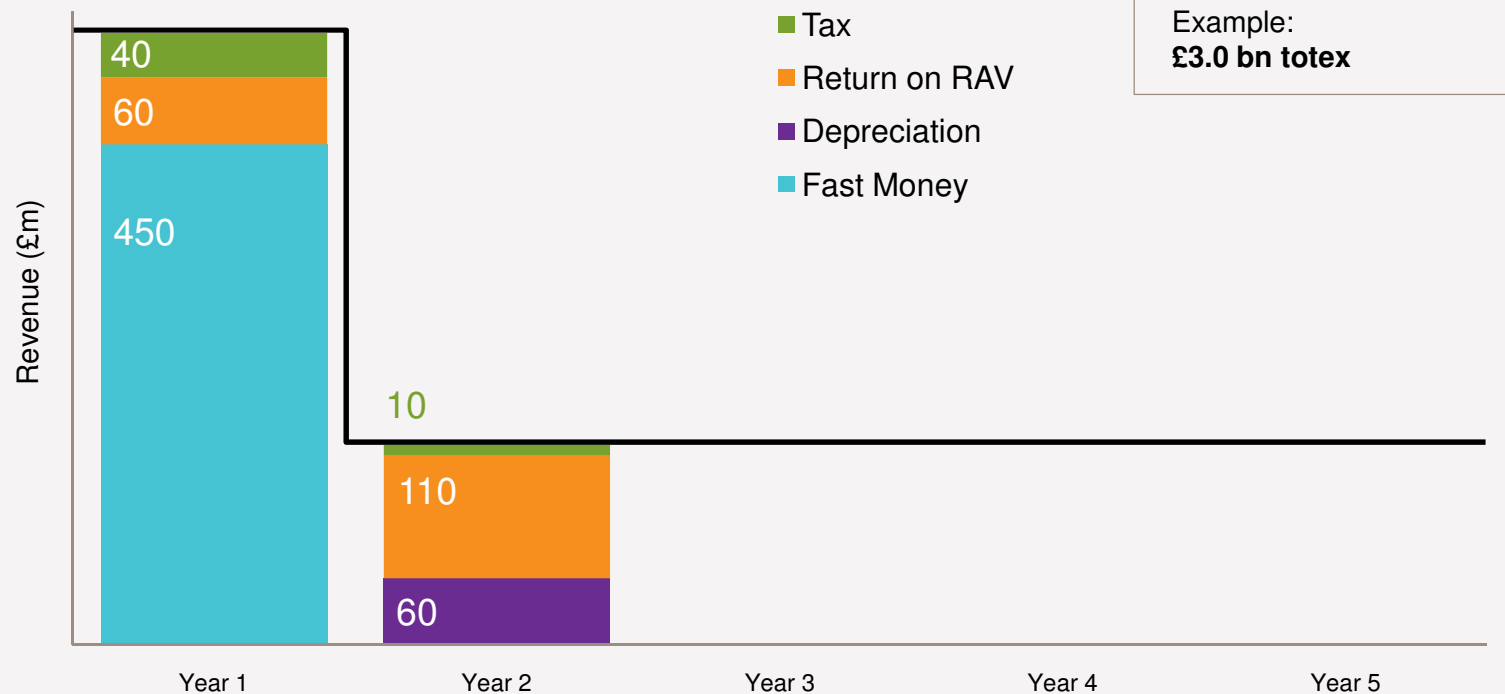


Example

£3bn year 1 totex

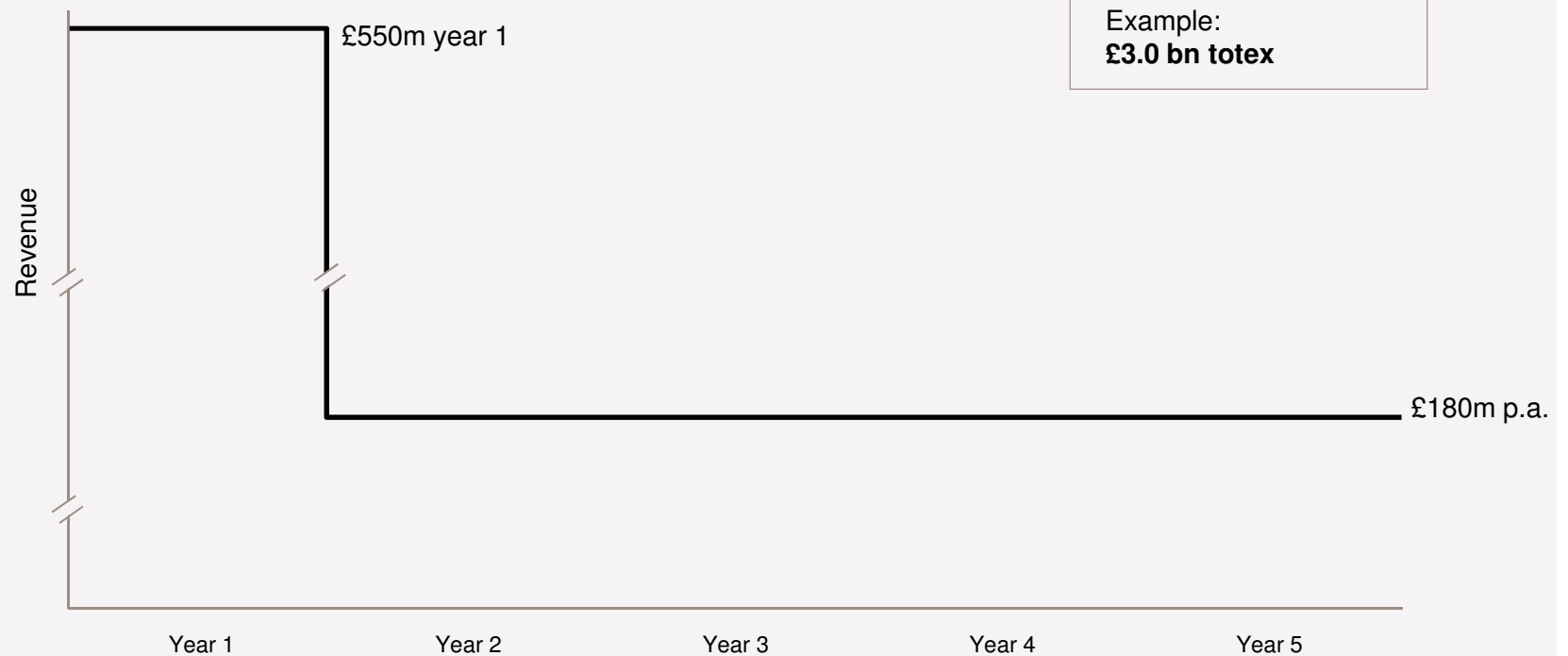
← Ofgem ex-ante assumption

Ex-ante revenue for £3.0bn totex



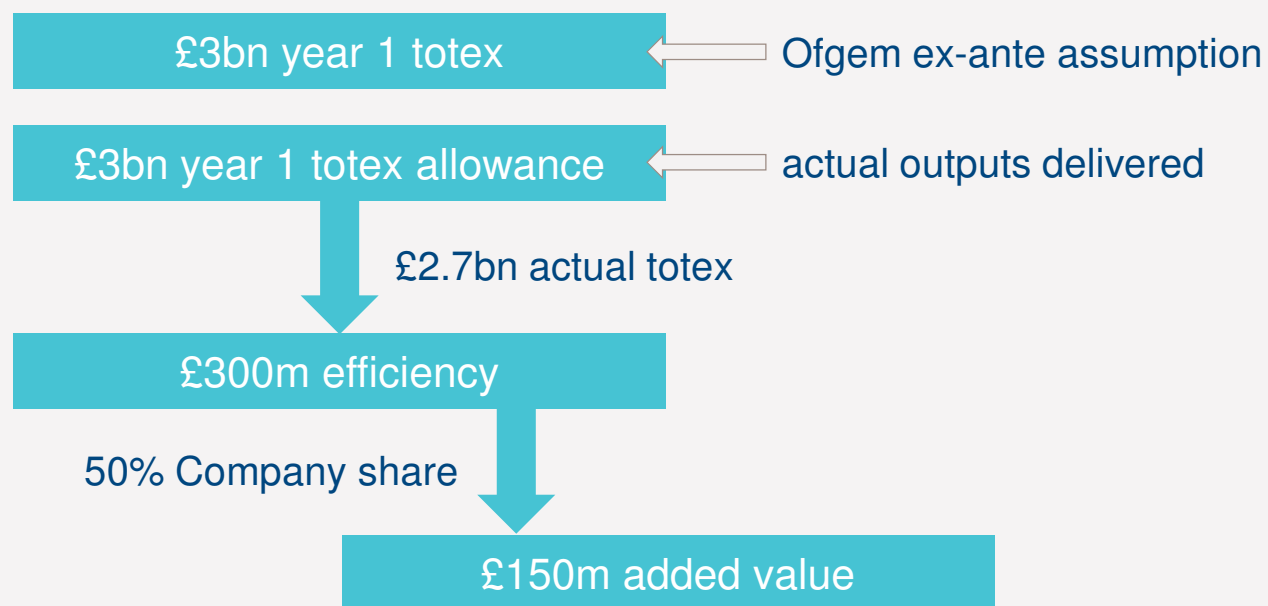
Stylised tax allowance shown for illustrative purposes only. Contribution to total tax allowance can be positive or negative. Year 3 onwards assumed = year 2 for ease of presentation

Ex-ante revenue for £3.0bn totex



For illustrative purposes only. Not to scale

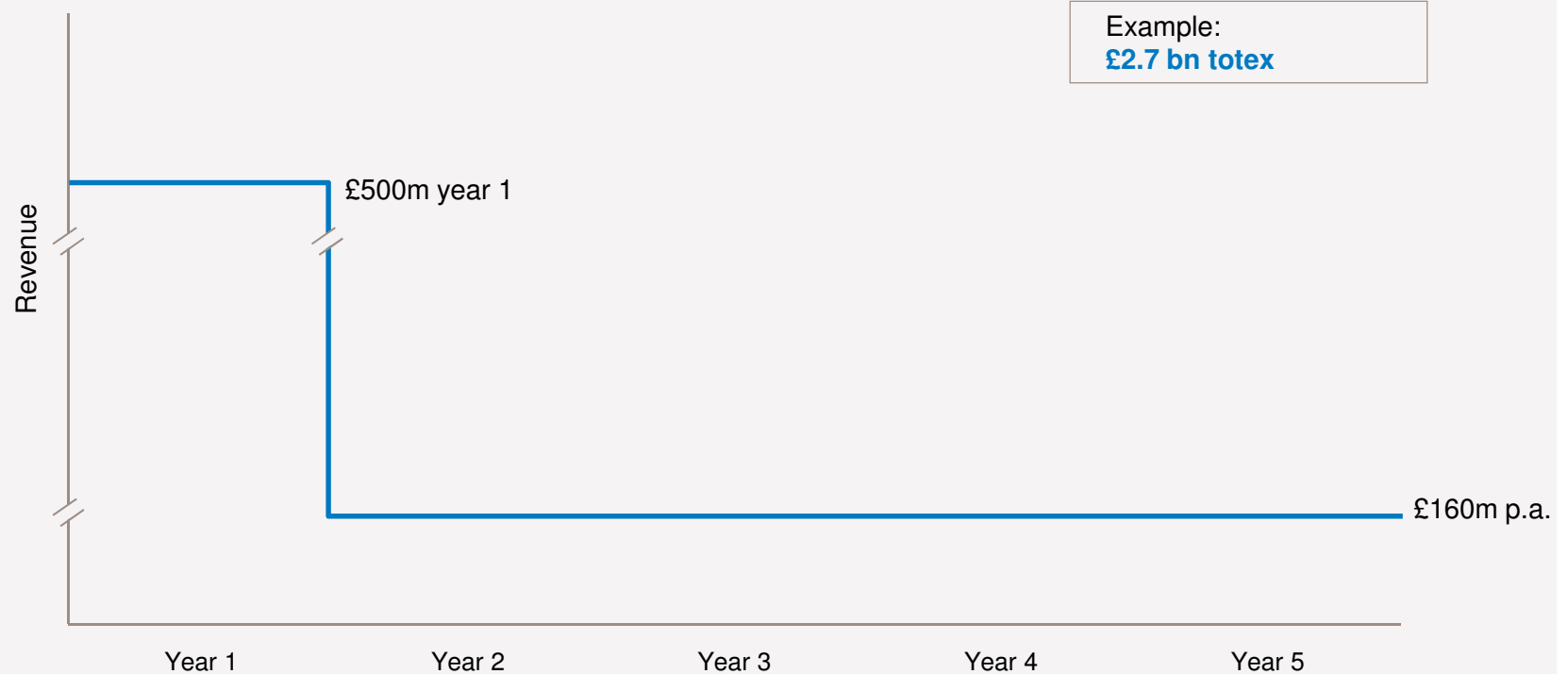
Example



Calculating ex-post revenue

A. Calculate revenue stream based on actual totex spent £2.7bn

Revenue stream for £2.7bn totex

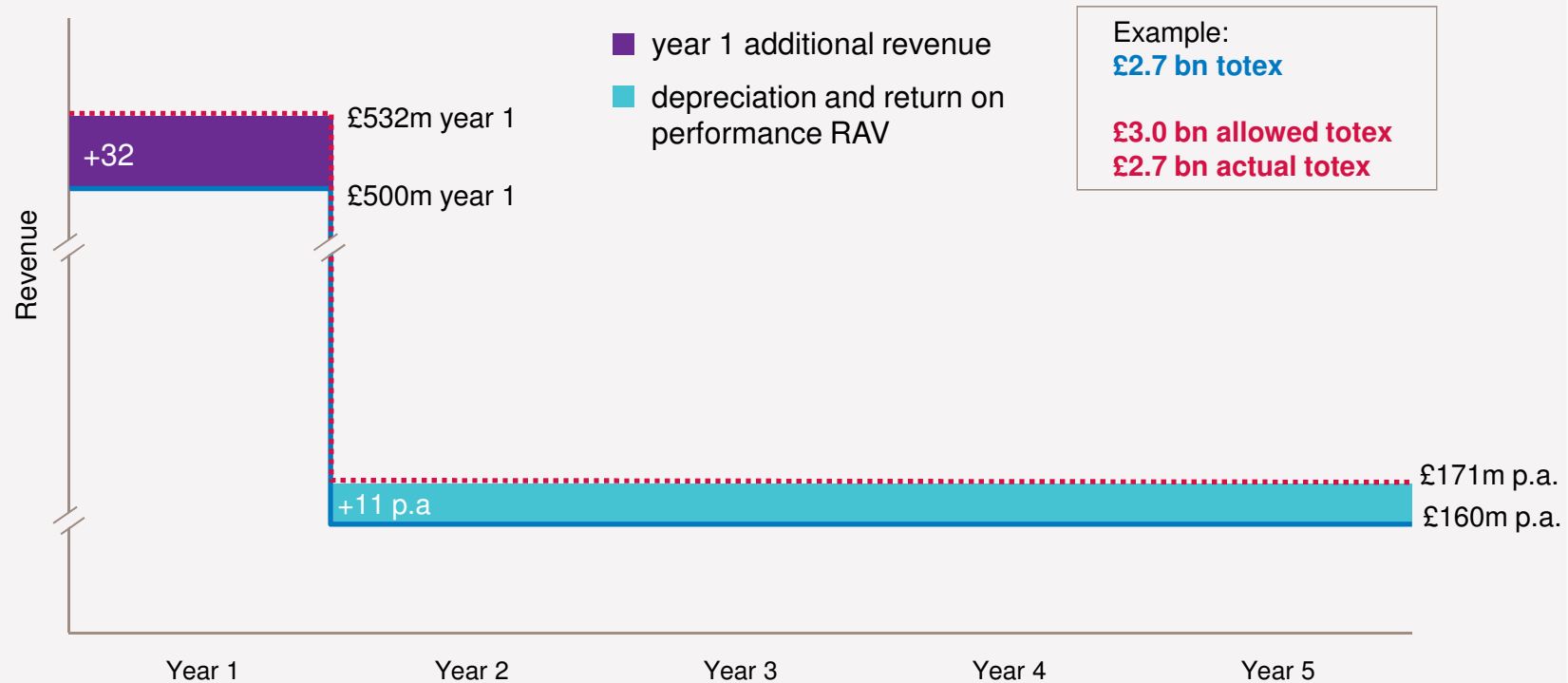


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Calculating ex-post revenue

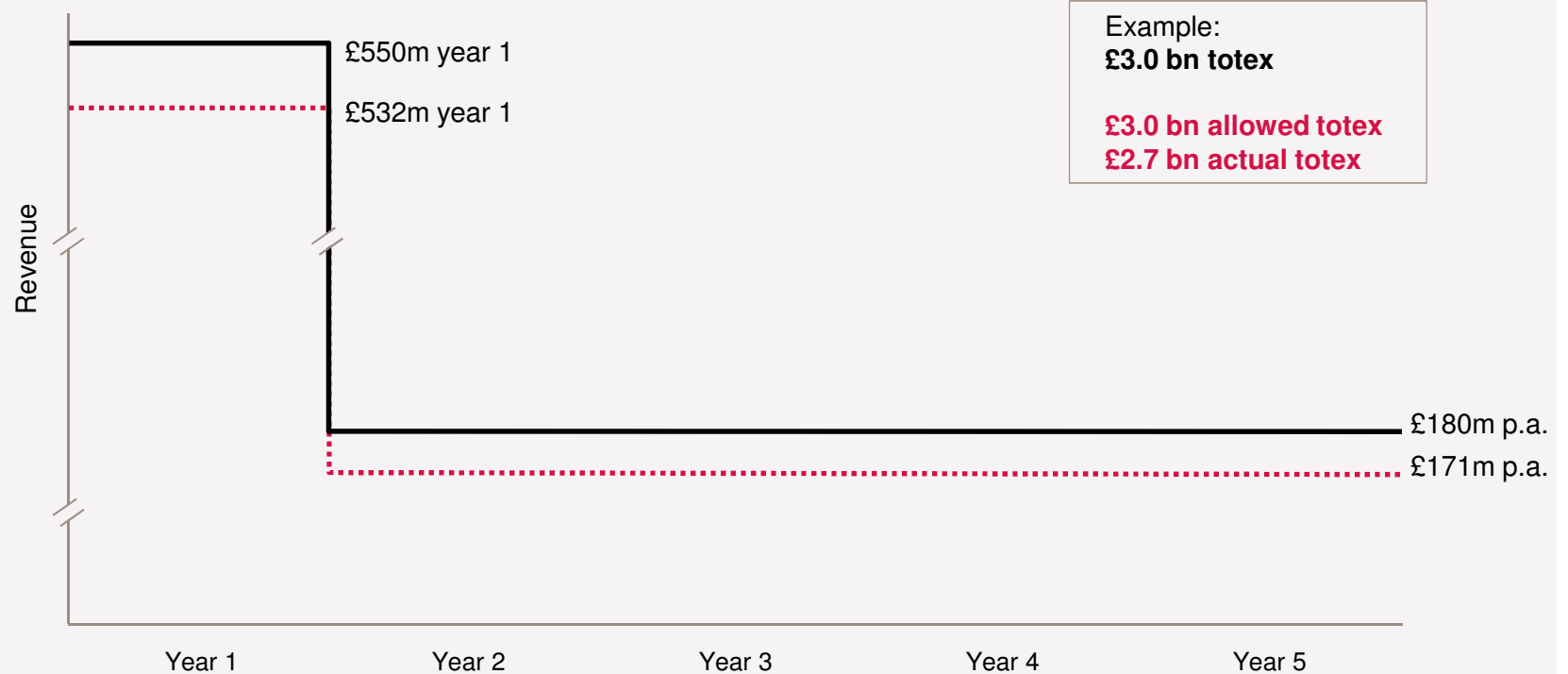
- | | |
|--|-----------|
| A. Calculate revenue stream based on actual totex spent | £2.7bn |
| B. Calculate totex allowance based on outputs delivered | £3.0bn |
| C. Calculate Value Added = $(B - A) \times \text{company share}$ | £150m |
| D. Add revenue...post-tax NPV = Value Added | |
| • Year 1 mostly fast money | £32m |
| • Year 2-45 based on additional performance RAV | £11m p.a. |

Calculating ex-post revenue



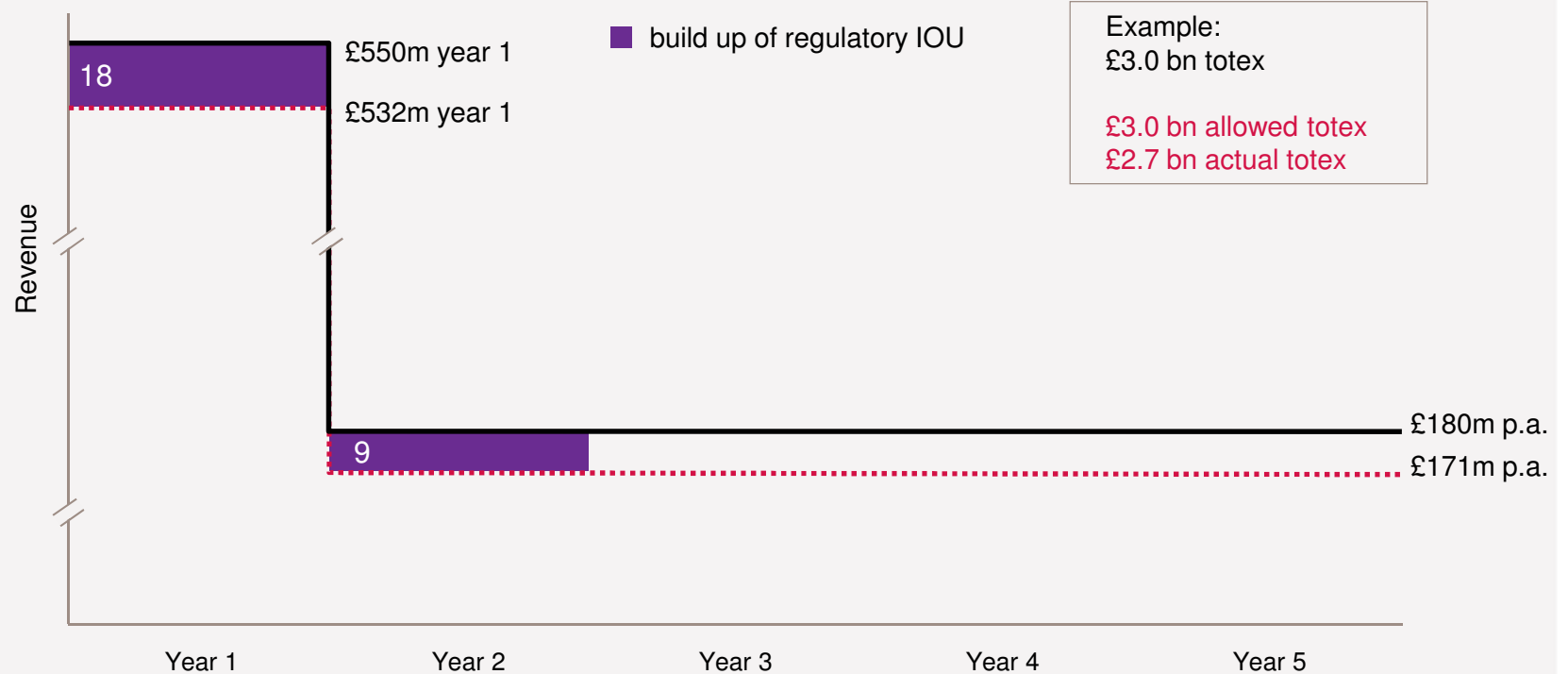
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Ex-ante compared to ex-post revenue

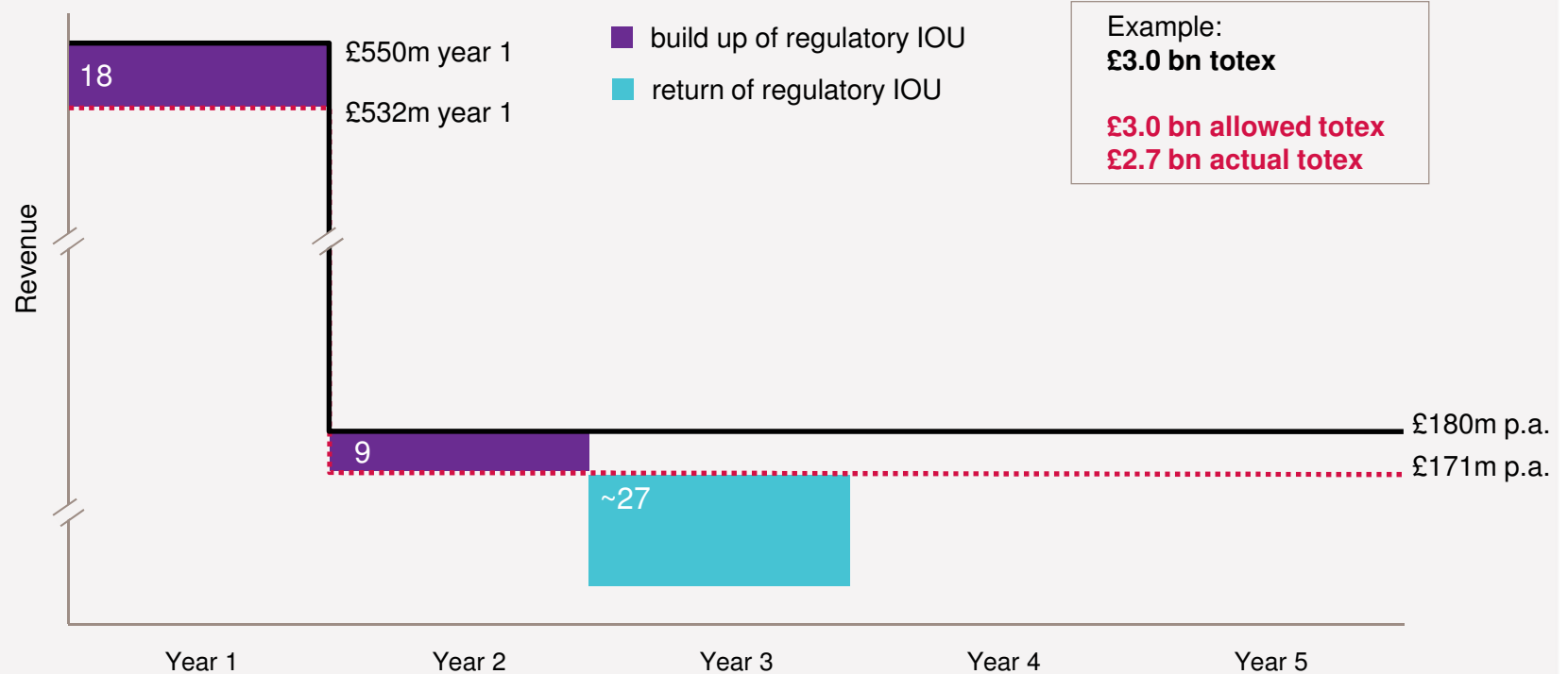


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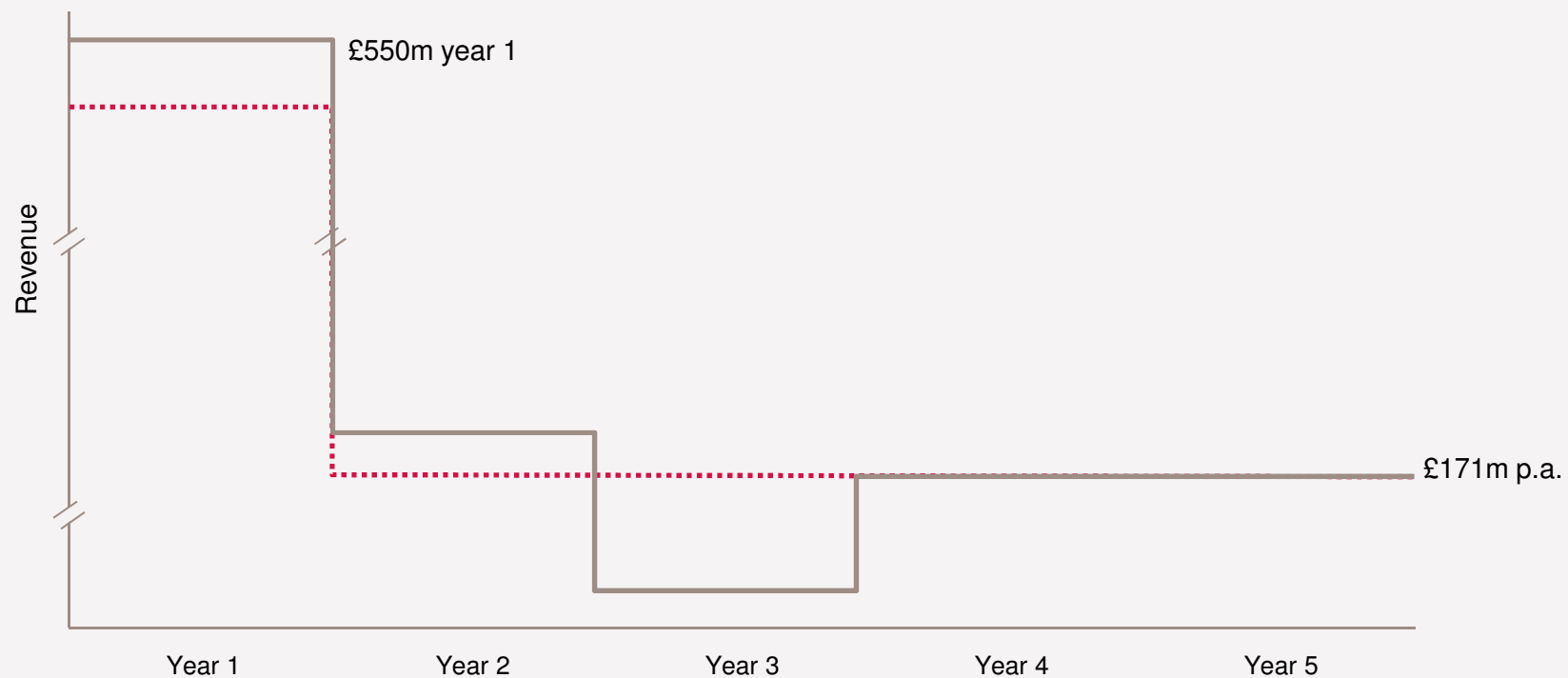
Timing of revenue collection



Timing of revenue collection



Actual revenue profile



For illustrative purposes only. Not to scale

Revenue adjustments in context

- May be additive and affect year on year comparisons
- Affect IFRS earnings profile but not regulatory returns
- Regulatory IOUs will be monitored and explained

Outperformance **always** benefits earnings over asset lifetime

IFRS accounting implications

Mismatch between timing of added value and IFRS earnings impact

- Returning revenues due to outperformance
- Spending opex to save capex

No IFRS adjustment for:

- Performance RAV
- Timing and regulatory IOUs
- Fast money v opex

Regulatory metrics reflect value earned

RIIO performance measures

- Operational return on equity
- Spend against totex allowances
- Incentive revenue and profits earned

some estimation
required

Summary

- Increased incentives
- New regulatory language
- RIIO drives performance measures
- Deliver outputs at lowest sustainable cost
 - opex or capex



John Pettigrew
Chief Operating Officer UK

London, Tuesday 6 August 2013

Agenda

- Key actions to build foundations for RIIO
- New concepts & opportunities
- Key areas of focus for outperformance
 - Delivery at lowest sustainable cash cost
- Critical success factors

Key areas of opportunity

Scope

- Innovatively delivering outputs

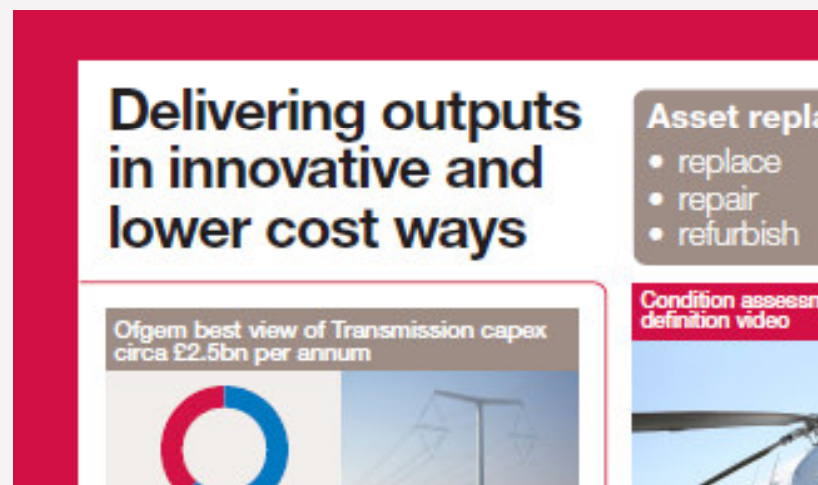
Delivering outputs in innovative and lower cost ways



Pauline
McCracken



David
Wright



Key areas of opportunity

Scope

Unit Costs

- Delivering physical solutions at lowest cost

Delivering capital solutions at the lowest sustainable cost



Ian
Galloway



Rob
Douglas

Delivering capital solutions at the lowest sustainable cost

Ofgem best view of Transmission capex circa £2.5bn per annum

- 1 Alliance realignment**
 - clear client and contractor account
 - clear responsibility for development of projects
 - Benefit:** close control of scope
- 2 Contract management**
 - skills development
 - commercially rigorous
 - Benefit:** improve contract performance
- 3 Competitive contracting**

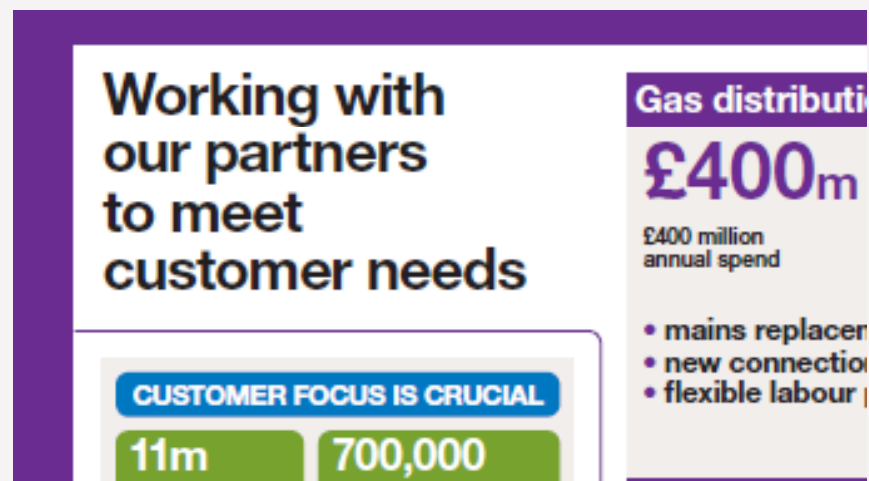
Working with our partners to meet customer needs



Emma
Fitzgerald



Ed
Syson



Key areas of opportunity

Scope

Unit Costs

Incentives

- Additional revenue from targeted performance

Maximising our incentives



Chris
Bennett

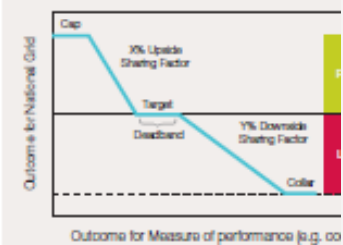


Paul
Whittaker

Maximising our incentives

- Consistent feature of UK price controls
- Encourage output delivery and behaviours to benefit consumers
- Clear areas and outputs for utilities to focus on

Typical incentive structure



Transmission

Electricity transmission incentives

Key areas of opportunity

Scope

Unit Costs

Incentives

Underpinned by
organisational changes

Developing a model to outperform



Nikki
Spaul

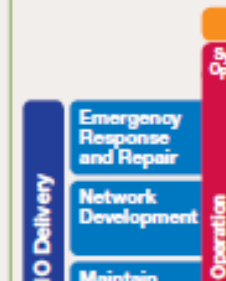


Dan
Davies

Developing a model to outperform

UK operating model changes

- Gas distribution model launched in 2011



Agenda

- Key actions to build foundations for RIIO
- New concepts & opportunities
- Key areas of focus for outperformance
- Critical success factors
 - Execution

Execution through...

- Performance excellence & continuous improvement
- Contract management
- Customer focus

Redefining RIIO



$$\text{RETHINKING} + \text{Innovation} + \text{Incentives} = \text{Outperformance}$$