RIIO

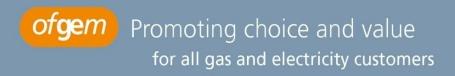


Presentation by Alistair Buchanan CEO Ofgem

(alistair.buchanan@ofgem.gov.uk)

MOVING ENERGY AND CLIMATE CHANGE TO A BETTER PLACE IN 2012

Winter/Spring 2012





PART OF THE OFGEM PACKAGE IN WINTER/SPRING 2012

- ❖ Tariff Reform Consulting on radical reforms now.
- ❖ New regulatory model RIIO in use for first time in 2012 for supergrid/transmission and local gas distribution companies.
- ❖ 16 Investigations of miss marketing, miss selling, discriminatory prices, customer complaints on-going.
- Gas security of supply report to HMG in late Spring 2012.
- Assist HMG in electricity market reform packages Energy Bill in May 2012.
- Project TransmiT on course for ruling Spring 2012....postage stamp option rejected in Dec 2011.

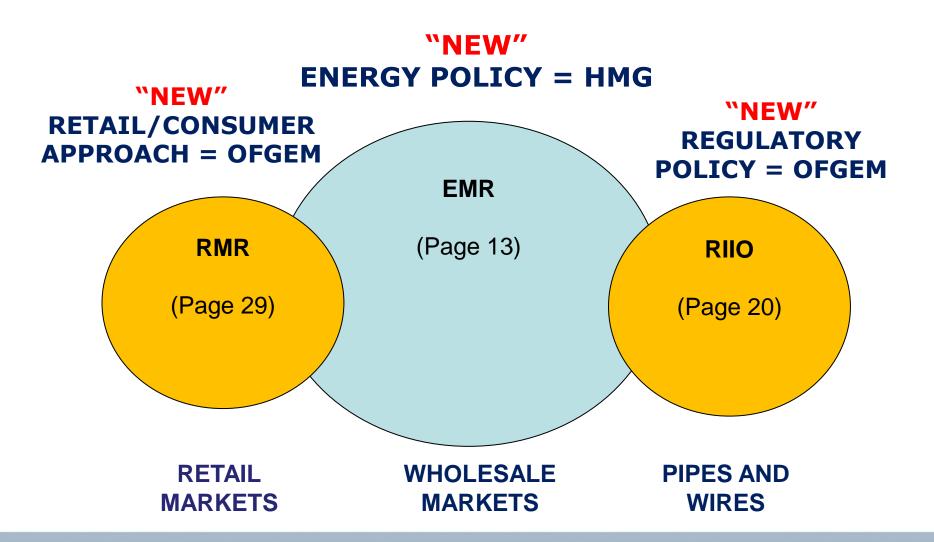
2011 = CHANGE NEEDED

2012 = NEW RULES





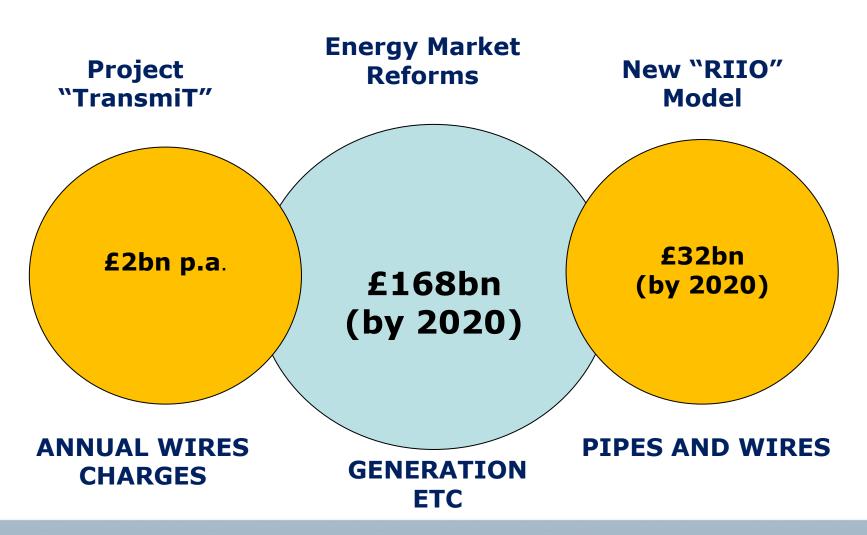
BACKGROUND (1) A NEW REGIME IN PLACE IN 2012

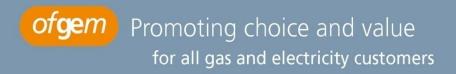






BACKGROUND (2) SCALE OF CHALLENGE IN £BN

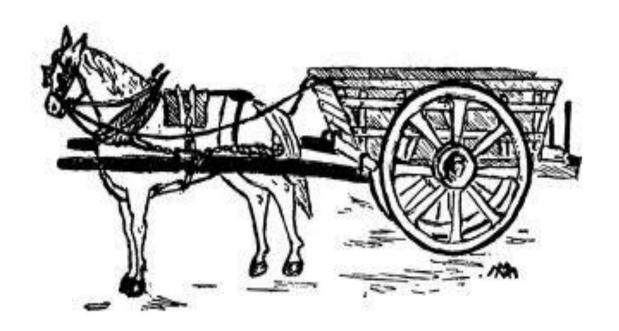






BACKGROUND (3) RIIO AND EMR TIED TOGETHER

Picture a Horse and Cart

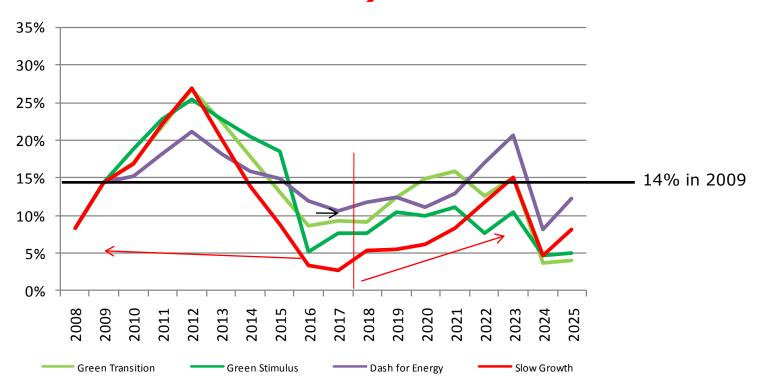


RIIO enables Horse. HMG to deliver Cart.



A QUICK LOOK AT THE CART FIRST!

DE-RATED CAPACITY MARGINS (PRE STRESS TESTS)



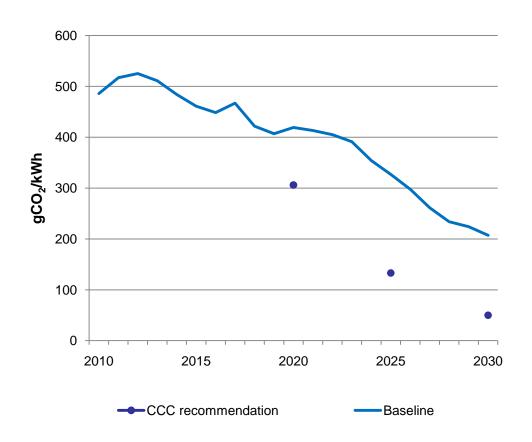
TIGHT MARGINS IN ELECTRICITY UNDER SOME SCENARIOS

JULY WHITE PAPER VERDICT ON SECURITY OF SUPPLY

- De-rated capacity margins >10% in 2018
- De-rated capacity margins >5% in 2023-25
- At 3% then 20GW short economic cost £200-600m pa.

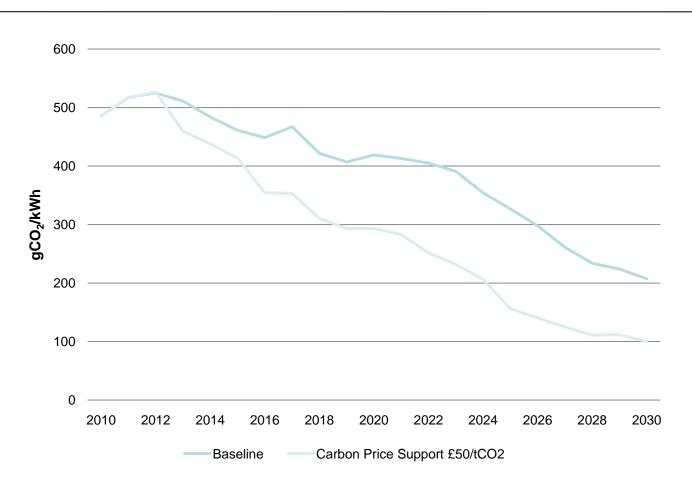
ACTIVE DEBATE FOCUSED ON LCPD HOURS LEFT

CARBON INTENSITY OF UK ELECTRICITY GENERATION



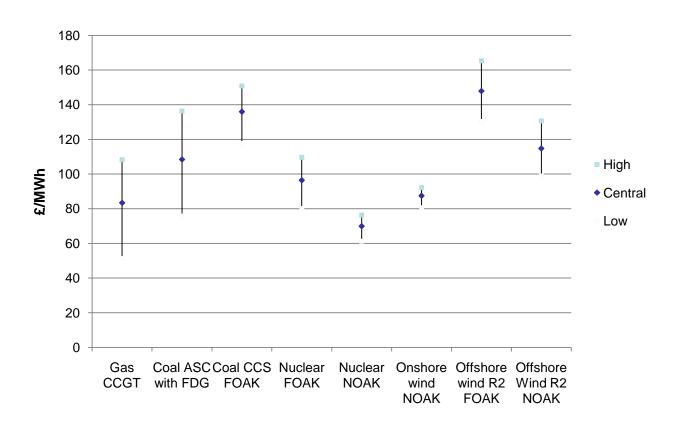
COMPOUNDED BY EU ETS FALLING €18 TO €7 IN 2011

DECARBONISATION TRAJECTORY UNDER £50/TCO₂ CARBON PRICE SUPPORT, COMPARED WITH THE BASELINE





LEVELISED COSTS OF GENERATION TECHNOLOGIES

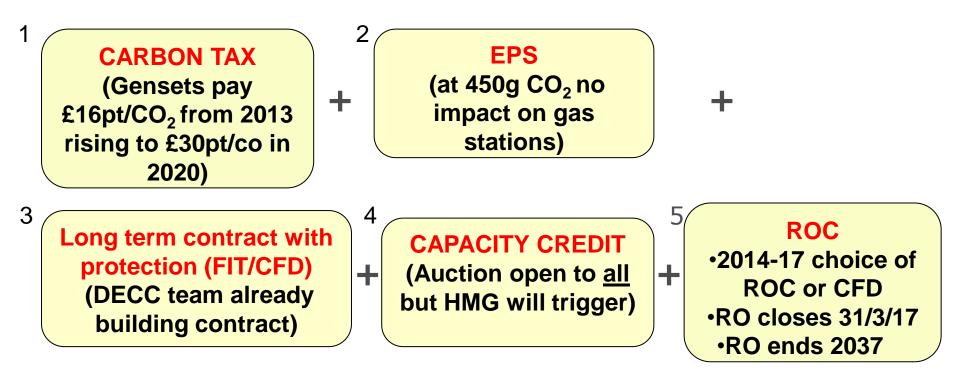




DISCOVERY: OPTIONS FOR CONSULTATION

A Targeted Reforms	B Enhanced Obligations (EO)	EO & Renewables Tenders	D Capacity Tenders	E Central Energy Buyer		
M						
Im						
	Central buyer of energy					
	Enhanced obligat and syster		(including capacity)			
	Centralised renewables market					
		Replace RO with renewables tenders	Tenders for all capacity			

EMR: DEC 2011 PACKAGE



HMG's RADICAL PACKAGE IN ELECTRICITY

KEY FACTORS

INSTITUTIONS. NG will run CFD and capacity auctions.

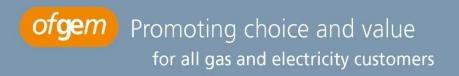
2 CFD. Initially an administered process not auction.

CM. DECC to trigger on advice of NG and others.

ROC. Banding good for Biomass (0.5 to 1.0) but poor for onshore wind (1.0 to 0.9)

IS THIS ENOUGH TO UNLOCK PURSES?

4





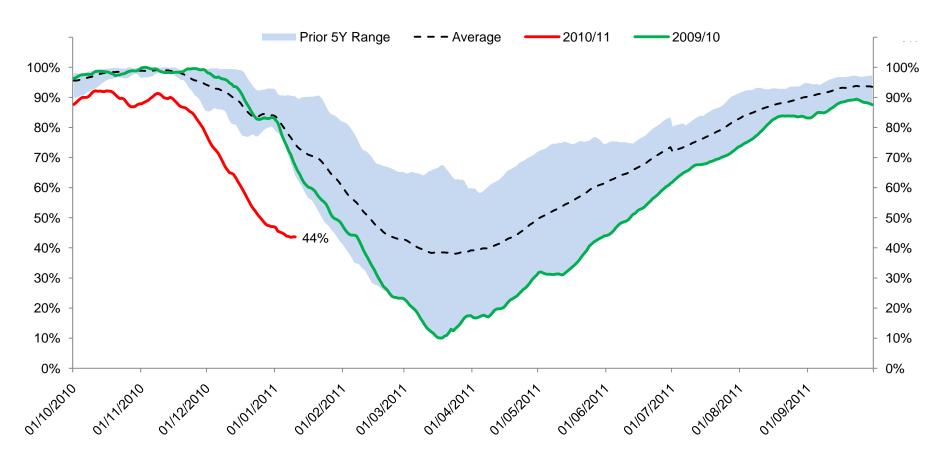
TIMELINES OF ELECTRICITY REFORMS

- EARLY 2012: Further guidance on Package.
- MAY 2012: Bill Lodged
- AUTUMN 2013: Act in Place
- 2014: Measures in Place

IT LOOKS A LONG TIME BUT IT ISN'T!

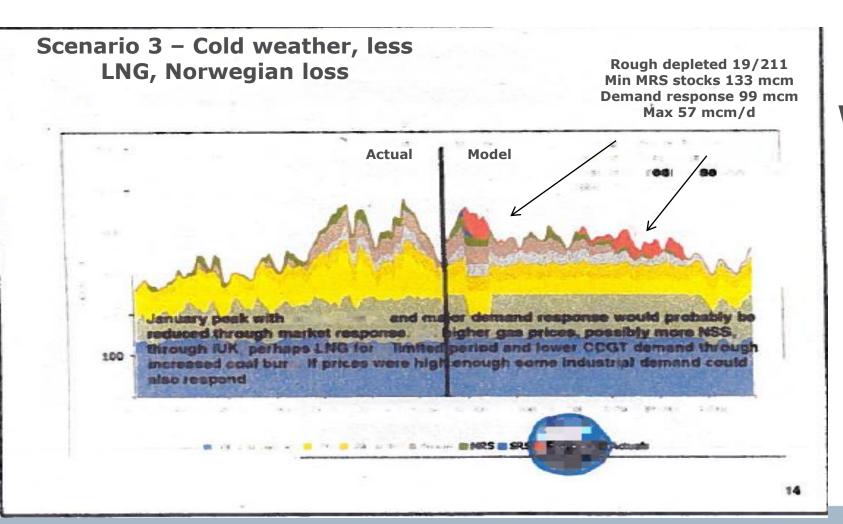
WHAT ABOUT GAS? (1)

GB storage stocks were at historic lows for January 2011 (44%).

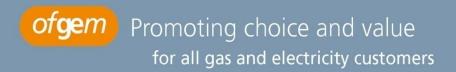




WHAT ABOUT GAS? (2)

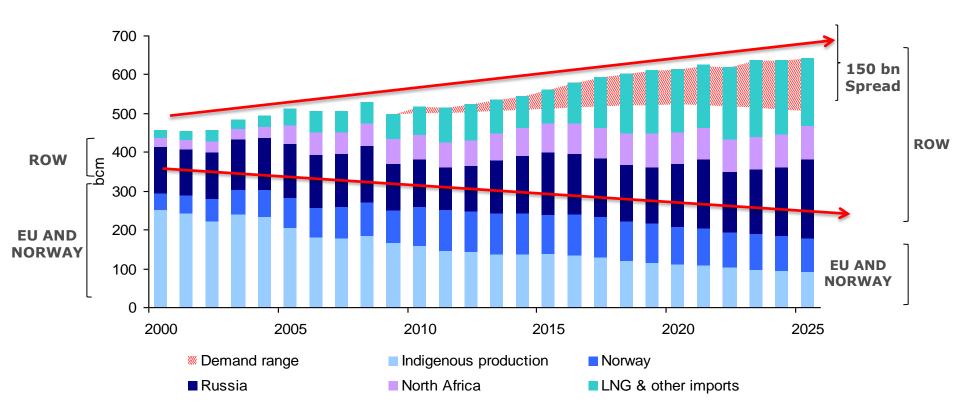


RED IS WORRY!



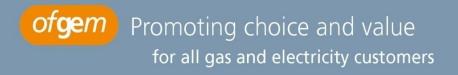
WHAT ABOUT GAS? (3)

Increasing dependence on non-European imports



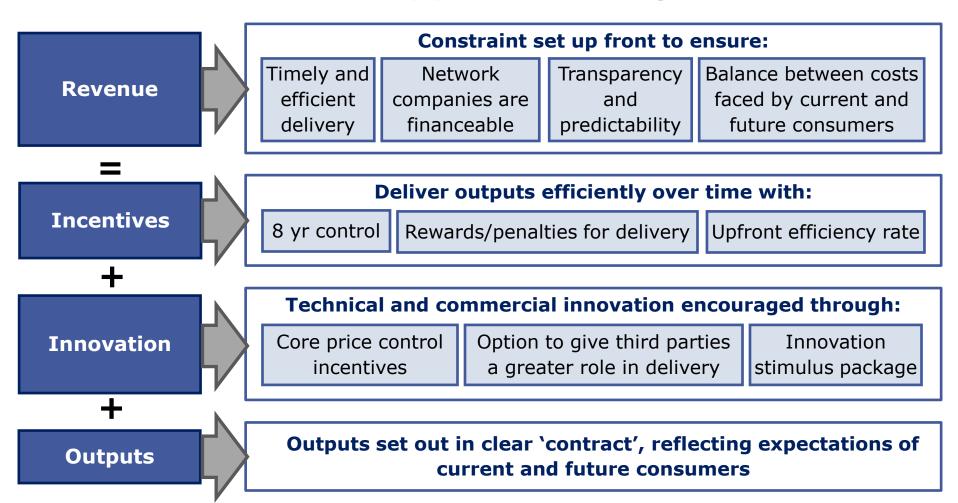
Source: National Grid, Ten Year Statement 2010

There are risks to gas security of supply due to increasing imports from non-European sources (Russia, Qatar, North Africa)





RIIO: A new approach to regulation







The Headlines

Goodbye RPI-X

Goodbye 5 years (3 years "left alone")

Goodbye Poor customer involvement

No money for R&D or improving carbon footprint

Commitment not to impair RAV

Great link to Discovery (£200 bn needed by 2020)

Hello RIIO (R is revenue, I is incentives, I is innovation and O is for outputs)

Hello 8 years (7 years "left alone") plus fast track option.

Hello Customer Engagement

DNO, GDN, TO get £1-2 billion for LCNF (Low Carbon Networks Fund)

Enables financial package to get support and introduction

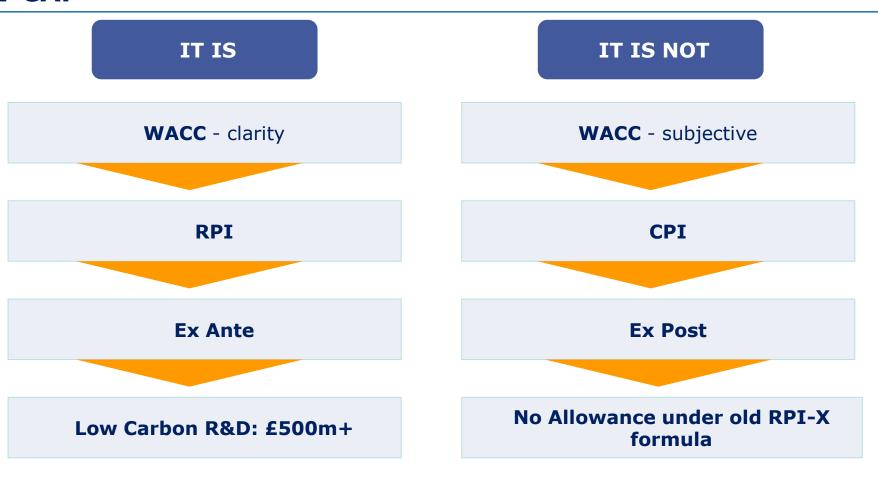
Regulatory policy can assist the delivery of £32bn by 2020

MOVING ON FROM RPI - X





RE-CAP



AN INVESTMENT BASED PACKAGE





KEY ELEMENTS OF PROPOSALS

- ♦ Cost of Equity Range = 6.0 7.2%.
- ❖Cost of Debt Index = 1boxx 10⁺ year index (based off 10, 20, 30 year debt and A/BBB ratings).
- ❖Depreciation: Transmission (E) = 45 years for new, no change to legacy.
 Distribution (E) = As above.

Transmission(G) = No change Distribution (G) = Front loaded basis to all assets and not just new.

❖Repex for gas distribution = From 50% to 100%. Change is largely offset in cf terms by front loaded deprecation. Only applies to new investment.

TRANSITION TERMS APPLY TO CASHFLOWS





THE CASH BEHIND THE I AND I OF "RIIO"

INNOVATION

-RIIO - T £240m 'pot' for R and D.

-RIIO – GD £160m 'pot' for Rand D.

(Electricity already has £320m in R and D pot)

INCENTIVES

-RIIO – T £320m (E) £30m (G)

-RIIO - GD £390m.

(Awarded in performance areas: emissions control, business carbon footprint, losses, connections, consumer satisfaction, visual amenity).

WAYS OF BEATING "BASE" CASE



How will we encourage efficient delivery?

Incentives

Transparent rewards/penalties for output delivery – those that deliver earn high returns, those that don't earn lower returns

Backstop threat of enforcement action and potential licence revocation for persistent non-delivery

Upfront symmetric efficiency incentive rate (builds on DPCR5)

Calibrate to ensure longterm value for money

Innovation stimulus package

Building on LCN Fund and supplementing incentives in framework

One for gas and one for electricity

Open to network companies and third parties

Time-limited stimulus reviewed at regular intervals

Prize funds to reward new commercial arrangements



OUTPUTS (OR STANDARDS OF SERVICE)

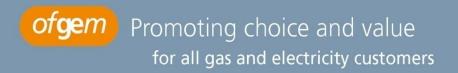
STANDARDS ON:

FEATURES ARE:

- RELIABILITY
- SAFETY
- SERVICE
- ENVIRONMENT
- SOCIAL

- TOUGH
- TRANSPARENT
- CONSUMER INPUT

'O' OF RIIO GIVES CONSUMERS VALUE FOR MONEY





CONCLUSION 1 – INVESTMENT AND PRICES

- 1. This is big money over 10 years
 - 2011 Capex totals for RIIO TI a staggering £33bn.
 - +100% p.a. on last 20 years capital spend run rate
- 2. "The scale of investment required means higher energy bills are almost certain."
- 3. Massive RAV impact (BOAML)
 - NG (ET) up from £8.4bn in 2011 to £23.9bn in 2021
 - SSE (ET) up from £0.506bn = 2011 to £5.6bn in 2021

REASSURANCE FOR CONSUMERS - THEIR MONEY WELL APPLIED AND SPENT



CONCLUSION 2 – INVESTORS HAVE A ROLE TO PLAY

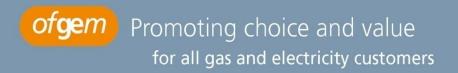
We rely on investors to:

- Keep pressure on management teams not to underperform
- To support management teams to appeal Ofgem's decisions if they believe them wrong.

You will have:

- Enough regular information to make these judgements
- An awareness that all NO's could outperform in theory (i.e. No "median theory" is in play)
- Investors must be alert that ineffective, lazy or poor management will be found out under RIIO.
- GB Network Regulation was never intended to be risk free.
- There is now a wider template for risk/reward.

CONSUMERS AND INVESTORS HAVE COMMON INTERESTS





RETAIL MARKET REFORMS – WHY?

- ❖ Failure to progress sufficiently on 2008 probe remedies in following areas:
 - Door step selling.
 - Bills/Annual statements.
 - Provision of Accounts.
 - Treating SME well.
 - Adherence to new licence conditions.
- Structural legacy issues compounded by cross subsidies.
- ❖Retail wholesale missmatch in 2010.
- Receipt of first segregated accounts raised questions.

NEED TO VASTLY IMPROVE CUSTOMER EXPERIENCE AND REGAIN TRUST



RETAIL MARKET REFORMS – WHAT?

- 1. Tariff Simplification
- 2. X% market to open through auctions and market makers.

Failure to achieve progress will lead to 'cc'.

- 3. Scottish Power investigations after June 2011 price increases,
- 4. Confirm misselling investigations proceeds (SP, SSE, EDF, RWE)
- 5. Appointed BDO in July 2011 to assist on accounts....response in Q1 2012.
- 6. SME market needs urgent answers especially over "roll-overs" and agents behaviours......November 2012 consultation well received.

TRANSPARENCY AND ACCESSABILITY

RETAIL MARKET REFORMS - TARIFFS

- EVERGREEN TARIFFS
 - -One tariff per payment method per fuel.
 - Customer choose tariff by comparing single unit price.
 - Standard, TOU, Green (and loyalty) options being considered.
 - Standing charge determined by Ofgem.
- FIXED TERM CONTRACTS (FTC)
 - No restrictions.
 - No changes to terms/conditions including price increases which are at suppliers discretion.
 - Automatic rollover banned.
 - Clear information to consumer.

HOPING FOR APR STYLE PRICE QUOTE

STEPS TO RECOVERY

- Step 1: Solid response to RMR. "We need to increase tariff simplicity" (BG)
- Step 2: Doorstep sales suspended (SSE leads and 4 follow).
- Step 3: Customer complaints resolution (BG (£2.5m), NPower (£2.0m and other cases (EDF £1.7m) "Take the Medicine and Move on".
- Step 4: New packages for consumers taking "trust, choice and simplicity" as themes:
 - SSE: 10 point plan "Building trust in Energy Retailing".
 - BG: "The Honest Conversation".
- Step 5: Industry support CAB/Ofgem's "Energy Best Deal".
- Step 6: EDF and SSE react to Ofgem's QR with "trust" responses.
- Step 7: DECC Energy Summit outlines "Consumer comes First" this winter.

SO FAR 7 BIG STEPS TO RECOVERY – WHAT NEXT?



NEXT 3 STEPS ARE FROM OFGEM

Step 8: Enhance choice and simplicity (November 2011):

- SME proposals
- Domestic Tariffs proposals

Step 9: Enhance/Promote competition:

- Liquidity proposals due Q1 2012

Step 10: Provide transparency in Accounts due Q1 2012:

- BDO Accountants Report

10 STEPS FROM SUMMER 2011 TO SPRING 2012 TO RE-BUILD CONFIDENCE IN SECTOR



SSE ON 12TH OCTOBER

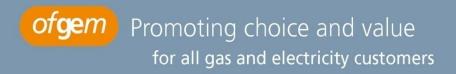
"Earlier this year Ofgem said that in a period of rising prices, suppliers have to transform the way they deal with customers. Ofgem was right".



TIM YEO ON 25TH JULY

"The rest of the Big Six should ditch the Del Boy sales tricks and concentrate on giving customers information to choose the correct contract".

"We now expect the companies to change voluntarily and not wait for Ofgem."



RE-CAP RECENT EVENTS

Yeo: Companies should act now on own accord.

ERA/Barker: At Energy Summit they offered/volunteered to help this winter.

Marchant: SSE to follow new path – "My aim is to put Alistair and his team out of business".

WE HOPE THE FLOW IS TOWARDS SELF-HELP



APPENDIX 1: LNG?

- Forecasting nightmare:
 - Japan, Korea.
 - China and India.
- Expensive versus pipe.
- Expensive capital outlay both for facilities and linking networks.
- "Less connectivity in Markets" IEA Oct '09

GLUT FOR NOW BUT CATCH 22?





APPENDIX 2: SHALE

Euro-Shale – not before 2025

- Timeframe.
- Cost.
- Environment.
- Technical.

So – US Shale to Europe's rescue?

- Displacement theory within USA must fail.
- USA has slow recovery.
- No adverse environmental outputs arise (EPA – 2012 Report)

EUROPE RELIES ON USA NOT NEEDING "ITS" LNG



APPENDIX 3: CATCH-22

Assume LNG import facilities do get funded.

EU has modest growth only.

 Diversity of supply under LNG still an issue.

- (1) But 5 delayed in 2010.
- (2) If Euro-Shale arrives from 2025 why build LNG as pipelines?
- (1) If US and Europe economics both surge more gas needed?
- (2) Gas surge in EU if worries over CO² targets lead to coal-gas switch as policy.
- (1) Qatar To look East?
- (2) Big 3 = +60% market.
- (3) Oz tied to Far East Market?

MAJOR UNCERTAINTIES

APPENDIX 4: UPDATE ON STRESS TESTS - TRAFFIC LIGHTS

Stress test	Period	Today	Green Transition	Green Stimulus	Dash for Energy	Slow Growth
Re-direction of LNG supplies	1-in-20 severe winter					
Russia-Ukraine dispute	1-in-20 severe winter					
Bacton outage	1-in-20 peak day					
No wind output	1-in-20 peak day					
Electricity interconnectors fully exporting	1-in-20 peak day					

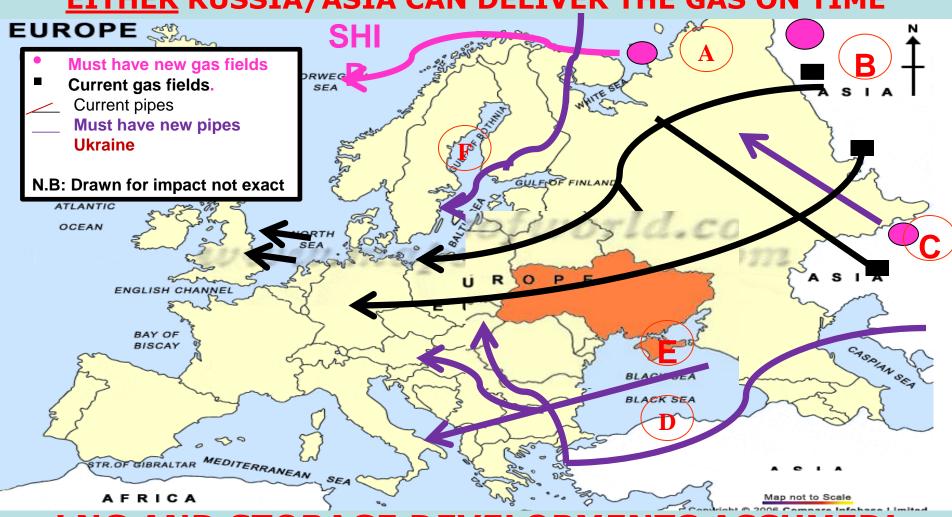
Low impact

Moderate impact

High impact



APPENDIX 4: EITHER RUSSIA/ASIA CAN DELIVER THE GAS ON TIME



LNG AND STORAGE DEVELOPMENTS ASSUMED!

APPENDIX 4: LIKELIHOOD THAT KEY PROJECTS ARRIVE ON ORIGINAL DATES

date	On time	Nearly on-time	Big de	elay Original
A. Shtokman		$lue{lue}$	\circ	2013
B. Yamal (new Fields)	•		\circ	2011
C. Turkmenistan double capacity			<u> </u>	2016/17
D. Nabucco				2014
E. South Stream	•			2015
F. Nord Stream				2011
Key = No	<pre></pre>	= Yes		

EVEN IF ONLY 'SOME DELAY' THE VOLUMES MAY BE VERY LOW AND OR/OR DISPLACED GAS



for all gas and electricity customers

