

## **Environmental Outputs**

Output Category	Primary measure	Incentive mech.
Business carbon footprint	Shrinkage	<ul> <li>(i) Shrinkage incentivised through cost of replacement gas</li> <li>(ii) Emissions incentive on leakage – potential to expand?</li> <li>Expectation with introduction of smart meters of move to measured outputs</li> </ul>
	Business carbon footprint	Introduce league table as with DPCR5 (i.e. reputational incentive).
Other emissions & resource use	Land remediation	No direct incentive (included in cost allowance); report sites remediated against cost allowance benchmark. By category?
	Extraction of gravels	No direct incentive (included in cost allowance); report tonnes extracted against cost allowance benchmark
	Landfill	No direct incentive (included in cost allowance); report tonnes to landfill against cost allowance benchmark
	Emissions to water	No direct incentive (included in cost allowance); report # discharge consents and # incident reports against cost allowance benchmark

Broad measure – can we measure carbon intensity of flows on network?



## Summary of open letter responses on environment

Shrinkage/leakage	Distributed Gas
<b>EDF:</b> Support principle of using settlement data for shrinkage calculation	<b>Gas Forum:</b> Costs of distributed gas should be explored
<b>CO Gas safety</b> : Flag concern over the environmental impact of toxins in gas e.g. Mercury, copper	<b>SGBI</b> : Supportive of developing distributed gas.
<b>NGG/WWU:</b> Mains replacement programme deliver environmental benefits	<b>NGN:</b> Argue that we should develop incentives to connect distributed gas
NGN: Current incentives work well – no move to settlement data	<b>Eon:</b> Suggest CV measured on local basis
<b>Total/ICOSS</b> : Unidentified gas to be included in shrinkage model	

## **Unidentified gas**

UNC mod 0229 introduces the AUGE to identify volume of unidentified gas.

Unidentified gas is then allocated equally between small and large supply points

Respondents to open letter suggested that the volume of unidentified gas should be part of the shrinkage calculation. They quote a number of benefits:

- Gas transporters would have an incentive to reduce unidentified gas
- Single industry process for shrinkage and unidentified gas more efficient than 2 separate ones
- Reduces administrative burden on shippers, lowering costs for customers

What are the merits and flaws of such an approach?

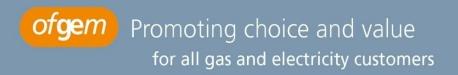
## Performance against shrinkage volumes

Analysis shows that most GDNs are performing well against volume shrinkage and leakage targets

Some GDNs are capping out on the environmental emissions incentive i.e. 10%+ below targets.

#### What is driving this:

- Advanced mains replacement programme?
- Improved system management?
- Other factors?
- Is this performance a one off or ongoing?



#### **Environmental emissions incentive**

# Shadow price of carbon has been replaced by carbon values published by DECC

Value of incentive based on environmental impact of leaked gas to air

GDPCR	GDPCR 2
Shadow price of carbon	Non traded carbon values
£25.40 per tonne C02 in 2007 prices	£51.70 per tonne CO2 in 2010 prices (central value)

Value of SO emissions incentive in Gas transmission almost doubled as a result of moving from shadow price to non traded values.

If tenants of incentive remains unaltered the value likely increase dramatically in GDPCR 2

What impact will this have on your business plans?



### **Distributed Gas**

Benefit	Do these apply in practice?
Reduce losses upstream	Could DN entry reduce losses upstream?
Improved network flexibility	Would DN entry improve demand side management?
Decarbonisation or more efficient use of fossil fuels	Is biomethane decarbonising or is it just renewable? What about shale gas?
Increased network reliability	How would DN entry affect network reliability?
Offset NTS offtake	How could DN entry affect NTS offtake?

#### **Distributed Gas**

- What do you need to know for the December document?
  - In order to inform business plans?
- How are current projects being treated?
- Charging regime
  - NG proposal
- Information