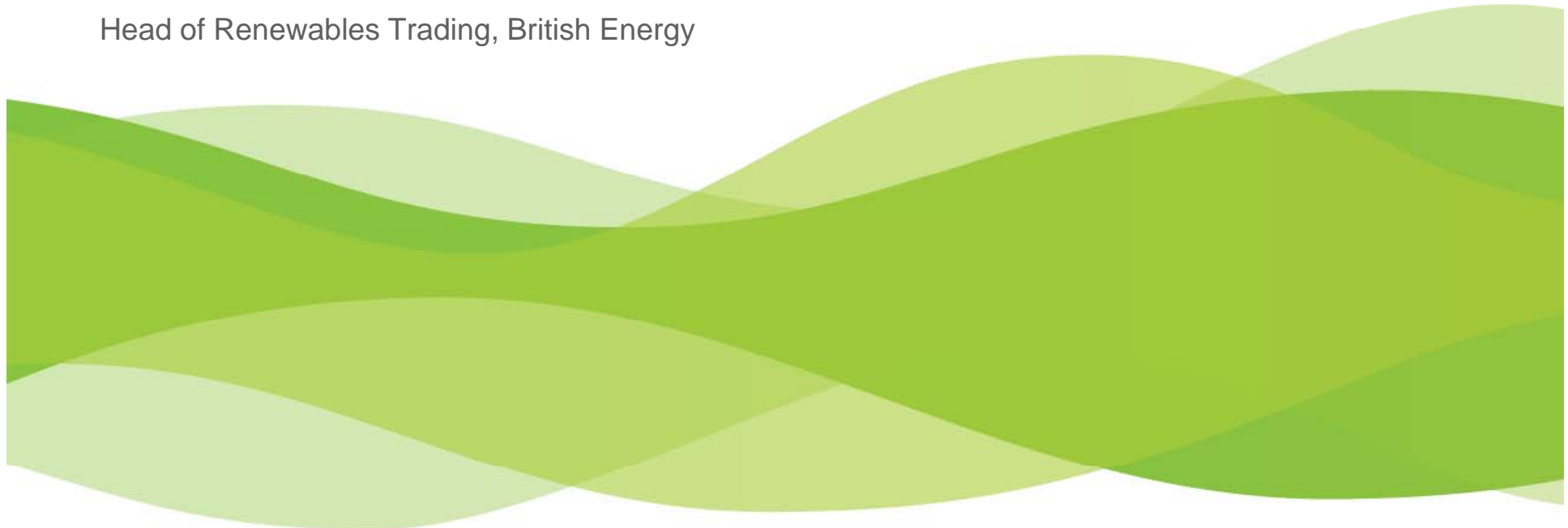


Review of consultation – ROC Cancellation

Andris Bankovskis

Head of Renewables Trading, British Energy



- > Address the issue of climate change
- > Removing confusion
- > Informing consumers to make choices
- > Using competitive forces

Three Consumers

- > Tom
 - > Wants to measure his carbon footprint
 - > Understands the importance of electricity in the supply chain and participates in CDP
 - > “You will receive electricity from Good Quality CHP. The carbon content based on a life-cycle analysis of its global warming potential is 100 - 250 gCO₂ per KWh (band C)”

- > Dick
 - > Wants everything Tom wants
 - > Particularly concerned with Renewable technologies

- > Harriett
 - > Passionate about identifying herself with new development
 - > Could have same interests as either of the above

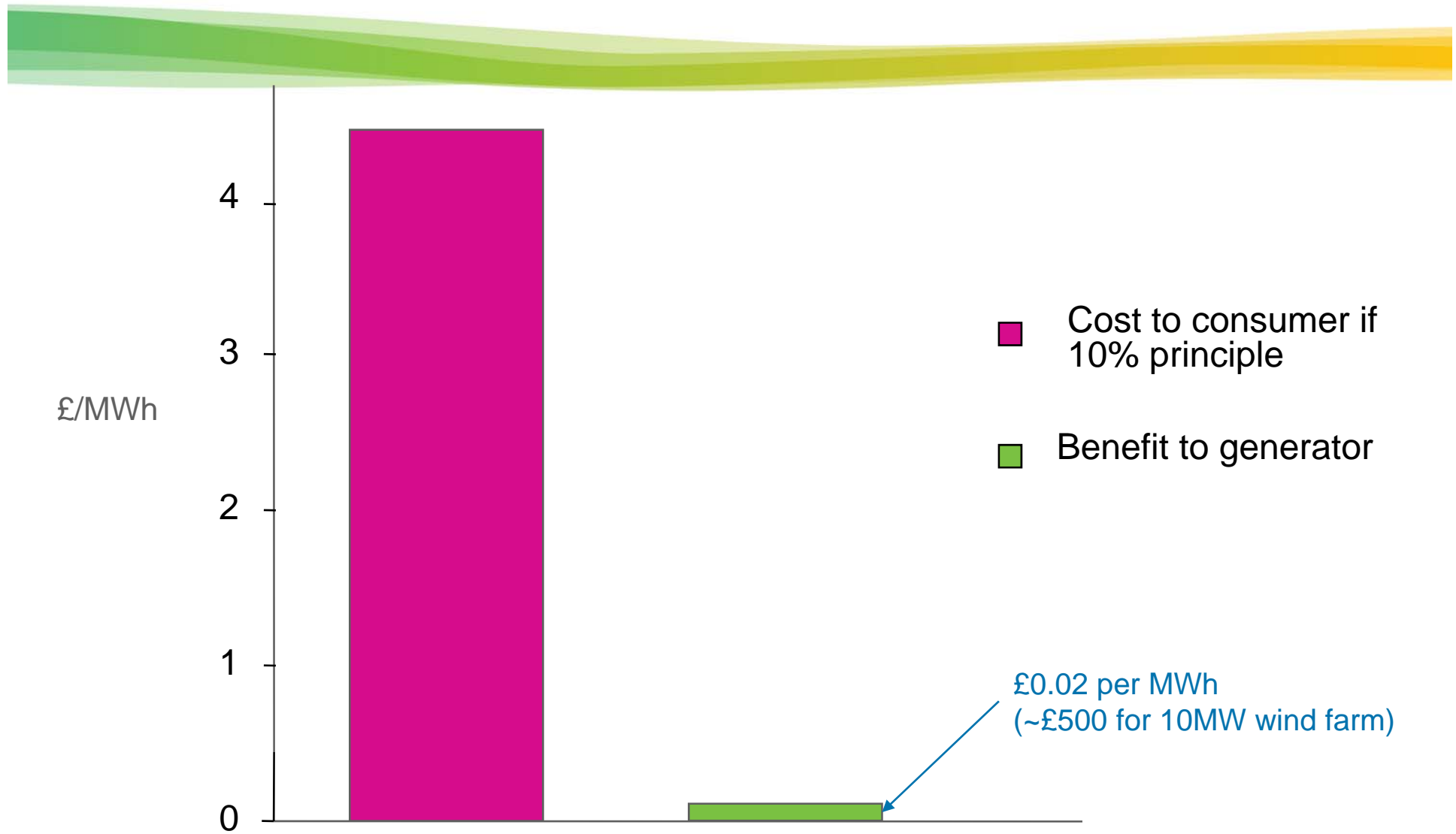
Renewables Obligation Certificate Cancellation:
Rhetoric or reality ?



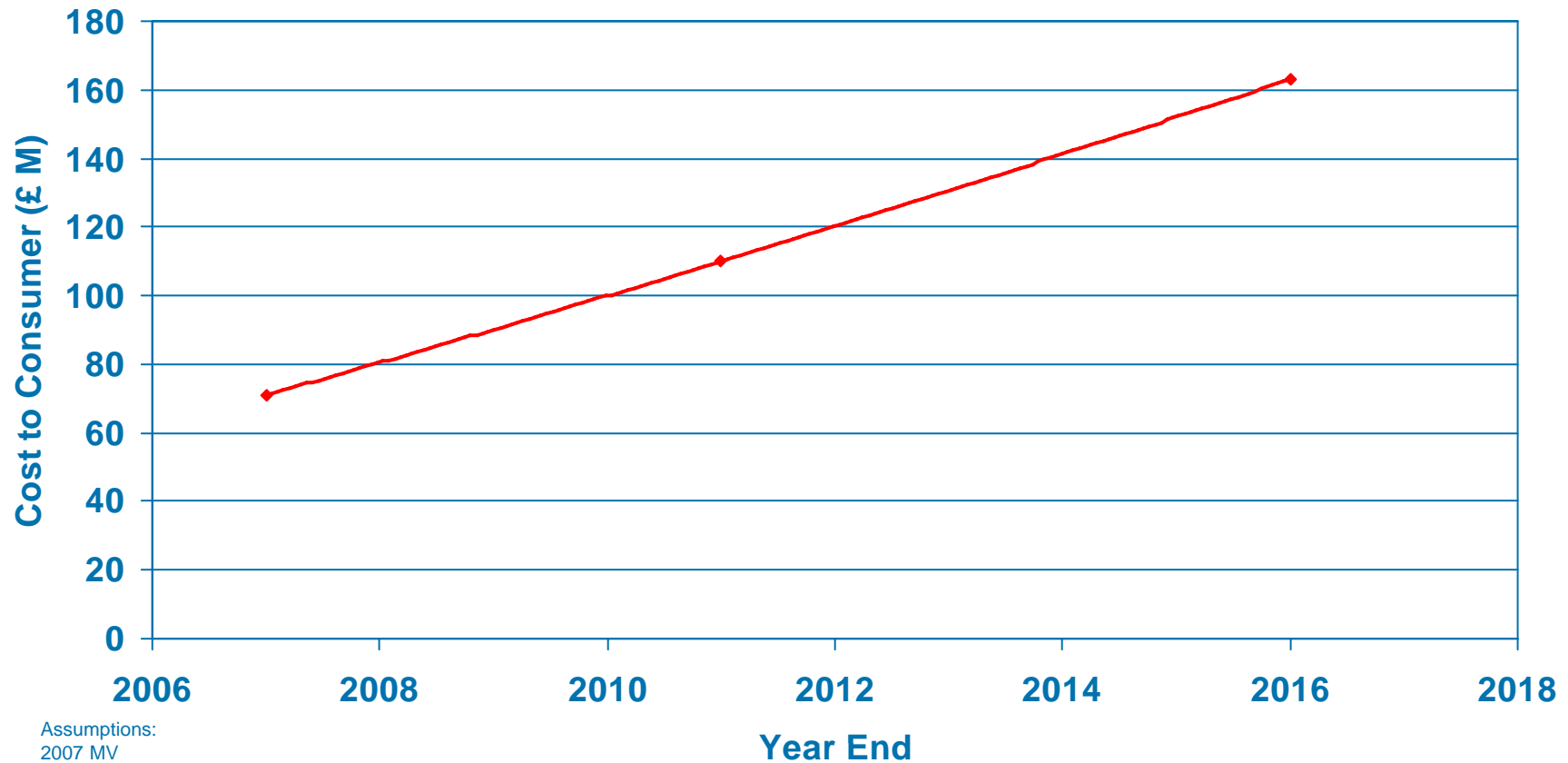
ROC retirement – the issues

- > Ineffective – negligible impact on investment decisions
- > Inefficient – misallocates resources
- > Confusing to consumers – limits consumer choice
- > Hugely expensive for consumers that participate
- > Depends on and potentially undermines the RO

Ineffective - Cost to consumers v benefit from ROC cancellation



Large scale - Cost to Maintain a £5 per MWh Recycle Benefit from 2007 to 2016



Assumptions:
2007 MV
Supply = 324TWh
RO = 6.7%, 10.4%, 15.4%
ROCs = initially 14,174,572MWh and grow in proportion to RO
Buyout = £33.24 per MWh

Inefficient - Where does the extra money go?

- > Suppliers
 - > Recycle is first collected by suppliers!
 - > Suppliers who participate in ROC cancellation may agree to share recycle
 - > Non-participating suppliers may keep the benefit
 - > By default, suppliers who own ROCable generation will benefit from windfalls
- > Generators
 - > Any shared money goes only to existing generators
 - > To all generators whether they exist or not, whether they need it or not



An electricity supplier must discharge its Renewables Obligation by:

(1) Acquiring Renewable Obligation Certificates (ROCs)

AND / OR

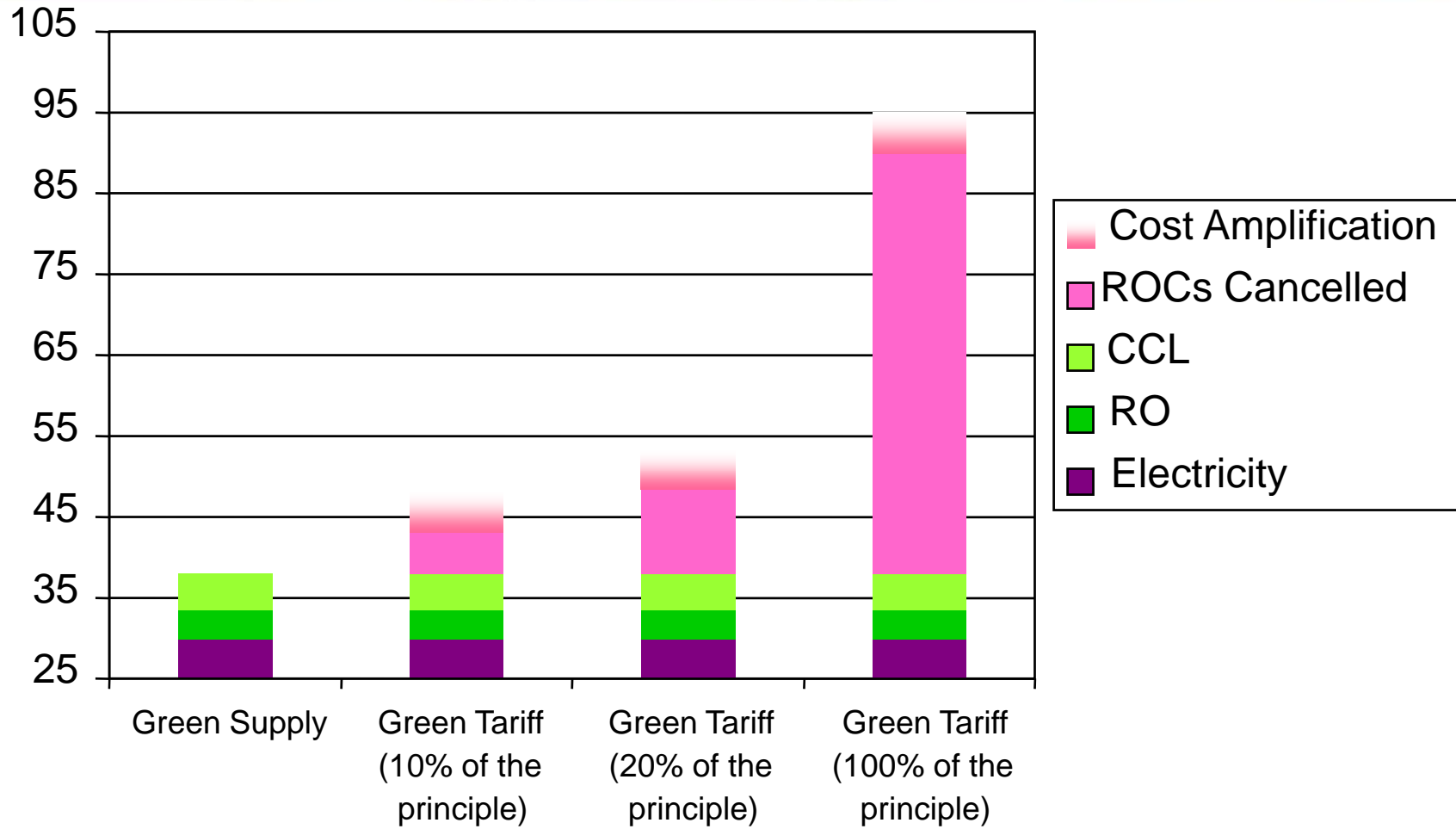
(2) Paying a buyout (fixed £/MWh amount)

which together equal a specified percentage of the MWh supplied

The Renewables Obligation is NOT an obligation to buy ROCs!

Buying a ROC does NOT require the purchase of renewable electricity!!

Expensive - Cost to the participating consumer



Threatens the Renewables Obligation



CONSUMERS
£/MWh fixed rate



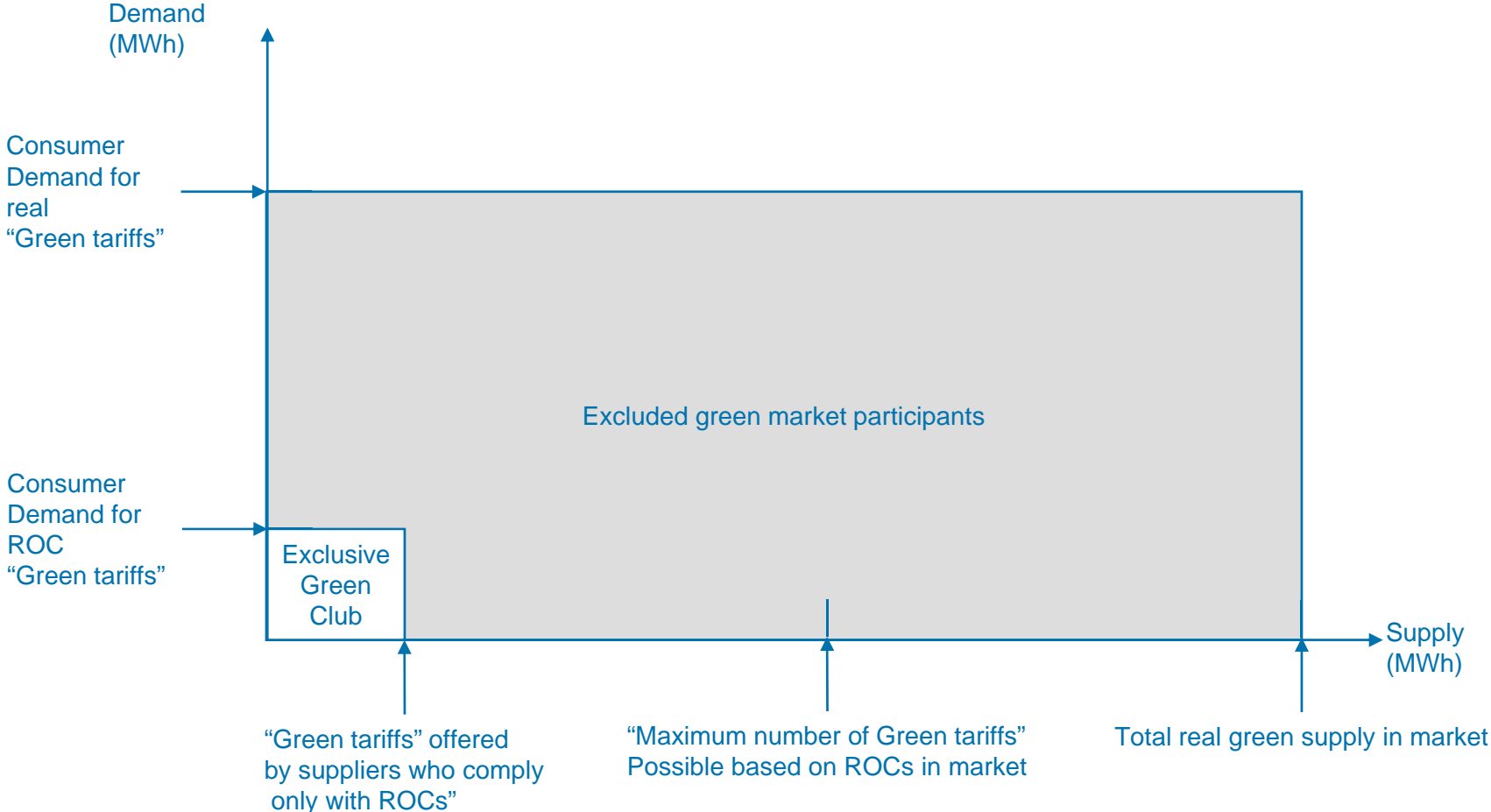
GENERATORS
£/MWh fixed rate

Acceptable
cost
to
consumers

Renewables Obligation
A market mechanism to collect subsidy from consumers
and pass it onto renewable generators
(via suppliers)

EU
State
Aid
Clearance

Limits competition amongst consumers



Three Consumers

> Tom

Band	gCO ₂ /kWh	Example
A	0-30	Wind, Nuclear, Hydro
B	30-100	Marine, Photovoltaic
C	100-250	CCS, GCCHP
D	250-500	CCGT gas and other CHP
E	500+	Coal, oil, gas oil

> Dick

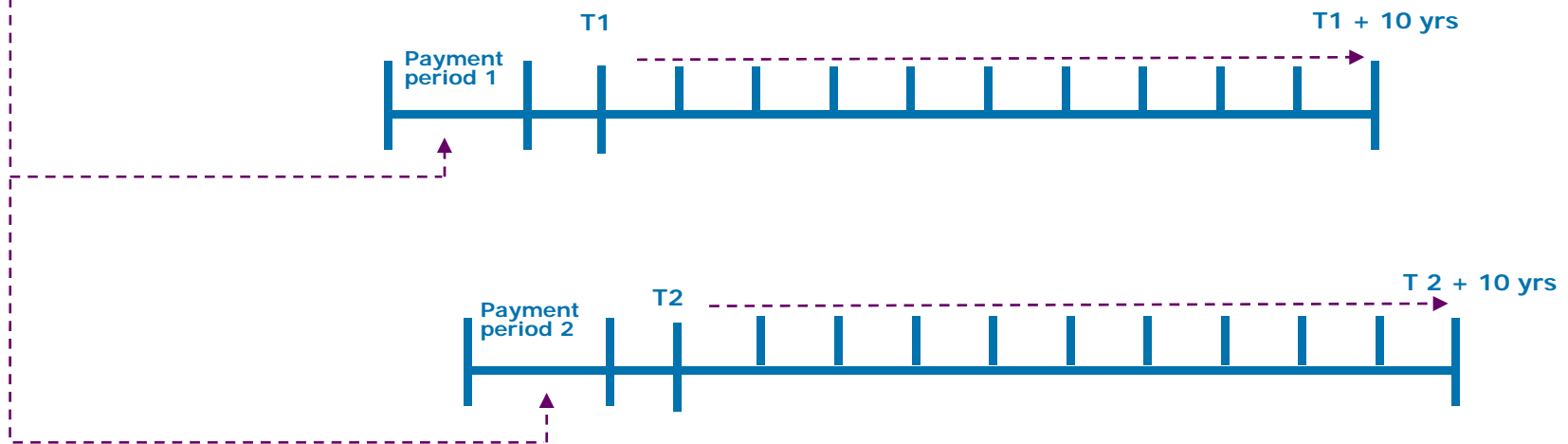
> Renewable 'kite' mark

> Harriett



A Climate Trust Fund Scheme





Climate Trust Fund Scheme – How it could work



Support Options	
<input checked="" type="checkbox"/>	Contribution to renewable electricity generators via Renewables Obligation
<input checked="" type="checkbox"/>	Purchase renewable or low carbon electricity from existing supply Percentage _____
<input type="checkbox"/>	Contribution to Climate Trust Fund
<input type="checkbox"/>	1%
<input type="checkbox"/>	2.5%
<input checked="" type="checkbox"/>	5%
<input type="checkbox"/>	7.5%
<input type="checkbox"/>	10%
<input type="checkbox"/>	Other _____

← Consumers made aware they are already paying this

Consumers CHOOSE, and know EXACTLY what they are paying for

Assessment Criteria – ROC Cancellation v Climate Trust Fund

	Criteria	ROC Cancellation	Climate Trust Fund
i	Commercial	✗	✓
ii	EU State Aid	✗	✓
iii	Additionality	✗	✓
iv	Transparency	✗	✓
v	Verifiability	✗	✓
vi	Dependability of arrangements	✗	✓
vii	Acceptable additional cost to consumers	✗	✓
viii	Independence from existing schemes	✗	✓