

Transition Bath Response to OFGEM Consultation on reducing standing charges November 2023

Background

Transition Bath is a registered charity whose aim is to make Bath and the surrounding area more environmentally sustainable. It has an interest in reducing carbon emissions from domestic and commercial buildings, which includes contributing to Bath and North East Somerset Unitary Authority (B&NES) having the highest standards of new building development in the UK through its Local Plan with operational carbon emissions up to 60% below minimum Part L Building Regulations used in the majority of other Local Authorities.

On 16th November 2023 OFGEM announced a ‘call for input’ on alternatives to how standing charges are currently applied to electricity and gas bills. In March 2023 the government [hinted at a future consultation](#) on ‘green levies’.

Discussion, methodology

We analysed a number of scenarios from the perspective of the impact of changing standing charges on incentives for home occupied to reduce their carbon emissions either through:

- behavioural change – labelled ‘low user home’ which could also be a proxy for the majority of homes in fuel poverty
- capital investment in carbon reducing technologies e.g. heat pumps, solar PV and EVs

We combined this with 3 scenarios for standing charges:

- the current status quo
- reallocating all standing charges to the volumetric charges individually for electricity and gas, with a neutral impact on the ‘average home’ – an extreme version of OFGEM’s ‘call for input’
- swapping electricity and gas standing charges as a proxy for the potential future government ‘rebalancing green levies’ consultation

Based on this analysis we have come to the following conclusions:

1. reallocating all standing charges to volumetric charges generally has a detrimental impact on those who have invested or are considering investing in low carbon technologies e.g. heat pumps, solar PV and EVs
2. reallocating standing charges to volumetric charges generally reduce costs for and incentivise low energy users using gas boilers to reduce their consumption, but not if they use heat pumps (or electric heating)
3. Moving green levies from electricity to gas provides incentives both for low energy users and those investing in low carbon technologies e.g. heat pumps, solar PV and EVs to reduce their carbon emissions

Summary

Overall, we feel the potential results of this consultation to reduce standing charges are mixed and would:

1. disincentivise those wishing to invest in local carbon technologies (heat pumps, solar PV, EVs)
2. incentivise low energy users and others to reduce their usage.

However, a more optimal solution would be the reallocation of ‘green and other levies’ from electricity to gas, combined with moving standing charge costs to the volumetric charges.

This contradicts the statement in the consultation “However, moving electricity (as opposed to gas) charges to standing rather than unit rates may have the effect of making some low-carbon technologies more affordable for domestic customers, such as electric vehicles and heat pumps.” which we believe to be incorrect.

We therefore feel this ‘call for input’ is the absence of the delivery of the government’s proposed consultation on ‘green levies’ which was announced in March 2023 but has failed to materialise to date, is premature. We don’t think OFGEM should progress this analysis in isolation from any government consultation on ‘green levies’. We would however support any reallocation of ‘green and other levies’ from electricity to gas to improve the economic benefits of investing in low carbon technologies. A more optimal and transparent solution would be a significant gradually increasing carbon tax on gas, but this may be politically difficult?

Detailed Analysis

Assumptions

We have included a spreadsheet including these calculations in our submission. The calculations make the following assumptions:

1. Tariffs: in line with current rates

	Electricity		Gas
	Day	Night	
Standing charge/day	£0.53		£0.30
Rate/kWh	£0.30	£0.09	£0.07

2. The average home consumes 2,800 kWh of electricity and 13,000 kWh of gas annually at an annual combined cost of £2,053
3. A low usage household motivated by behavioural change or fuel poverty uses 60% of this average
4. Examines an extreme reallocation scenario of all standing charges to the rate, so zero standing charges, but this is allocated on the basis of a neutral overall impact on the average annual homes electricity and gas costs i.e. total costs remain the same at £2,053
5. Examines a 'Green Levy Rebalance' scenario of electricity standing charges reducing from 53p/kWh to 30p/kWh, and gas increasing from 30p/kWh to 53p/kWh
6. Various reasonable assumptions are made for low carbon technologies:
 - a. Heat pump efficiencies of 330% versus gas boiler's 80%
 - b. Annual solar PV production of 2,800 kWh with 50% (deemed) export
 - c. Annual EV mileage of 7,000 miles, efficiency of 0.25 kWh/mile, 90% charged at home, 60% using a low rate overnight 'EV tariff'

Summary of Results: Average Home

This demonstrates:

- Reallocating all standing charges to the rate disincentivises investment in low carbon technology in general e.g. would increase annual costs by 11% for the average user who invested in a heat pump, solar PV and an EV
- Rebalancing the 'Green levies' from electricity to gas would incentivise investment in low carbon technologies, reducing costs by 5% for the average user who invested in a heat pump, solar PV and an EV

Average Home	Status Quo	Zero Standing Charge		Green Levy Rebalance	
	Energy Costs	Energy Costs	Change	Energy Costs	Change
Average home - gas boiler	£2,053	£2,053	0%	£2,053	0%
Average home - heat pump	£1,979	£2,197	11%	£1,895	-4%
Average home - gas boiler + solar PV	£1,633	£1,536	-6%	£1,633	0%
Average home - EV	£2,327	£2,408	3%	£2,327	0%
Average home - heat pump + EV	£2,253	£2,551	13%	£2,169	-4%
Average home - heat pump + solar PV	£1,559	£1,680	8%	£1,475	-5%
Average home - heat pump + solar PV + EV	£1,833	£2,035	11%	£1,749	-5%

Summary of Results: Low User Home (60% Average Home)

This demonstrates:

- Reallocating all standing charges to the rate would incentivise lower energy users with gas boilers, reducing their costs by 9%, but increasing the costs of lower energy users with heat pumps by 4%
- Reallocating all standing charges to the rate disincentivises investment in low carbon technology for low energy users (perhaps those interested minimising their carbon footprint) in general e.g. would increase annual costs by 3% for the average user who invested in a heat pump, solar PV and an EV
- Rebalancing the 'Green levies' from electricity to gas would incentivise investment in low carbon technologies, reducing costs by 8% for the average user who invested in a heat pump, solar PV and an EV

Low Usage Home	Status Quo	Zero Standing Charge		Green Levy Rebalance	
	Energy Costs	Energy Costs	Change	Energy Costs	Change
Average home - gas boiler	£1,353	£1,232	-9%	£1,353	0%
Average home - heat pump	£1,265	£1,318	4%	£1,181	-7%
Average home - gas boiler + solar PV	£933	£715	-23%	£933	0%
Average home - EV	£1,627	£1,586	-2%	£1,627	0%
Average home - heat pump + EV	£1,539	£1,673	9%	£1,455	-5%
Average home - heat pump + solar PV	£845	£801	-5%	£761	-10%
Average home - heat pump + solar PV + EV	£1,119	£1,156	3%	£1,035	-8%