# Climate Levy on Energy-

## Will cutting support for renewables cut Environmental and Social charges on energy bills?

Author / Contact :

Julian Stringer

Jules@actionclimateteignbridge.org

Contents

SECTION 1. INTRODUCTION .....2

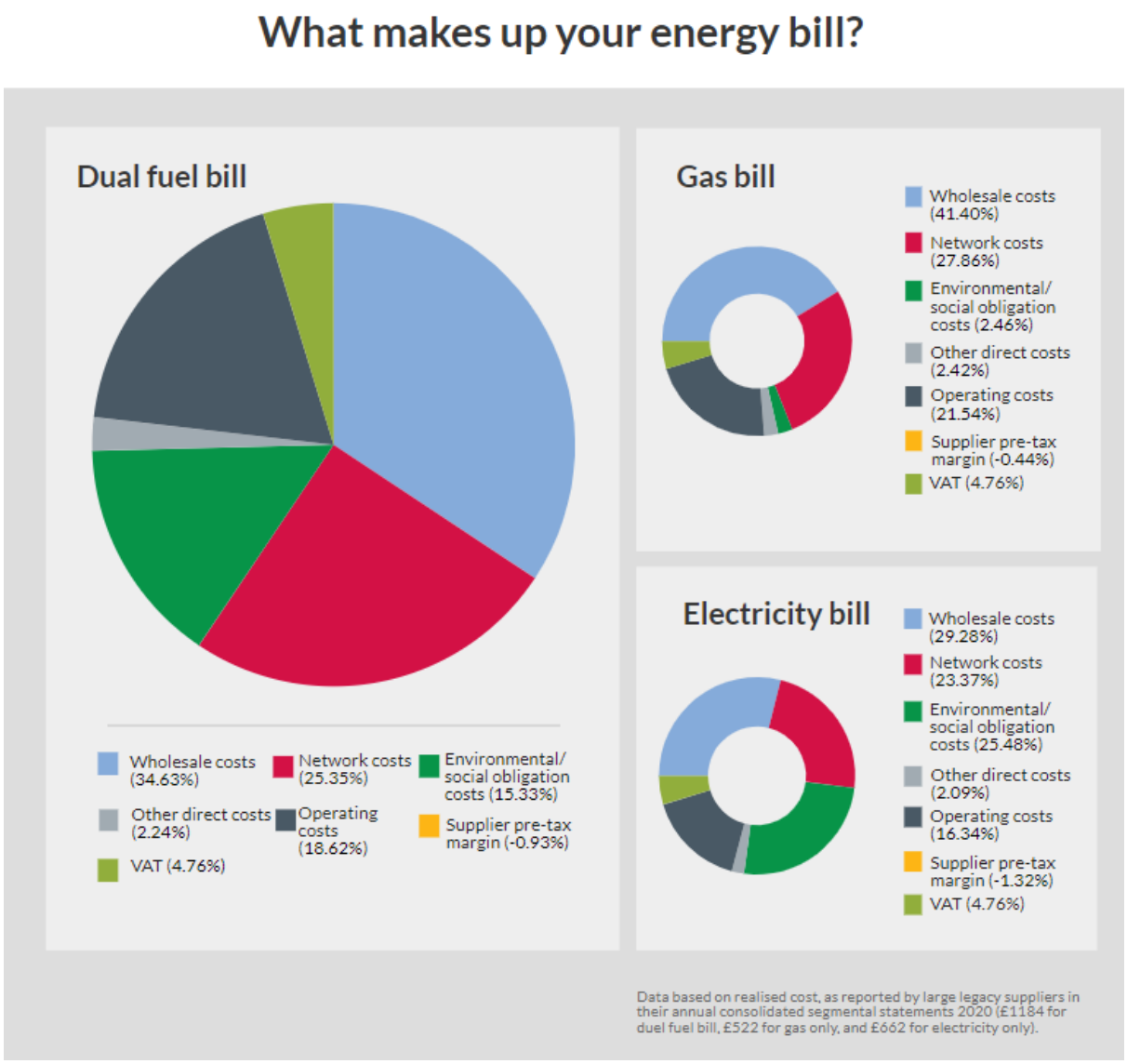
SECTION 2. INCREASING ELECTRICITY WHOLESALE PRICES.....2

SECTION 3. BREAKDOWN OF ENVIRONMENTAL AND SOCIAL CHARGES.....4

SECTION 4. WHAT PART WILL ENVIRONMENTAL AND SOCIAL CHARGES HAVE IN THE FUTURE 5

## Section 1. Introduction

OFGEM's analysis from October 2021 showed that a proportion of energy bills is accounted for by environmental and social charges, 2.5% for gas and 25% for electricity in 2020.



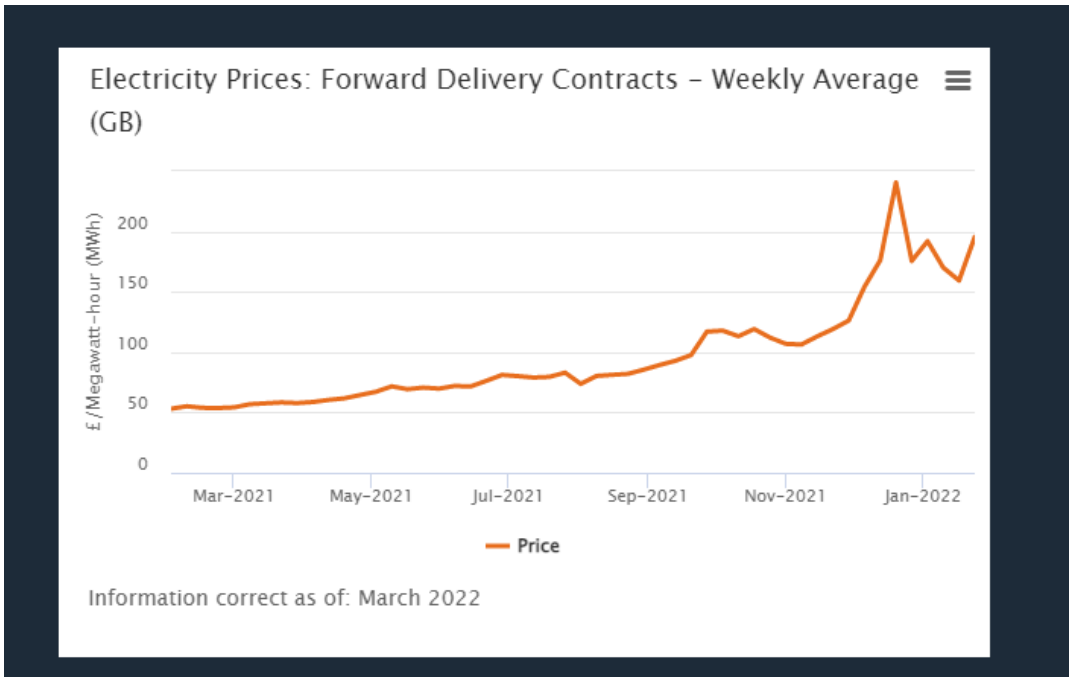

*Based on 2020 electricity and gas prices*

Some have argued that at a time when energy costs are rising that these can be cut to save increasing people's bills. At the time of this graphic the average dual fuel bill was £1184, so environmental and social charges accounted for £181.54 or ~15%

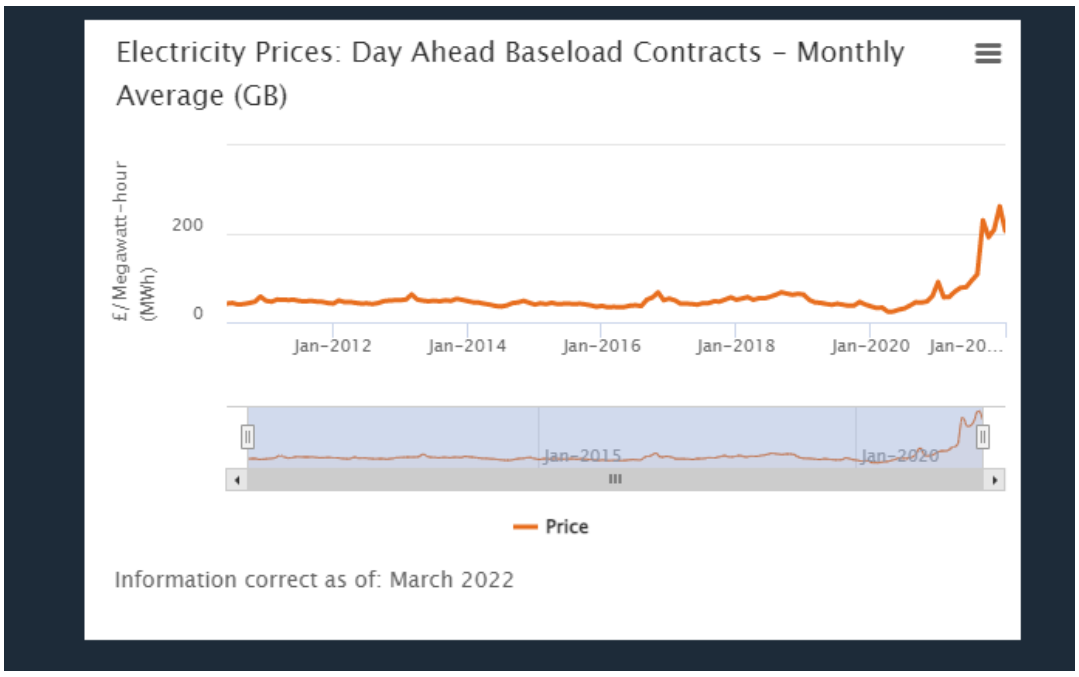
## Section 2. Increasing electricity wholesale prices

The cause of increasing bills is an unprecedented increase in the wholesale price of fossil fuels, which increases the wholesale price of electricity as this is principally determined by the most expensive component (natural gas). There is no reason for most other costs to increase in the same proportion.

Over the last year forward electricity wholesale prices have increased sharply




As have day ahead wholesale prices




Reading off from the day ahead baseload contracts the average price for 2020 was £36.04 / MWh, whereas for 2021 it was £127.47 / MWh, a 3.45 fold increase.

An electricity bill of £1000 for 2020 breaks down as follows:

| Item | 2020 Cost | 2021 Cost |
|---|---|---|
| Wholesale costs | 292.8 | 1010.4 |
| Network costs | 233.7 | 233.7 |
| Environmental / social | 254.8 | 254.8 |
| Other direct | 20.9 | 20.9 |
| Operating costs | 163.4 | 163.4 |
| Supplier pre-tax margin | -13.2 | -13.2 |
| VAT @ 5% | 47.6 | 83.5 |
| Total | 1000 | 1753.5 |

This assumes that other costs apart from VAT stay the same. In this case the proportion of environmental and social costs drops to 14.53%, we go on to explain how this proportion will drop still further.

## Section 3. Breakdown of environmental and social charges.

The components of environmental and social charges are given here. We have extracted annual costs and other information for each scheme from these pages and annual reports. These are shown in the following table.

| Scheme | Annual cost (2020) | Annual cost (2022) | Annual cost (2023) | Scheme started | Scheme ended for new applicants | Contract length | Notes |
|---|---|---|---|---|---|---|---|
| Renewables Obligation | 6bn | 5.7bn | 5.4bn | 2000? | 2017 | 20 | |
| Feed in Tariff | 1.76bn | 1.76bn | 1.76bn | 2012 | 2021 | | |
| Contracts for difference | 2.3bn | -1.3bn | -1.3bn | 2017 | Ongoing | | |
| Capacity market | 7.5 million | 7.5 million | 7.5 million | | | | |
| Green gas support scheme and green gas levy | | 37 million | 63 million | 2022 | Ongoing | | Increasing to 130m by 2025 |
| Warm home discount | 350 million | 350 million | 350 million | | | | |
| Energy Company Obligation (ECO3) | 530 million | 530 million | 0 | 2018 | 2022 | | |
| Domestic Renewable Heat Incentive (RHI) | 144.6 million | 144.6 million | 0 | 2014 | 2022 | 7 | |
| Non Domestic RHI | 792 million | 792 million | 0 | 2014 | 2021 | 20 | |
| Total | 11.882bn | 8.016bn | 6.275bn | | | | |

The combined effect of negative CfDs and schemes coming to an end is that the total spend on environmental and social schemes drops to 67.46% of its 2020 amount in 2022 and 52.81% in 2023.

The majority of the cost of these schemes relates to past commitments, particularly to encourage take-up of renewables, the cost of these is fixed and so will decline as a proportion of bills. The only ways that these past commitments can be reduced beyond contracts expiring naturally would be for government to:

- Move these payments to general taxation
- Renege on these contracts.

The only bill funded schemes that will incur new future obligations are:

- Contracts for Difference, where in the last quarter of 2021 a payment of £133million was made from generators to suppliers, as the price of electricity was above the strike price. This will continue to be the case if electricity prices remain high.
- A small fixed commitment to the green gas levy (maximum £130million per year).
- Warm homes discount.

Some are being replaced by alternatively funded schemes:

- RHI and NHRHI are being replaced by boiler replacement scheme, which is treasury funded.
- ECO3 is being replaced by the Local Authority Delivery scheme, paid for by government grant.

This means that each year the amount due from bill payers for past renewable subsidies will decrease, and if energy consumption increases its proportion will decrease.

## Section 4. What part will environmental and social charges have in the future

Assuming that wholesale electricity prices rise no further, this means that the breakdown for 2022 and 2023 looks more like:

| Item | 2020 Cost | 2022 Cost | 2023 Cost |
|---|---|---|---|
| Wholesale costs | 292.8 | 1010.4 | 1010.4 |
| Network costs | 233.7 | 233.7 | 233.7 |
| Environmental / social | 254.8 | 171.9 | 134.57 |
| Other direct | 20.9 | 20.9 | 20.9 |
| Operating costs | 163.4 | 163.4 | 163.4 |
| Supplier pre-tax margin | -13.2 | -13.2 | -13.2 |
| VAT @ 5% | 47.6 | 79.35 | 77.49 |
| Total | 1000 | 1666.4 | 1627.3 |

So the proportion attributable to environmental and social schemes for 2022 is 10.32% and for 2023 8.27%. This proportion will fall further when:

- Electricity wholesale prices increase
- Electricity consumption increases
- RO contracts lapse

Specifically adding more renewables will reduce the cost of energy, not increase it.