COMMENT

Which facts?

Five errors in 'Realism needs today's facts'

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Comment on Rosenow, J. (2026), 'Realism needs today's facts', *Bright Spots* (Substack), 1 November 2026, a review of Helm, D. (2026), *Climate Realism*.

ABSTRACT

Jan Rosenow's review of Dieter Helm's *Climate Realism* is titled 'Realism needs today's facts'. We classified its 44 factual claims against the sources it links. Five central claims, on temperature, electricity bills, the size of a future energy system, prices and the cost of solar power, are overstated or mislabelled. Each is corrected by a source the review links or by Rosenow's own figures.

KEYWORDS energy policy · electricity bills · temperature scenarios · primary energy · source checking

1 The review and the test

Rosenow's review of Helm is titled 'Realism needs today's facts'. We checked its 44 factual claims against the sources it links. Some stand: coal power did fall in 2025 (Ember, 2026), and carbon offsets are often credited with more than they deliver (Romm et al., 2025). The five that carry the argument do not:

1. **Temperature.** It counts promises as achievements.
2. **Bills.** Its 90% for gas holds only on Rosenow's own choice of starting date and measure.
3. **System size.** Its 300 EJ energy system is a thought experiment, sized for today, resting on a counting convention.
4. **Prices.** It says wind and solar are not linked to retail prices. The post it cites says they are.
5. **Cost.** It states as today's fact what its source forecasts for 2030.

2 Temperature

The review says: 'Current policies now point to around 2.5 °C, according to the International Energy Agency.' The report it links gives 2.9 °C for current policies, the laws and rules governments have passed (IEA, 2025, p. 37). The 2.5 °C is its Stated Policies forecast, which adds plans announced but not passed (p. 105).

The review sets 2.5 °C against 3.5 °C before the Paris Agreement, a forecast based only on the policies in force in 2015 (IEA, 2023, p. 23). Like with like, laws then against laws now, the fall is 0.6 °C. The agency has itself called it 1 °C (IEA, 2023, p. 19), but only by setting today's announced plans against 2015's laws. The rest is promises. And this year, for the first time, the agency's Stated Policies forecast rose (IEA, 2025, p. 266).

3 Bills

The review states that 'more expensive gas is responsible for nearly 90% of the rise in UK household electricity bills since 2020'. The observation that gas has driven prices is unremarkable. The question

is whether weather-dependent generation and its subsidies have made bills higher or lower. On our own modelling they have made them higher: over 2002–24, renewables subsidies and the grid, balancing and capacity costs that came with wind and solar exceeded the fall in the power price they brought, by £47.6bn in 2024 prices, with carbon pricing left out (Lyon, 2026b, a preprint). In 2021–23, when gas was dearest, the fall in the power price exceeded the cost, by £13.4bn.

The review's link for the 90% is broken, but the figure is Rosenow's own. His spreadsheet puts the rise in a typical electricity bill from October 2020 to October 2026 at £179 after inflation, £161 of it wholesale (Rosenow, 2026c).

Two costs moved off the bill shrink the £179. Levies fell by £51 when part of them was shifted to general taxation in April 2026 (UKERC, 2026), and VAT fell by £32 because electricity carries none until April 2027 (Ofgem, 2026a). Counting only the costs that rose, wholesale is 54% of the increase. Starting in 2018/19, it is 44%.

October 2020 is also a low: the wholesale cost on a typical bill was lower then than in any period since the price cap began (Ofgem, 2026a). And the wholesale line includes the carbon price paid by gas-fired stations (Ofgem, 2026b).

4 System size

The review says 300 exajoules (EJ) of primary energy a year would be 'sufficient' for an electrified world, half the 600 EJ that sceptics say must be replaced. The figure comes from Rosenow's own preprint (Rosenow et al., 2026; a revised version is accepted but not yet published). It does not support 'sufficient'. Its authors call their electrified world 'not a prediction or forecast but a thought experiment'.

It is sized for today's demand for heat, light and motion, which its authors expect to rise.

More than a third of the saving depends on how wind and solar are counted. Counted as the fuel a power station would burn to make the same electricity, as the Energy Institute did until 2024, the system comes to about 423 EJ (Lyon, 2026a).

And it leaves out the energy to build the new system, and rebound, the extra use that cheaper energy brings (Lyon, 2026a).

5 Prices

The review says: 'When I looked for a correlation between the share of wind and solar and retail electricity prices, comparing EU countries and US states, I could not find one.' The post it links found one. Across Europe in 2025, it reports, 'higher shares of wind and solar being correlated more closely with higher retail prices' (Rosenow, 2026b).

6 Cost

The review says solar with batteries is 'now the cheapest way of generating electricity in most places around the world'. Its source is a model projection (Nijsse et al., 2023). It finds solar cheapest 'across most of the world' by 2030, and for today only 'among the cheapest' in six regions (p. 3).

7 Conclusion

Of the review's 44 factual claims, 14 are supported, ten of them with a caveat. Five are overstated or mislabelled, three are not in the source cited, five rest only on Rosenow's own posts, nine carry no source and eight could not be checked.

Realism does need today's facts. On the review's own sources, they are these: warming of 2.9 °C under the laws in force, wholesale costs at about half the rise in bills, an energy system sized for today's demand, wind and solar linked to higher prices, and solar cheapest across most of the world by 2030, not now.

The claim ledger, with each source quoted, is available from the author. We could not raise these points with him directly. A reply, by whatever channel he prefers, would be welcome.

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