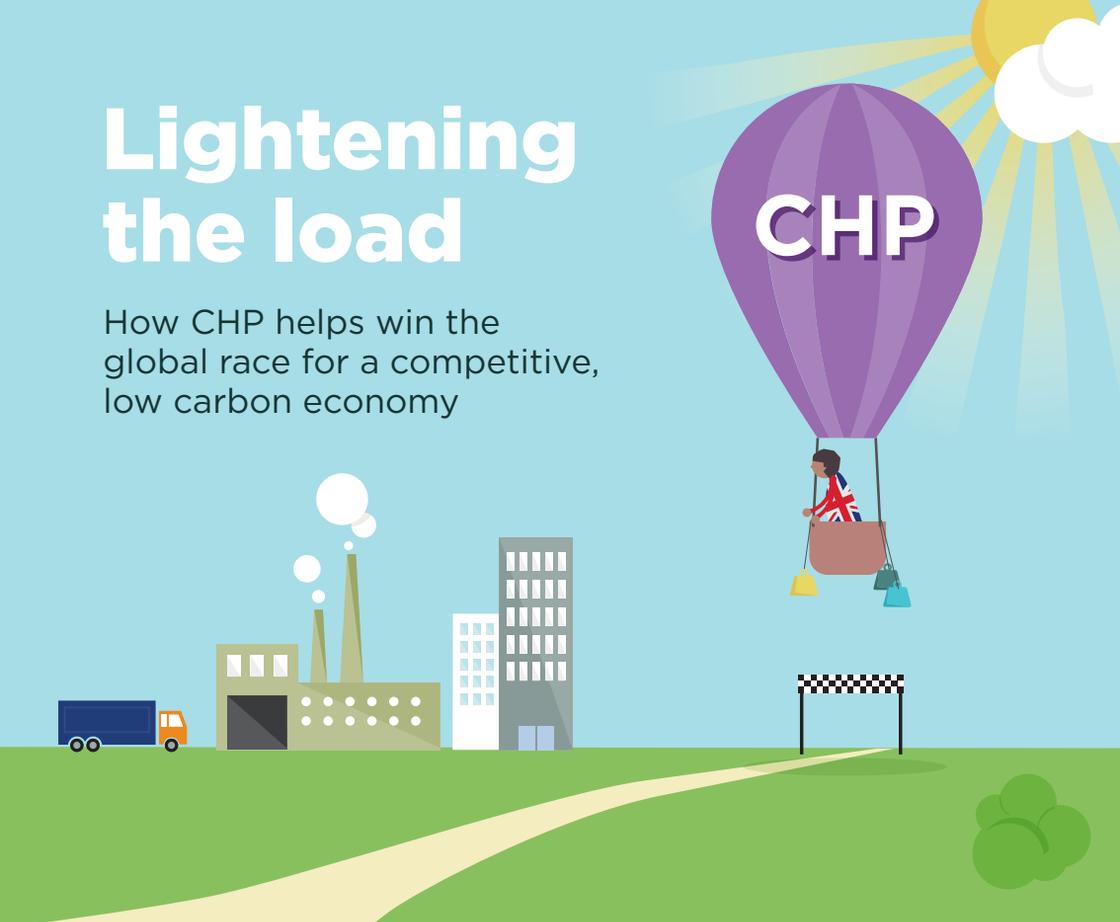


Lightening the load

How CHP helps win the global race for a competitive, low carbon economy



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The Association for Decentralised Energy

Global race for a low carbon economy



A concerted global effort is required to tackle climate change, and countries are competing on who can transition most effectively. How each nation adapts to a carbon constrained world will, to a large extent, determine its future economic competitiveness and ability to deliver lasting, sustainable growth and prosperity.

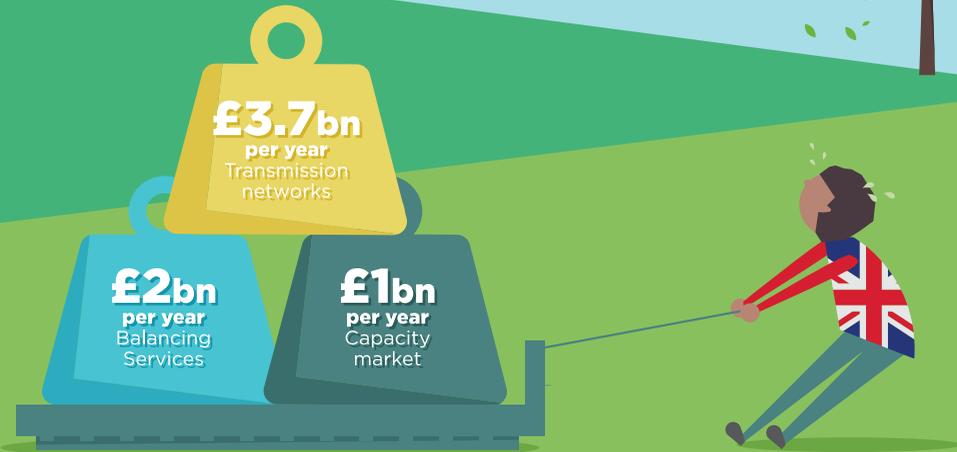


Delivering a decarbonised economy provides the best value to consumers over the long term. However in the short term, these two goals can create tensions, with business energy costs rising by as much as 119% since 2004.

Business energy costs have risen as much as 119%



We need new investments in our electricity system, increasing certain costs

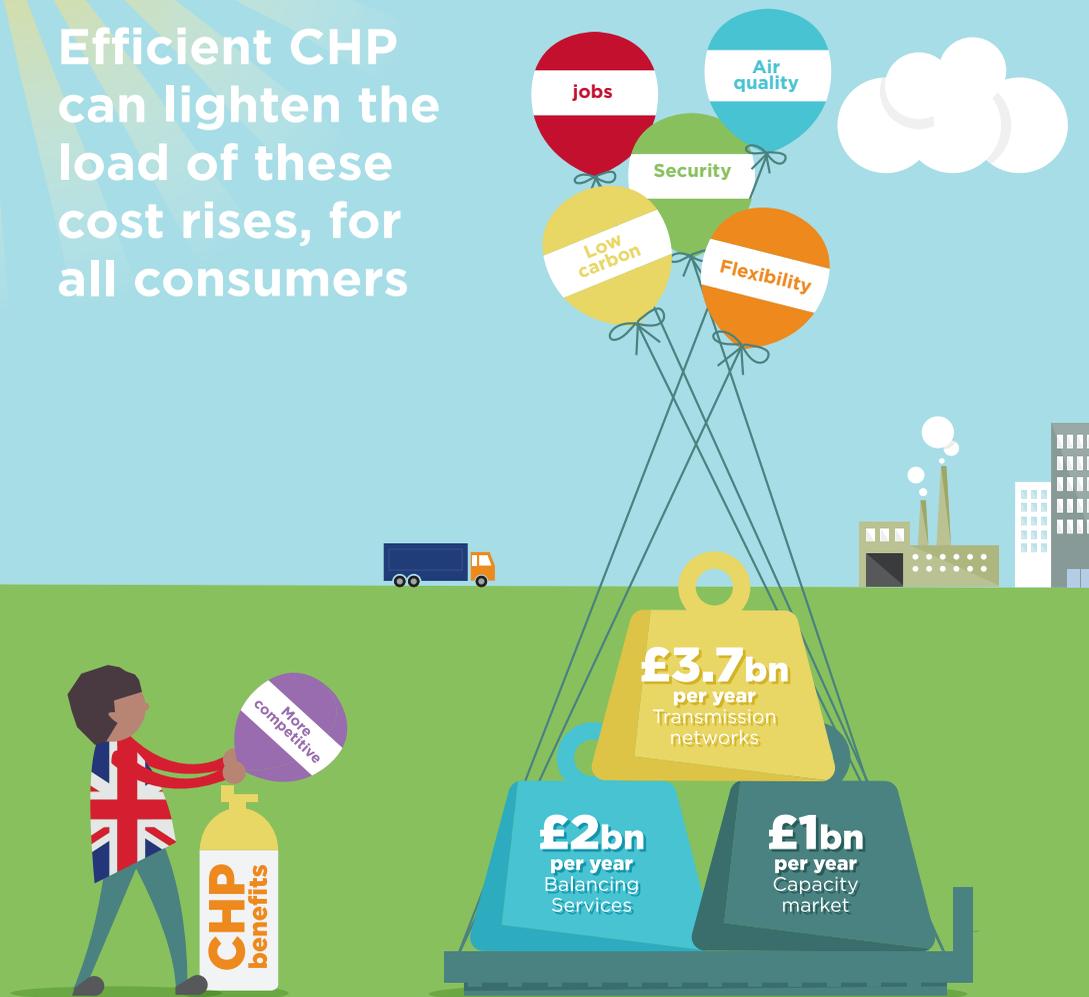


As the electricity system incorporates increasing amounts of intermittent renewables the UK needs:

- Secure and sufficient power capacity;
- Instantly matched supply and demand;
- New electricity network infrastructure.

These costs will add nearly £13 billion, or one third of electricity costs, onto users' bills by 2021.

Efficient CHP can lighten the load of these cost rises, for all consumers



Businesses can mitigate this cost rise and protect their competitiveness by using combined heat and power (CHP). CHP is the most efficient form of generation. It enables businesses to participate in new energy markets, provide flexibility, efficiency and local value, and helps achieve the Government's strategic energy and industrial policy goals.



Today users with CHP are reducing carbon emissions and energy costs across the economy.

Carbon savings equal to taking **1 in 10** cars off the road

Cost savings to the economy of **£375m**

Fuel savings equal to energy used by **500,000** UK homes

In 2030, by ensuring new gas generation is CHP, the technology will continue to save significant amounts of carbon and costs. But action is needed to cross the current policy gap.

Carbon savings equal to taking **1 in 14** cars off the road

Cost savings to the economy of **£715m**

Fuel savings equal to energy used by **425,000** UK homes

POLICY

GAP

An illustration of a person wearing a Union Jack shirt climbing a grey brick wall. A rope is attached to a basket floating in the sky, which contains several colorful balloons and two shopping bags (one yellow, one blue). The background is a light blue sky with sun rays. The text 'Rewarding CHP's benefits delivers a more competitive low carbon transition' is written in white on the sky. The text 'BRIDGING THE POLICY GAP' is written in white on a blue rectangular area at the bottom of the wall.

Rewarding CHP's benefits delivers a more competitive low carbon transition

BRIDGING THE POLICY GAP

For CHP to achieve its potential, energy users need a fair reward for the energy security, flexibility and carbon reduction benefits they provide. However, this value is not fully recognised in policy or energy markets, leaving a gap that is hard for energy users to traverse, preventing CHP's full benefits from being realised.

- Protect and extend carbon tax reliefs
- Reward small generators for network benefits
- Support for energy efficiency investments
- Reform Capacity Market to reward efficiency
- Create fairer flexibility markets

**We could
achieve
further
benefits
across the
economy**

It is possible to achieve further benefits by meeting CHP's cost-effective potential in the UK and protecting existing CHP users. By 2025, highly efficient CHP capacity could almost treble. By doing so, the UK can better deliver a market-led, low carbon, business friendly transition.

2030

**8GW
more
CHP**



Full list of recommendations

1. With National Grid and other market analysts expecting up to 15 GW of new gas generation, and with gas generators continuing to generate for thousands of hours in 2030, the UK should set a clear ambition to ensure as much of this capacity as possible is CHP.
2. CHP's system benefits should be properly recognised and rewarded under the Government's forthcoming carbon taxation review. This can be achieved by continuing the Carbon Price Support tax at its current rate until 2025 when coal generation is forecast to close; by maintaining existing CHP reliefs under the Climate Change Levy and the Carbon Price Support; and by relieving CHP from Carbon Price Support for its exported electricity.
3. In order to ensure gas CHP's long-term carbon savings are recognised across policy, all carbon methodologies should base CHP's carbon value against the emissions of the marginal gas plant, not the average grid emissions, including within SAP and the HM Treasury Green Book.
4. The regulator, Ofgem, should provide assurance that distributed generators are fairly rewarded for the benefits they provide to the transmission and distribution networks, including benefits of net demand reductions on long-term network costs.
5. The Conservative Manifesto's commitment to deliver a new support scheme for industrial energy efficiency should be implemented, and be available for both new assets and enabling business users to connect to existing CHP assets.
6. Government should encourage Energy Intensive Industries' (EII) energy efficiency by compensating CHP operators who supply energy to EIIs to replace the competitive advantage lost by EII reliefs.
7. In its 2019 review, the Government should reform the Capacity Market to ensure that it better secures long-term value for consumers, recognising the life-time efficiency benefits to consumers of different power plants. This value recognition could be accomplished by providing a bid price uplift in auctions for lower carbon or more efficient plants.
8. Government and Ofgem should continue simplifying the Capacity Market to make it easier for CHP users. One example is that regulations currently prevent sub-2 MW, non-exporting CHP from participating in the auctions.
9. National Grid should follow through on its commitment to reform the balancing service markets to make them simple, transparent, competitive, and open to all market participants.
10. National Grid should specifically reward inertia, including recognising the value of already-generating power plants. At the very least, inertia value should be recognised and rewarded in any future voltage market design.



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