NEW ECONOMICS FOUNDATION

National Energy Guarantee FAQ

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Q1. How does the National Energy Guarantee (NEG) interact with emerging tariffs, particularly the Time of Use (ToU) tariffs?

The NEG is universal and is a response to the fundamental fact that energy is an essential need and nobody, regardless of their circumstance, should ever face disconnection of their energy supply. Having said that, the way we produce, distribute and consume energy is changing dramatically and the current design of the market isn't fit for purpose. We are already seeing large sets of consumers responding, by altering their demand patterns, to price signals from their supplier and the electricity system operator. We are likely to see more of this in the years to come.

In a world where electricity consumption is going to get considerably higher, a high degree of 'flexibility' is essential in our power system to avoid building thousands of miles worth of new wiring across the country, especially to manage what is called 'peak demand' (i.e. the highest daily peak in the nation's energy consumption). Consumers can provide that flexibility by shifting their demand through the day as opposed to just peak times (like 8 am or 7 pm). However, not all consumers have the right tools or know-how to interact with the energy system and expecting ubiquitous adoption and automation of smart energy devices might be premature.

Introduction of the NEG does not necessarily have to come at the expense of suppliers offering other tariffs. Beyond the free tariff threshold, we would expect suppliers to offer innovative tariffs and incentives to consumers to shift their demand in order to reduce the burden of premium tariffs.

Q2. What about high-income households with low energy consumption that benefit unfairly from the scheme?

High income households living in highly energy efficient properties are likely to see a reduction in their energy bills with some even managing to reduce their bills to zero (eg. Passivhaus homes). Such households should benefit from the high capital investments that were made in improving their homes. However, such households cannot escape the costs of our energy system that are currently socialised across all bill payers (eg. network, environmental and social levies) and ought to be recouped through other progressive routes such as the income tax. This reduces

the current regressive distribution of these costs on energy bills thereby further reducing the burden on low-income households.

A useful analogy perhaps is to view this as the NHS equivalent for energy or even the recently announced universal childcare policies. Irrespective of income, everybody has access to essential medical and childcare support without going out of pocket and that applies to richer households as well.

Q3. Should we apply the NEG particularly in the winter?

Considering the demand for heating is the highest in the 3-4 months of winter, it could be argued that the free energy be applied during those months. This could ensure there is no significant risk of consumers being forced to reduce their consumption at the risk of their health. The cost of energy in the winter is of course higher than the rest of the year and suppliers will be required to have much better hedging strategies, procuring energy well in advance and via long term contracts (3-5 years).

If the scheme, as designed in our proposal, does not introduce tapering thresholds relatively early, the requisite amount of free energy will be a fixed amount (~75 TWh of gas and ~30 TWh of electricity based on our model) and suppliers can ensure they cumulatively procure these volumes at low rates. The administration of such an approach shouldn't be too complicated either with the proliferation of smart meters.

Q4. What about the low-income high-energy users that could lose out from the scheme?

We discuss this at length in our working paper. We show that in our current design of the scheme, roughly 90% of the bottom income quintile will see a net reduction in their energy bills when set against 2021 prices. This leaves 10% of households on low incomes that could see a rise in bills and just under 2% could in fact see bills rise by over 50%. This is of course concerning, and remedial measures will have to be put in place. Amongst several options we discuss in the paper, we argue that a portion of this 2% are possible survey outliers and likely to not be reflective of the actual consumption. Many are likely to be eligible for means tested benefits but aren't applying for and this offers further incentive to claim benefits. Finally, it allows suppliers and the local government to identify these homes and target specific energy reduction measures.

Another likely reason for high energy bills is the fact that some low-income households live in large properties that are highly energy inefficient. Government statistics indicate that only 5% of fuel poor homes in properties are in the worst performing EPC category of F & G and this rises to 22% if adding band E on top. We acknowledge that the government's approach to defining fuel poverty is limiting but this scheme can help target support directly to households that most need efficiency measures.

Q5. What does the NEG mean in the context of wider energy market reform such as the proposal to bifurcate the wholesale market into separate renewables only and fossil fuel-based markets?

These reforms are welcome and are set to impact the wholesale prices of electricity. As more renewables enter the power system through fixed contracts (CfDs), it will reduce the wholesale prices further. The Labour party for instance is committed to building a power system that is near 100% fossil free by 2030. In such a scenario, an average consumer is likely to be paying a lot less for the 'wholesale' component of their energy bill and much more for 'balancing' the energy grid and fixed socialised costs such as paying for network upgrades and environmental levies. This we believe offers another strong argument to ensure those fixed costs, which will rise rapidly in the short term before stabilising, need to be distributed progressively across consumers and general taxation could provide a fairer route.

Q6. How will suppliers recover fixed costs of the energy system?

We argue a more progressive way of paying for fixed costs of the energy system (such as grid costs) would be to move them on to general taxation. Higher income households are more likely to rely less and less on the grid by becoming increasingly self-sufficient. As the NEG further incentivises energy demand reduction, the overall costs of the energy system will go down as well - however, slightly higher fixed costs cannot be avoided and these could be paid through the more progressive income tax route.

Q7. Should the energy thresholds be tapered over time?

Thresholds can be tapered over time but it is critical that essential energy needs are always protected and households never experience debt induced disconnection. How consumers, particularly those in the 'able-to-pay' category respond to the premium price tariff can also affect the setting of these thresholds over a period.

Q8. What about households that only rely on electricity for all their needs?

We address this question in the working paper by shifting a part of the gas allowance on to electricity. As more and more households switch to heat pumps, this allowance can be reduced in line with the efficiency of heat pumps, which are at least 3 times more efficient than gas boilers. An estimated 430,000 fuel poor households rely on electricity only systems for heating with roughly half of them living in highly energy inefficient properties (below EPC band D).

Some of these households are energy starved as high electricity costs lead to high self-rationing. Protecting these households is another high priority and in our current design approach, the shifting of free and subsidised gas allowance on to electricity protects over 95% of households in the bottom income groups. More targeted energy efficiency measures are equally important.

We adopt a similar approach to households off the gas grid but relying on solid and liquid fuels like oil, coal, biomass etc.

Q9. Is it better to offer free allowances of energy per person as opposed to a household?

Allocation of energy allowances can indeed be done at a personnel level, but it runs a risk of disproportionately benefiting richer households in larger, detached homes. We acknowledge that fuel poverty is very high in households with a couple having one or more dependent children and that is why we allocate greater free allowances for children.

Q10. What about those households with second or third homes?

We argue that using existing data matching exercises, suppliers should be able to identify second or third homeowners and ensure they only benefit from this scheme on one property. Roughly half a million households in the UK are second homes for UK citizens.

Q11. Will the scheme incentivise solar panels?

We believe there is a huge incentive for households, particularly in the wealthier, able-to-pay demographic, to install solar panels and batteries. We estimate that payback periods could fall by 20-30%, resulting from our current design of the scheme. Besides this obvious benefit, suppliers are already preparing for a new era of tariffs and incentives for households to offer system level flexibility solutions and receive money or other perks in return. The premium tariff tier will put a rocket booster under consumer adoption of solar panels and batteries and new tariffs will sustain that adoption.

Q12. How can the scheme incentivise energy efficiency?

Similar to incentivising solar panels and batteries, there is a strong incentive for households to bring their energy consumption just around the national average of today. We also know there still is tremendous scope for energy demand reduction in homes through efficiency solutions and this scheme will incentivise that.

Q13. What further protections are needed for households on low incomes with vulnerable characteristics?

We consider the following in the working paper as additional measures to channel greater fiscal support for households on lower incomes or facing other vulnerable characteristics.

- Retain the current means and non-means tested schemes such as the warm home discount, winter fuel payments, local authority discretionary funding etc. The targeting of these schemes will need to be refined to align it better with the NEG. For eg. those with disabilities that aren't able to access disability benefits, low-income pensioners etc.

- Remove standing charges off energy bills and find a more progressive way of paying for them, such as income tax.

Several organisations have proposed new forms of targeting that relies on a mix of data from the DWP on the benefits system, income data from HMRC and energy consumption data from suppliers. We discuss the issues with some of these approaches in this FAQ section.

Q14. What about customers on Pre Payment Meters (PPM)?

The existing price differential between current default tariff users and PPM users should be removed and the government has in fact done that in the latest budget and this should be a permanent change. PPM users will equally receive the essential energy provision, alongside our additional allowances depending on their eligibility, but can continue to remain on such meters if they so choose to.

Q15. Will this scheme be run alongside the Ofgem price cap? Or would it supersede it?

The Ofgem price cap was put in place to protect consumers from a lack of genuine competition and price gouging in the energy supply market. Considering the current price cap is primarily driven by suppliers being able to recover their costs with a small margin, the design of the cap will need to be reformed to align it with the NEG. This for instance could take the form of unit price caps for the premium tier where higher energy users aren't burdened by sudden, steep rise in bills. Irrespective of the design of the future price cap, ensuring suppliers are adhering to their licence conditions and adequately hedging against future volatility will also go a long way in offering long term protection for consumers. The rapid rise and equally rapid demise of small energy firms has only benefited highly engaged customers while disproportionately burdening the rest of the population.

Q16. How does this scheme compare to a social tariff?

There is no shared definition of a social tariff. Some proponents calling for a social tariff argue for a discount on unit rates of energy for a targeted group of consumers while others have called for direct lump sum payments, similar to existing means tested schemes such as the Warm Home Discount. In fact, the National Energy Guarantee which is based on the notion of a rising block tariff is in effect another variation of a social tariff that is more universally applied with additional allowances and support for those on benefits, with disability or with children. All proponents of a social tariff, in whatever form, acknowledge its limitations in the context of a lack of good, reliable data.

However, we believe there are a few specific reasons why a social tariff, under certain definitions, appears inadequate when compared to a more universal scheme, these are:

a. Arbitrary cliff edges: schemes that use specific eligibility criteria invariably introduce cliff edges where individuals or households missing out on the eligibility by narrow margins stand to miss out on huge bill savings. Some have argued, for instance, an arbitrary income threshold of £30,000 where households earning below that amount receive support proportional to their energy consumption. In such a scenario, an estimated 1.35mn households on benefits will in fact miss out on much needed support as they fall outside the income threshold. For example, a couple with 2 children might have a higher household income than £30k but will experience a greater need for support compared to a single occupant household on £29k. Arbitrary income cut off levels could therefore lead to certain perverse outcomes.

   The NEG, through its universal nature, offers a minimum level of protection to all households, irrespective of income or any other circumstance. This is hugely valuable to those on the sharpest end of our society that face energy starvation every winter.

b. Need for new means testing methods: where some organisations are calling for new 'means test' methods whereby household income level is combined with energy consumption to better target support. Currently such targeting is not possible given the lack of income data at a household level (as opposed to the individual level) and proponents of such approaches are potentially underestimating the administrative hassle and challenge of introducing a new means test. However, if it indeed proved to be easy, it could open up a whole new set of possibilities for targeting support not just for energy but for all other forms of social welfare.

c. Accessing schemes can be complicated: especially in scenarios where customers aren't aware of the schemes and/or are required to apply for them through procuring vouchers or other means. This can be avoided by automatically delivering the support via suppliers onto household bills which is what the latest revisions of means tested schemes are doing (eg. warm home discount)

d. Lack of a 'green' incentive: by capping unit prices, offering fixed rebates or lump-sum payments to certain households, incentives for energy efficiency and domestic renewables are significantly blunted. It is true that a lot of the households that might receive targeted support would not otherwise have the means to respond to price signals by making considerable capital investments. They are also not the most engaged in the energy market and therefore are vulnerable to it. However, there is still a risk that certain designs of social tariffs sustain high energy consumption when there is a significant potential for demand reduction without compromising on the quality of life.

e. Considerably reducing supplier responsibility: whereby the government subsidises the energy bills of certain households, in some cases up to a third of the population, which would otherwise be a shared responsibility of suppliers as well. A social tariff, as envisioned by some, allows suppliers to effectively ignore a significant portion of the country and instead focus their tariff innovation on high income users. Locking out certain consumers from the energy system, which is undergoing huge innovation right now, might lead to unintended consequences over the longer term. Schemes such as the

energy company obligation, where suppliers deliver energy efficiency measures, will still be in operation but it comes with little risk to suppliers.

Q17. Can a social tariff operate alongside the NEG?

We have argued in our working paper that in order to further enhance the quantum of support to certain households, an appropriate social tariff can operate alongside our National Energy Guarantee. These are not incompatible ideas however we strongly believe a universal basic minimum is vital in protecting everybody in an uncertain and highly volatile energy market while also ensuring we don't permanently and significantly blunt the necessary price signals for consumers to respond.

Q18. Should standing charges be cancelled?

Standing charges currently amount to roughly ~£270 per household a year. Cancelling them therefore will benefit all households but it is a cost that nonetheless has to be paid through other means, either via a direct government subsidy or generators taking a further hit, both of which can be seen as too expensive. Standing charges could be dropped on a targeted group but it raises similar challenges as highlighted before in identifying such a target group. Regardless, we strongly believe a more progressive approach has to be established for covering the non-energy costs of supply.

Q19. Are there any international examples of this scheme?

California, Dubai, Italy and different states in India have some of a rising block tariff and some of these countries have had such schemes for several years. We are still reviewing the literature on the experience of these countries.

Q20. Is the scheme too expensive?

The scheme can be designed in a cost neutral manner i.e. with no additional cost to the government and high income, high energy users effectively cross subsidising low income users. One of our designs of the model is to limit the budget of the scheme to the current expenditure of the government on support schemes such as the warm home discount, winter fuel payments etc. and the results highlight that we can establish a more progressive form of energy bill support.

Q21. Why don't we directly support households to procure more renewables instead of altering retail tariffs?

Supporting households to adopt domestic renewables is a positive thing and we are already witnessing that transition in progress - the policy goal is to ensure the costs and benefits of such a transition are fairly distributed. However, for those who are not able to invest readily into

household level renewables, they should be encouraged to invest in large scale renewable energy generating plants.

Ripple Energy is a great example of this where any household can invest small amounts of money into a wind or solar farm and in return gain a certain chunk of the plant's capacity. Using a supplier as an intermediary agent, such retail investors can directly benefit with reduction in their energy bills every time the generator produces energy at a cheaper rate compared to the market price. Some households have benefited from reductions in their bills of up to £950. During volatile market conditions, investing in renewables could be a perfect hedging strategy for individual households.

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