

Offering an effective route to low carbon economy

July 16 2015, by Alan Williams

To achieve public support for a transformation to a low carbon society, politicians would be advised to implement a quantity-based energy quota system, with a fixed and decreasing cap on total use, rather than relying on carbon pricing and taxation mechanisms, according to a new study.

In a wide-ranging paper published in the *Carbon Management* journal, researchers from the Fleming Policy Centre - including Dr Victoria Hurth from Plymouth University - set out the potential of a policy framework termed Tradable Energy Quotas (TEQs) for meeting the ambitious [carbon emissions](#) reductions targets required to address the climate crisis.

They argue that TEQs offer the most effective, equitable and expeditious way to bridge the gulf between climate science and political reality.

Since publication, the paper - Reconciling scientific reality with realpolitik: moving beyond [carbon pricing](#) to TEQs: an integrated, economy-wide emissions cap - has become the journal's second most read article ever.

Uniquely among climate policy solutions, TEQs addresses the bind that arises because "realists about climatology rightly argue that physical reality bats last and does not negotiate", while "realists within politics argue with equal validity that any approach that tries to radically transform society against society's wishes will be resented and, soon

enough, rejected".

The TEQs framework, explain the authors, anticipates and overcomes some of the reasons for public resistance to transformative climate policies.

For example, one of the key reasons for the unpopularity of policies such as carbon taxes is that they fail to positively engage all people and organisations.

Instead, by making [energy](#) more expensive, they tend to be regressive and even divisive, by imposing a greater financial strain on the poorest in society, who can end up priced out of the energy market and suffering fuel poverty.

In contrast, TEQs would increase equality of access to energy, meaning everyone would get a guaranteed entitlement (in the form of allocated TEQs units) to purchase energy. Above that standard entitlement, the more you use, the more you would pay, since you would have to purchase additional TEQs units.

Because the units are tradable, and so can be sold as well as bought, intensive fossil fuel users would effectively have to pay lower energy users for the privilege of using more than their fair share.

Dr Hurth, Lecturer in Marketing at Plymouth University, said:

"According to a 2013 study by the Centre for Sustainable Energy, 71% of households in the lowest three income deciles would benefit from implementing TEQs, whereas 55% in the highest three income deciles would face higher costs. Not only that, the hard cap would mean that the TEQs price (set at national level) would rise if too many people use more than their fair share, so the framework would create a shared incentive to lower overall energy consumption, motivating all energy users to

cooperate on solutions to the energy and [climate crisis](#). Finally, TEQs would guarantee that a nation meets its emissions reductions targets."

Provided by University of Plymouth

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