

The Energy Efficiency Levy

**A Consultation Paper by
The Director General of Electricity Supply
For Northern Ireland**

November 2001

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Introduction

On 25 September 2001 the Northern Ireland Assembly passed the following motion: *That this Assembly encourages the Regulator General for Electricity and Gas to contribute to the eradication of fuel poverty by increasing the energy efficiency levy to £5 per customer, creating £3.6m to tackle fuel poverty.*

The vote in favour of the motion was 31 and the vote against was 23. However those voting against had expressed as strong a desire to see fuel poverty tackled as those voting for the motion. The Assembly was unanimous in its concern about fuel poverty and differed only in the way in which funding might be obtained to tackle it.

Purpose

The purpose of this paper is to provide information on the origin and development of the levy and to seek views on the considerations which need to be taken into account in giving effect to the Assembly's wishes.

Background to the Energy Efficiency Levy

The Energy Efficiency Levy was first collected in Northern Ireland in 1997/8 at the rate of £1 per customer. The amount collected was increased following consultation to £1.50 in 1999/2000 and £2 in 2000/2001. This amount will increase with inflation and the growth in customer numbers.

To date, i.e. to 31 March 2001 the Energy Efficiency Levy has raised £3.6m which has been invested by NIE Supply in a number of energy efficiency measures. They have attracted an additional £3m making a total spend of £6.6m. The programmes supported by the levy are audited by the Energy Savings Trust. Up to 31 March 2001 each kilowatt hour saved by the levy has been at an average cost to customers of 0.73 pence compared to an average cost of producing and delivering a kilowatt hour of electricity of 10.45p to domestic customers. A total of 416 gigawatt hours will be saved over the lifetime of the measures avoiding approximately 500,000 tonnes of CO₂ emissions and £29m in fuel bills.

So far 120,000 customers have directly benefited from the measures. All customers benefit indirectly as the measures reduce the need for new investment in the NIE transmission and distribution system though for this effect to be perceptible energy efficiency investment would have to be substantial and sustained over a very long period. NIE's Supply Business according to the Energy Saving Trust's figures performs significantly better than the average British electricity supply business in obtaining cost effective efficiency gains.

As originally conceived the levy was intended to save carbon emissions and costs. It was not focussed on fuel poverty and indeed there was some feeling that combatting fuel poverty and reducing CO₂ emissions could not be easily aligned.

However in the period since the levy was introduced the issue of fuel poverty has moved further up the policy agenda of Government and - despite the fact that fuel poverty is primarily a space heating issue - an increasing proportion of the levy is used on fuel poverty programmes.

Eradicating Fuel Poverty

Households which spend more than 10% of their income on energy are regarded as being in fuel poverty. For households in the lowest income bands - for example pensioners on Minimum Income Guarantee of about £4,000 per annum - this means that they must be adequately heated and provided with electricity for around £400 per annum or £8 per week. This is achievable in well-insulated homes with efficient gas heating and efficient electrical appliances. In principle therefore fuel poverty may be capable of being eradicated - at least in urban areas when households are encouraged to claim all their social security entitlements. There may, nevertheless, be an income deficiency aspect to fuel poverty but increasing household incomes is outside the scope of this paper.

There are 170,000 households in Northern Ireland which are classified as being in fuel poverty. If the average cost of eliminating fuel poverty in all these households is £2,000 per house the total bill will be £340m which suggests an expenditure of £34m per annum if the task is to be accomplished in 10 years. Northern Ireland, under the Northern Ireland Housing Executive, which is Northern Ireland's Housing Energy Agency (HECA), is making better progress than most UK regions in improving the energy efficiency of the housing stock. The results of the Housing Condition Survey which will be available next year should provide firm, up-to-date data on the deficiencies of the housing stock in energy performance and the size of the task of eliminating fuel poverty.

Households or homes?

While it is households which suffer fuel poverty it is the dwelling itself which is the battlefield on which fuel poverty must be fought. While nobody can legislate to prevent individuals so mismanaging their resources as to leave insufficient money to pay for modest heating and electricity bills, it is possible to progressively upgrade the housing stock, its heating systems and the electrical appliances which households use to ensure that dwellings do provide comfortable homes heated, lit and powered at a modest cost. There are a number of factors which are leading to this progressive "fuel poverty proofing" of homes. These include:

- the replacement of old dwellings with new;
- the development of the natural gas market;
- the NIHE heater replacement programme;
- the NIHE improvement grants scheme;
- Housing Association Improvement programmes;
- improvements paid for by householders.

It should be noted that none of these programmes have as their primary objective the elimination

of fuel poverty. They do - as does the NIHE's HECA role - have the effect of contributing some of the £34m per annum required to eliminate fuel poverty.

Leading the coalition

While it is still the case that public policy formulation and delivery have some way to go before they are properly "joined up" it is indisputable that fuel poverty impacts on the activities of a number of areas of public policy. Those who suffer cold and damp housing are more likely to suffer from poor health. If they are children their educational performance is likely to be adversely affected and their life chances diminished. Both the Health Service and the Education system and ultimately the wider economy will pay a price for the casualties of fuel poverty. Sorting out this problem is not just the right thing to do in a humanitarian sense; it is the right thing to do in an economic sense. The Health Service's annual bill for treating the casualties of fuel poverty in Northern Ireland has been put at £30m per annum - almost as much as the annual sum required for eliminating fuel poverty over ten years. The £57m paid annually as Winter Fuel Allowance actually exceeds the annual cost of tackling fuel poverty.

Fuel poverty also has implications for other departments - OFM/DFM is overseeing the commitment to eradicate fuel poverty in the programme for Government and has convened an inter-departmental group on Fuel Poverty. DETI has an interest in the strategy's energy implications. The decision to extend the gas pipelines to the Northwest and the Southeast will make it much easier to tackle fuel poverty. But a fuel poverty strategy which uses this opportunity will contribute significantly to vindicating the decision to build the pipelines. DOE will be concerned with fuel poverty and the environment. Driving out polluting, expensive and inefficient fuels will help both the environment and the fuel poor. There are badly needed worthwhile jobs to be created in tackling fuel poverty in both urban and rural areas. Tackling fuel poverty is most effectively undertaken on a community basis and the sense of community purpose can be reinforced as community organisations deliver tangible improvements at the level of the individual house.

While many public and voluntary bodies are involved as well as private companies such as the energy providers the lead Department is the Department for Social Development. Successive DSD Ministers have made clear the importance they attach to eradicating fuel poverty. A budget of £4.1m per annum has been set aside for this purpose and this will quickly grow to £6m as the capability to deliver grows. Clearly anything on fuel poverty which is done by way of the energy efficiency levy would have to be subordinated to and dovetailed into the policy measures put forward and implemented by DSD and the proposals emanating from the OFM/DFM led working group. Once I have the results of this consultation exercise I would therefore propose discussing with Departments, in the light of the views expressed by consultees, if increasing the levy would be a helpful step in tackling fuel poverty or if it would merely have the effect of displacing public expenditure. I am here making the assumption that if the energy efficiency levy is increased to tackle fuel poverty the projects financed will have to pass an additionality test, i.e. they would have to be additional to what would have happened in the absence of the levy.

NIE - incentivising energy efficiency

NIE is more incentivised than other UK electricity companies to encourage energy efficiency. In most markets companies increase their profits by selling more of their product either through increasing market share or enlarging the market. Electricity is different because it is socially, environmentally and economically desirable that less electricity should be sold. It is therefore desirable to have a way of rewarding electricity companies so that they can meet the growing demand for energy services by selling fewer units of electricity which consumers will use more efficiently. The NIE Supply business receives a payment for all the kilowatt hours saved above the target of 110 Gigawatt hours set by the Energy Saving Trust. Last year the Supply Business earned an additional £312,000 profit - an amount which equated to about 6% of its profits for that year. Ofreg is exploring with NIE the scope for extending this incentive approach to T&D. As NIE has no interest in selling more electricity it becomes sound business sense for NIE and for electricity customers to have NIE pursue policies which reduce electricity demand especially at winter peaks. This could extend to encouraging gas cooking and improving the uptake of combined heat and power plants.

While NIE has neither a monopoly of access to the levy nor a legal obligation to produce the schemes which spend it, in practice NIE has been alone among electricity supply companies in coming up with schemes and projects. The successes of the energy efficiency levy to date, the extent to which it has outperformed the rest of the UK, is largely a tribute to the dedication, hard work and enthusiasm of the NIE Supply Business. While others may draw on the levy fund in future and come up with good schemes it is likely that NIE Supply will continue to be the major driver. The impact of the levy on the NIE Supply Business is therefore a valid regulatory concern at this stage.

Increasing the levy could have the effect of reducing the scope for NIE to make the additional efficiency gains which it is already beginning to make. Ofreg will want to explore with NIE the relationship between levies and incentives in order to secure the optimum mix which enables NIE to reduce energy usage at least cost to customers.

How much is available?

If it is assumed that taking about 17,000 households per annum out of fuel poverty is likely to be near the limit of what is physically achievable - though Ofreg is not aware if anyone has carried out an exercise of this sort - and that the cost would be about £34m the question which needs to be addressed is how much is currently available and what role would the levy - about 10% of the requirement - play.

The normal run of gas conversions, demolishing poor housing, upgrading heating in Housing Executive property and home improvements should lead to several thousand homes each year being "fuel poverty proofed". But there are no readily available figures on the extent to which fuel poverty might be decreasing independently of specific fuel poverty measures. Clearly an inter-agency/inter-departmental working group is needed to identify the size of the problem and

the parameters within which the levy could function.

How could the levy be used?

The levy could be used in a variety of ways which may give it a flexibility - since it will not be public expenditure - greater than mainstream policy instruments.

The levy could:

- (a) be used to finance directly fuel poverty projects (total house solutions) which might otherwise not be financed; or
- (b) be used to finance the electricity component in projects funded by others e.g. appliances, lights etc; or
- (c) be directed to fuel poverty electricity houses i.e. Economy 7 or all electric households; or
- (d) be directed to NIE's Keypad customers using Keypad as a way of identifying an electricity user constituency which has a high risk of being fuel poor but also a newly enhanced capability of managing energy use better; or
- (d) be used to front end expenditure by for example meeting the finance costs of loans which will bring forward much greater resources earlier than a programme paid out of revenues;
- (f) be used to attract in additional funds by - for example being allocated to district council areas or health action zones where councils or other agencies are prepared to invest their own money or European Structural Fund money in fuel poverty programmes;
- (g) be used as leverage to support bids for Executive Programme Funds; or
- (g) be used to provide grants of say 25% grants to incentivise private landlords, Housing Associations etc; or
- (i) be used to complement NIE incentive earning energy efficiency schemes..

Is the £5 levy affordable?

The levy is the amount of money which NIE is allowed to raise from customers and this amount would be £5 times the number of customers. However the actual amount is a charge per kilowatt hour of electricity bought so the amount paid per customer will vary with the amount they use.

Thus customers who consume little pay little. A levy of £5 would actually only cost an average domestic customer using 38000 kilowatt hours per year £1.62 and since lower income households are disproportionately concentrated in the below average consumption bands most of the fuel poor would themselves be paying much less than £1 per year more than they may be

paying at present. Price controls and fuel cost changes affect the annual bill by much more than this and moving to Keypad will save about half of those on fuel poverty a minimum of £13 per annum.

Is it fair?

The levy will inevitably mean that while all customers pay not all will benefit directly. This however is true of much of the costs which contribute to make up the electricity bill. For example urban consumers pay for the accelerated refurbishment of the rural network or the call centre which is designed to help those most likely to suffer supply interruptions. All customers will contribute to the cost of the Scottish interconnector although the beneficiaries - at least in the early years - are likely to be mainly large commercial and industrial users. The distributional aspect of the levy is not untypical except in being particularly transparent.

Moreover it should be appreciated that the levy - along with all the other measures which seek to hold back the growth in demand - does have an effect on the amount of capital investment the network needs. In their submission for the T&D price control NIE have informed me that each additional unit of peak demand requires an investment of £315. On this basis, an energy efficiency measure which avoids a kw of peak demand avoids this expenditure each year the demand is deferred. In that sense the levy is a “no regrets” expenditure from which some customers gain directly and all customers indirectly. All customers also have the potential to benefit from levy funded schemes which, using NIE’s bulk purchasing power, have brought products such as low energy light bulbs (CFLs) within reach of all customers at prices below those at which they were first introduced to the market.

What next?

The Assembly has opened up the possibility of increasing the levy to £5 per customer and using this money to accelerate the eradication of fuel poverty.

It is therefore necessary to explore the way in which the Assembly’s wish to direct resources into tackling fuel poverty could be achieved to greatest effect at least cost and with measurable additional impact.

Accordingly I would be grateful for views on the topics considered in this paper, any other relevant matter and on the specific questions below.

Should the bulk of the money be directed into a few large schemes rather than many small schemes to minimise management costs?

Should the levy be subject to an “additionality test” ie., that it is not substituting for Government expenditure and what form should such a test take?

Should there be a minimum percentage of leveraged finance in order to gain access to levy fund - eg., there must be 50p, £1 or £2 of non-levy money for every £1 of levy

finance going into a project?

Should a small proportion of the levy be used to research or initiate solutions to the income dimension of fuel poverty?

The present levy is accessible to anybody holding an electricity supply licence and is managed and audited by the Energy Saving Trust on behalf of customers. Is there a need to change/extend these arrangements.

If the levy is increased from 1 April 2002 from its level of £2.09p (£2 in April 2000 indexed by inflation) should it be fixed at £5 for five years or indexed to inflation?

Should some of the money be used for bringing a renewable energy component to fuel poverty products eg., renewable electric heating or solar water heating, especially for rural areas.

NIE has produced annual reports on how the money has been spent. What further steps, if any, should be made to publicise the levy's use - eg., an annual leaflet in the bill, an annual report to the Assembly?

Responses should be sent to Gerry Donnelly at:

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email: gerry.donnelly@ofregni.gov.uk

by 14 December 2001.

Following the completion of this consultation I will discuss with the lead Government Departments the most effective relationship between the energy efficiency levy and the Executive's campaign to eradicate fuel poverty.