# Child Poverty the 'fuel poverty' dimension

Children ... spoke about damp and cold houses affecting their health, and wanted rental properties to be safer and healthier. They noted that more insulation of homes would make heating homes more affordable, as they reported that families are struggling to pay household bills, which leads to no heating, no water, and the inability to cook. (Expert Advisory Group on Solutions to Child Poverty, 2012)

Fuel poverty can be broadly described as the inability of a household to afford a sufficient level of energy services in the home. Energy services are the things people need and desire from their use of energy, such as warm and comfortable rooms, hot water, lighting, and cooked food. Having a sufficiency of energy services is widely accepted as indispensable to modern living and peoples' quality of life, while a state of energy deprivation can have an adverse impact on physical and mental health, well-being and social functioning (Boardman, 1991; Pantazis, Gordon and Townsend, 2006). As the Expert Advisory Group on Solutions to Child Poverty noted, fuel poverty is a contributing factor in the breadth and depth of child poverty in New Zealand.

This article will background the emergence of fuel poverty and outline its main characteristics in New Zealand with particular reference to child poverty.<sup>1</sup> I will examine and critique the policy response to date and explore several policy options. The perspective I bring is through having 'a foot in each camp' – by

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having a background in policy work for local and central government agencies, and involvement with front-line service delivery in a fuel poverty-focused charitable trust. Housing policies, including specific proposals such as a house 'warrant of fitness', will not be explored here, since Philippa Howden-Chapman is covering this ground elsewhere in this issue of *Policy Quarterly*.

#### The emergence of fuel poverty

The term 'fuel poverty' was first coined in the United Kingdom in the 1970s to describe the adverse social impacts of cold homes and energy deprivation resulting from the large energy price increases occurring at that time, economic recession, and fuel supplier disconnection policies (Boardman, 1991). It took over two decades for the term to become officially recognised, but in 2001 the UK government adopted a formal definition of fuel poverty as part of a policy initiative that elevated the reduction and elimination of fuel poverty to one of its main energy goals. A household was considered to be in fuel poverty when it 'needs to spend more than 10% of its income on all fuel use and to heat its home to an adequate standard of warmth' (UK Government, 2001). The definition contains a very useful concept - what a household needs to spend to achieve a sufficiency of energy services - but the specific formulation of the expenditure to income ratio and the 10% threshold has proven problematic. The current UK government has proposed that fuel poverty should in future be defined as households having the twin attributes of low income and high relative energy costs (Department of Energy and Climate Change, 2012).

The 10% expenditure threshold has been used in various analyses of fuel poverty in New Zealand, but application of this formulation heavily weights the presumption of fuel poverty to low-income, single-person and elderly households. There is undoubtedly energy deprivation among the elderly, but studies of deprivation and poverty more generally clearly show that, in terms of both numbers and depth, households with children comprise the majority of the socially deprived (Perry, 2012). The largest number of at-risk households are those with children, with one-parent families displaying the highest rate of deprivation. Indicators of fuel poverty align closely with indicators of social deprivation more generally (McChesney, 2012).

Children typically experience two types of negative consequences from their family being in fuel poverty. The first is the high likelihood of living in cold and damp houses that are under-heated, or not heated at all during the winter. The 2008 New Zealand Living Standards Survey found 9% of children living in homes where main rooms cannot be kept warm, 17% where there is a major problem with dampness and mould, and 22% where there is a major problem with keeping the house warm in winter (Perry, 2009). The incidence of these indictors displayed a strong deprivation gradient (see Figure 1). The *Growing Up in New Zealand* study, reporting on babies at 9 months of age (data was collected during the 12 months to January 2011), found 18.4%

Figure 1: Rate of fuel poverty indicators for children by deprivation group



Source: Perry, 2009

Figure 2: Incidence of fuel poverty-related indicators, Growing Up in New Zealand households 2010-11



Source: Morton et al., 2012

of households 'putting up with feeling cold to save on heating costs' (Morton et al., 2012). Progressively higher levels of mould, condensation and dampness, and houses lacking heating were found in more deprived areas (see Figure 2).

A second consequence of fuel poverty is that children may experience periods when their household suffers electricity disconnection. Disconnection may occur through a formal process initiated by the electricity supplier for late or nonpayment of electricity bills, or as a result

#### **Causes and responses**

Fuel poverty has emerged and risen in New Zealand in parallel with poverty and child poverty more generally, and shares some of the same drivers (e.g. low household income relative to outgoings, social dislocation). Other drivers are unique to this issue, in particular the costs faced by families in providing an adequate level of energy service provision. These energy costs are determined by a mix of market conditions (e.g. prevailing energy tariffs), house characteristics (e.g. loca-

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of families with prepayment meters enduring periods without power because they cannot afford to top up their meter. Difficulty with paying bills on time and disconnection are also strongly associated with higher levels of deprivation more generally (Perry, 2009).

Disconnection greatly disrupts the structure of family life, especially if it is recurring. Household stresses are increased and families are forced into a range of short-term coping behaviours, some of which are unsafe and risky for children (e.g. using candles for lighting, and various unflued portable gas appliances). Disconnection compromises a range of social necessities, including food storage and cooking (and the ability to feed children well), and washing, as well as exacerbating cold homes issues (O'Sullivan et al., 2011). It is estimated that in 2011 about 50,000 households were disconnected for some period due to inability to pay. This represented a significant increase from three years earlier, when guidelines were developed by the then Electricity Commission and the industry in efforts to minimise disconnection (Electricity Authority, 2010).

tion, orientation to the sun, insulation, heating system) and behavioural drivers (e.g. choices, knowledge and skill in managing costs effectively).

Government energy policy decisions have been an underlying driver of fuel poverty trends, producing both positive and negative outcomes. The most profound have been policies relating to electricity prices. Up to the late 1980s electricity pricing incorporated a social element by providing lower electricity prices for residential consumers through a cross-subsidy from commercial and industrial users. The electricity reforms initiated in the late 1980s set out to establish a competitive, commercial model for electricity (i.e. as a commodity traded within a market rather than being priced by government with mixed objectives, including social, in mind). Responding to concerns that the electricity reforms (and income and benefit reforms occurring at the same time) would leave many households vulnerable, the government's 1992 Energy Policy Framework specified one of the desired outcomes as 'basic energy services remain accessible to all members of New Zealand society' (New Zealand Government, 1992). Improving

the efficiency of energy use in households was seen as an effective way of addressing energy affordability and cold homes concerns, while also being positive for the environment, and hence became the main response focus. The government's current Warm Up New Zealand: Heat Smart insulation retrofitting programme is the most recent evolution of household energy efficiency initiatives that began in 1995.

Two decades on from the 'basic energy services ... for all' sentiment, how well has this outcome been achieved? By 2012 an estimated 175,000 houses, occupied by those on low incomes, had been insulated in ceilings and/or under floors via government programmes (including Housing New Zealand Corporation rental houses). Over half of the installations have occurred since 2009 when the Warm Up New Zealand: Heat Smart programme began. In addition, partial funding for heating appliances for a much smaller number of houses was made available from 2009 to 2012.

improved service But energy affordability gained through insulation and efficiency programmes have, for most low-income households, been swamped by relentless increases in electricity costs experienced since the early 1990s. Average tariffs have increased by 70% in real terms, and in the last decade the gap between average residential tariffs and those paid by commerce and industry has widened considerably (Figure 3). Bertram (2012) identifies the reason for the increase in the last decade as the practice of electricity generator-retailers carrying out 'fair value' asset revaluations within an essentially unregulated environment. Households appear to have borne the brunt of these price increases. Given that the sector has been responsible for only a little over 35% of electricity consumption growth since 2000, why households alone should have received such high price increases is unclear, except perhaps that they have been largely captive to Ramsey pricing practices (where producers concentrate price increases on the most inelastic sector of the market). The overall results have been strongly regressive: energy costs in relation to income for households in the lowest income quintile have almost doubled from less than 5% in the late 1980s to over 9% in 2010 (McChesney, 2012).<sup>2</sup>

Meanwhile, the desired outcome of universal access to basic energy services was quietly retired from energy policy, beginning in 2007 when the scope of energy services was reduced, with all reference to energy services universality finally dropped from the New Zealand Energy Strategy in 2011. This change appears to have been made as a matter of government priority to focus on the short-term actions of Warm Up New Zealand: Heat Smart and electricity supplier switching, since public submissions apparently did not suggest that the universality provision be dropped and neither did officials recommend it (Ministry of Economic Development, 2011). The path taken here is consistent with Bromell's (2012) depiction of recent governments' exasperation with 'utopian' outcome statements and strategies, turning the focus instead to specific actions via a 'command and comply' approach. To the current government's credit, the rate of insulation achievement in low-income homes in just three years of the Warm Up New Zealand programme exceeded the total for the prior 15 years. The danger, however, is that energy policy becomes defined and preoccupied by the delivery of short-term outputs, and that the wider purpose becomes lost.

## Evaluation, interpretation and political drivers

An evaluation of health, energy and employment impacts of Warm Up New Zealand: Heat Smart was carried out in 2010-11 (Grimes et al., 2012; Telfar Barnard et al., 2011). The central estimate indicated a net benefit of about \$1.05 billion3 at a 5:1 benefit-cost ratio for insulation. The Energy Efficiency and Conservation Authority (2012) saw this as affirmation of the insulation focus of the programme. But the evaluation showed quite clearly that the benefits are strongly asymmetric: 99% of the benefits are health-related, with 74% deriving from reduced mortality among elderly persons who had previously been hospitalised (representing just 0.1% of the households reached by the programme). The other

Figure 3: Real average electricity prices to end user groupings



Source: Ministry of Economic Development, 2012

health benefits, which include reduced hospitalisation and pharmaceutical costs, and imputed benefits from previous studies (e.g. less time off work), are also largely derived from households where a member had a pre-existing health condition. The health benefits were concentrated in the houses of those on low incomes: benefits per household were 2.5 times higher for households where a member had a Community Services Card than for general income households. Thus, it seems reasonable to deduce that the vast majority of the (quantified) benefits of Warm Up New Zealand derive from a minority of households, and that a significant number of houses currently being insulated under the scheme are not achieving an overall net benefit. Grimes et al. (2012) concluded as much by suggesting a targeting strategy to 'low and middle income earners and other at-risk groups in terms of illness' (p.28).

However, under the pressure of achieving the high-level target for the scheme (which is expressed in aggregate houses insulated) and restricted budgets, Warm Up New Zealand appears to be moving in the opposite direction. In 2011– 12, only 39% of houses insulated under the scheme were occupied by Community Service Card holders and 61% were general income houses; by comparison, in the first year of the scheme the ratio was almost reversed, at 64:36 (Energy Efficiency and Conservation Authority, 2010, 2012).

The Warm Up New Zealand: Heat Smart evaluation also covered heating appliances, of which a limited number had begun to be partly funded in 2009. Fuel poverty groups had long advocated for heating appliance grants because giving at-risk households access to efficient heaters with low running costs (i.e. log burners and heat pumps) is fundamental in providing affordable heat. Low-income households typically use heaters with high running costs because they are cheap to purchase (e.g. plug-in heaters and unflued LPG heaters), but running costs at typically 25-40 cents per kilowatt hour are three to six times higher than the low-running cost options. However, the evaluation found negative overall benefits for heating, a finding that led to most heating subsidies being discontinued in 2012.4

For those working with families in fuel poverty the decision to discontinue funding for heating appliances has been a step backward, especially as the decision appears to be grounded in a questionable evaluative methodology, and with little attempt to question whether the Warm Up New Zealand sample truly represented those most in need of heating. For example, the evaluation did not include or value the additional warmth gained as a private benefit by household occupants, arguably the largest form of benefit from efficient heating.5 Moreover, the circumstance of many of those securing heaters under Warm Up New Zealand is highly self-selecting because there are still significant cost barriers for the most needy. Neither, seemingly, has the very high desirability of replacing unflued LPG heaters with safe and cheap-to-run alternatives been factored in. Discontinuing a heating grant also effectively discriminates against those whose houses do not allow for insulation (e.g. they are constructed with skillion roofs or concrete floors, or lack access to the underfloor space).

I have previously commented on the divergence between government programmes which were increasingly and facilitating electricity supplier switching.

- Projects targeted to specific
  household types for example,
  CEA has run a Warm Babies project
  since 2001 in partnership with other
  agencies and referral networks
  in order to provide a warm and
  safe environment for new babies.
  Ironically, much of the focus of the
  programme has been to provide
  efficient heating appliances, a task
  made much easier with Warm Up
  New Zealand: Heat Smart, and which
  now will need to be revisited.
  Heating appliances prior to Warm
  Up New Zealand: Heat Smart
- funding, CEA was installing efficient heating systems into as many needy

... by recognising that individual circumstances of fuel poverty can vary enormously, and designing responses appropriately to reflect this diversity, well-designed and tailored energy interventions can make a big difference.

focusing on a few standardised activities, and the way the fuel poverty-focused NGO I am associated with, the Community Energy Action Charitable Trust (CEA) approached its task (McChesney, 2008). I outlined a 'gap analysis' – the gap between the outputs provided by central government programmes, and the additional actions pursued by CEA in order to meet the needs of households as perceived and presented to it. An updated list includes:

- Curtains supplied through donated and recycled curtains, using both paid staff and volunteers, and partnering with other community agencies (currently over 60) to identify households in need.<sup>6</sup>
- Energy advice CEA now employs three specialist home energy advisers funded through a mix of locally-derived funding and user charges. The services offered include telephone advice, home energy checks and reports, problem solving,

houses as funding would allow. The reason is simple: insulation on its own does not transform a cold, hard-to-heat home into a warm, affordably heated one. With Warm Up New Zealand funding the ratio of heating to insulation installations in 2011 was about 0.4:1.0 (Community Energy Action Charitable Trust, 2012), still perhaps lower than ideal but reasonable within funding limitations.

 Discretionary funding/flexible customer payment arrangements – CEA has operated a discretionary funding pool to enable households that would otherwise be unable to meet their financial contribution to Warm Up New Zealand: Heat Smart projects to proceed.

These are some of CEA's experiences, having built up a considerable pool of knowledge through operating in Christchurch for almost 20 years. Other organisations in other areas have similarly built up local knowledge and expertise, and have developed their own set of responses to local circumstances and needs.

In my experience, officials place little value on this experiential information – it 'lacks rigour', or can be discounted because it comes from an advocatory stance. But, as argued above, 'official' evaluations and interpretations are not free from their own limitations and biases. In my view, much could be gained from bringing together and refining these different forms of information and insight – similar to Bromell's (2012) argument for creating better 'public value' around policy advice and interventions.

#### The way forward

The reality of fuel poverty, and its contribution to child poverty, requires a rethink of priorities and procedures around the energy interventions that the government is currently supporting.

At the heart of the issue is clarity about the problem to be addressed. 'Fuel poverty' has not been formally recognised as the policy problem. Official aversion to the term 'fuel poverty' has not helped, and neither has lack of agreement around a definition (there has rightfully been disquiet about adopting the UK 10% threshold definition). The policy agenda has been driven by related issues (e.g. 'cold homes', uninsulated homes, health costs, poor energy efficiency), and 'solutions' have been dominated by an insulation mindset. Lack of clarity around the policy problem produces negative flow-on effects (e.g. information that could better inform the issue is not seen as relevant and hence is not identified or collected).

This issue needs policy recognition. A good start would be to revisit the 1992 Energy Policy Framework and elevate the desired policy outcome that all households should be able to access a basic level of energy services into the current New Zealand Energy Strategy. In itself this would be relatively meaningless unless it genuinely informs the policy process, and policy actions and agency alignments flow from such a commitment. For example, it should trigger more focused, and disaggregated, monitoring. There is a need to move beyond monitoring household 'averages', or Warm Up New Zealand aggregated totals, to capture relevant information on those most at risk. Are those households most at risk accessing the assistance available to them, for example?

A redefined problem identification should logically lead to an examination of policy effectiveness, funding priorities, and the scope for more effective targeting of the assistance monies available. This task would be ably assisted by making use of front-line networks, with their ability to identify those households most at risk and facilitate appropriate interventions.

Finally, there needs to be an examination of institutional responsibilities. At present no single government agency has an 'umbrella' policy overview of fuel poverty. Given that this is essentially an issue of social policy, logically the Ministry of Social Development should be taking on this role. In terms of programme delivery, the current model demands review because it is essentially based on a competitive funder-provider model for delivering large numbers of insulation retrofits. Fuel poverty demands an emphasis on localised approaches - tapping into existing social provider networks and working collaboratively, matching solutions to needs (i.e. looking at the 'quality' of response, not just quantity), harnessing local voluntary networks and self-help approaches, and so on. In particular, an alternative model, based on greater local autonomy for programme design and funding decisions, and built around a 'quality partnership' approach, needs serious consideration.

#### Conclusions

Addressing fuel poverty is a very important dimension of the child poverty challenge. Children have strongly articulated the negative consequences of living with energy deprivation – the cold homes, health impacts, and social dislocation caused by electricity disconnection – and the Expert Advisory Group on Solutions to Child Poverty (2012) has reflected this in a number of its recommendations.

Because of the diverse drivers of fuel poverty, there are limits to which energy interventions alone can, and should, be expected to resolve this issue. But, by recognising that individual circumstances of fuel poverty can vary enormously, and designing responses appropriately to reflect this diversity, well-designed and tailored energy interventions can make a big difference. After almost two decades of experience with various forms of energy intervention, we have a fairly good idea of what works and how we can do better.

In the current 'authorising environment' of available funding, I believe we can be much more focused and effective in addressing fuel poverty. The challenge, perhaps, will be to the authorising environment of institutional arrangements: to recast the policy problem around 'fuel poverty', and to reframe programme delivery around a greater level of local autonomy and leadership.

2 This ratio is an imperfect measure of affordability but does serve to highlight the change in relative costs.

- 4 Some funding is still available for clean heating appliances associated with localised polluted airsheds, but wider availability as an intervention to help address fuel poverty has been discontinued.
- 5 The evaluation of insulation also did not include this benefit, although it is likely to be of lesser importance to the overall benefits than would be the case for heating.
- 6 There are now six curtain banks operating in communities throughout New Zealand, several being sponsored by Genesis Energy.

#### References

- Bertram, G. (2012) 'Electricity prices, asset values, regulation and renewables', Sustainable Energy Forum presentation, July, accessed 28 February 2013 from http://www.geoffbertram.com/ publications/?no\_cache=1
- Boardman, B. (1991) *Fuel Poverty: from cold homes to affordable warmth*, London: Belhaven Press
- Bromell, D. (2012) 'Creating public value in the policy advice role: a reflection from the front line', *Policy Quarterly*, 8 (4), pp.16-22
- Community Energy Action Charitable Trust (2012) Annual Report 2011, accessed 28 February 2013 from http://www.cea.co.nz/files/Annual\_ Report\_2011\_final.pdf
- Department of Energy and Climate Change (2012) *Fuel Poverty: changing the framework for measurement*, accessed 28 February 2013 from https://www.gov.uk/government/consultations/fuel-poverty-changingthe-framework-for-measurement
- Electricity Authority (2010) *Guideline on Arrangements to Assist Vulnerable Consumers: version 2.1*, Wellington, accessed 28 February 2013 from http://www.ea.govt.nz/consumer/mdvc/
- Energy Efficiency and Conservation Authority (2010) *Annual Report* 2009–2010, accessed 28 February from http://www.eeca.govt.nz/ node/10993
- Energy Efficiency and Conservation Authority (2012) 2011–2012 Annual Report, accessed 28 February from http://www.eeca.govt.nz/resource/ eeca-annual-report-2011-2012

- Expert Advisory Group on Solutions to Child Poverty (2012) Solutions to Child Poverty in New Zealand: evidence for action, Wellington: Office of the Children's Commissioner, accessed 28 February 2013 from http://www.occ.org.nz/publications/child\_poverty#final
- Grimes, A., T. Denne, P. Howden-Chapman, R. Arnold, L. Telfar-Barnard, N. Preval and C. Young (2012) Cost Benefit Analysis of the Warm Up New Zealand: Heat Smart Programme, report for Ministry of Economic Development (revised June 2012), accessed 28 February 2013 from http://www.healthyhousing.org.nz/wp-content/ uploads/2012/05/NZIF\_CBA\_report-Final-Revised-0612.pdf
- McChesney, I. (2008) 'Reflections and wrap-up', proceedings of the Fuel Poverty Workshop, 4 June, Christchurch, Christchurch: Community Energy Action Charitable Trust
- McChesney, I. (2012) Fuel Poverty in New Zealand: a public policy investigation, Wellington: School of Government, Victoria University of Wellington
- Ministry of Economic Development (2011) Summary and Analysis of Submissions on the Draft New Zealand Energy Strategy and the Draft New Zealand Energy Efficiency and Conservation Strategy, Wellington: Ministry of Economic Development
- Ministry of Economic Development (2012) New Zealand Energy Data file: 2011 calendar year edition, accessed 28 February 2013 from: http://www.med.govt.nz/sectors-industries/energy/energy-modelling/ publications/energy-data-file/new-zealand-energy-data-file-2012

The analysis undertaken in New Zealand on fuel poverty to date typically does not allow the separate identification of child 'fuel poverty' from fuel poverty in general.

<sup>3</sup> This is based on 2009–2013 programme commitments using a 'central scenario' with 4% discount rate.

- Morton, S.M.B., P.E. Atatoa Carr, C.C. Grant, A.C. Lee, D.K. Bandara, J. Mohal and C.R. Wall (2012) Growing Up in New Zealand: a longitudinal study of New Zealand children and their families. Report 2: Now we are born, Auckland, accessed 28 February 2013 from http://www.growingup.co.nz/research/results.aspx
- New Zealand Government (1992) 'Energy policy framework confirmed', media release, 30 June, Wellington: Office of the Minister of Energy
- O'Sullivan, K.C., P. Howden-Chapman and G. Fougere (2011) 'Making the connection: the relationship between fuel poverty, electricity disconnection, and prepayment metering', *Energy Policy*, 39, pp.733-41
- Pantazis, C., D. Gordon and P.R. Townsend (2006) 'The necessities of life', in C. Pantazis, D. Gordon and R. Levitas (eds), *Poverty and Social Exclusion in Britain: the millennium survey*, Bristol: The Policy Press
- Perry, B. (2009) Non-income Measures of Material Wellbeing and Hardship: first results from the 2008 New Zealand living standards survey, with international comparisons, Working Paper 01/09, Wellington: Ministry of Social Development, accessed 28 February 2013 from http://www.msd.govt.nz/about-msd-and-our-work/

publications-resources/monitoring/living-standards/living-standards-2008.html

- Perry, B. (2012) Household Incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2011, Wellington: Ministry of Social Development, accessed 28 February 2013 from http:// www.msd.govt.nz/about-msd-and-our-work/publications-resources/ monitoring/household-incomes/index.html
- Telfar Barnard, L., N. Preval, P. Howden-Chapman, R. Arnold, C. Young, A. Grimes and T. Denne (2011) *The Impact of Retrofitted Insulation and New Heaters on Health Services Utilisation and Costs, Pharmaceutical Costs and Mortality: the impact of Warm Up New Zealand: Heat Smart*, report to the Ministry of Economic Development, accessed 28 February 2013 from http://www. healthyhousing.org.nz/wp-content/uploads/2012/03/NZIF\_Health\_ report-Final.pdf
- UK Government (2001) *The UK Fuel Poverty Strategy*, accessed 20 March 2012 from http://www.decc.gov.uk/en/content/cms/what\_we\_ do/consumers/fuel\_poverty/strategy/strategy.aspx

# Increasing Inequality Causes, Consequences and Responses

### Thursday 18 July 2013 Rydges, 75 Featherston Street, Wellington

Income inequality has increased significantly in New Zealand and many other OECD countries in recent decades. This all-day forum will explore the following issues:

- What are the causes and consequences of growing inequality?
- How might some of the negative social impacts of inequality be reduced?
- What are the options for reducing income inequality and which, if any of these, have merit?

#### Speakers:

Dr Michael Forster OECD Professor Robert Wade London School of Economics Dr Cathy Wylie New Zealand Council for Educational Research Professor Philippa Howden-Chapman University of Otago Dr Tracey McIntosh University of Auckland Professor Paul Dalziel Lincoln University Dr Geoff Bertram Senior Associate, IPGS For further information and details on how to register please visit our website http://igps.victoria.ac.nz



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