Development of a framework for assessing impacts of policy proposals on different consumer groups

Ofgem commissioned the Centre for Sustainable Energy (CSE) to help us improve our understanding of domestic gas and electricity consumption, and what characteristics drive variations in usage. The outcome was a series of pen portraits or ‘archetypes’.

Ofgem publishes overall average consumption values for gas and electricity customers. These figures are used by Ofgem in its analysis and for the conversion of prices. These average figures are currently being reviewed and will be published on our website1.

Ofgem has generally used average (median) consumption levels to perform quantitative analysis of the impact of policy proposals on domestic consumer’s gas and electricity bills. However, fuel bill impacts are likely to distribute unevenly across the domestic population due to differences between consumers. Therefore the archetypes can be used to inform future analysis of the impact of policies on gas and electricity bills.

The archetypes are first differentiated by household heating fuel, being either mains-gas heated or non-mains gas (thus electric or non-metered fuel). The latter subset of households is further divided into four different archetypes, and the mains-gas heated households (representing over 80% of households in Great Britain) are split into eight archetypal groups.

The archetypes allow a more sophisticated approach to analysis in the following ways:

- The average consumption levels of different groups can be used to underpin quantitative analysis of the impact of policy proposals on different consumers’ bills.
- The archetypes provide simple ‘pen portrait’ descriptions of the types of consumer they represent. These can assist the development more user-friendly communications of customer impacts. They can also help to ensure the impacts of policies on more vulnerable consumer groups are considered.

Each of the 12 archetypes is a distinct group of households. Each archetype is established because those consumers share some common characteristics. However it is worth noting that some of those characteristics are not necessarily unique to each group.

This document provides a summary of the archetypes developed by CSE. The full report, ‘Beyond Average Consumption – Development of a framework for assessing impacts of policy proposals on different consumer groups’, is available on Ofgem’s website2.

Archetypes 1-4 – Households heated by electricity or other non-metered fuels

Archetype 1: Low-income electrically heated

This archetype mostly consists of single adults without children, retired or not working. Half of the households contain individuals over the age of 60 and one third over the age of 75. Around 75 per cent of households are in urban areas with a relatively high representation in the South East, South West and Scotland. Households within this archetype have low annual incomes, typically lower than £11,000. Average household disposable income is £6,900. Around 31 per cent use prepayment meters (PPMs) and are ‘sticky’ customers, i.e. they are less likely to switch energy supplier.

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1 Decision letter: Revision of typical domestic consumption values, Ofgem, January 2011
2 www.ofgem.gov.uk
Archetype 2: All other electrically-heated households

The majority of the households contain couples, one fifth of whom have children. There is a mixed age range with one quarter under 35 years old. Households tend to have middle ranging incomes with a mean annual disposable income of £25,800. Around 55 per cent are owner occupied and one quarter private rented. The majority of households have two or fewer bedrooms. These households pay mainly by direct debit and show some propensity to switch supplier.

Archetype 3: Low-income non-metered fuel-heated households

Households in this archetype are mostly made up of single adults and couples, 65 per cent of whom are over the age of 60. The majority live in medium sized detached and semi-detached properties, 65 per cent of which are located in rural areas. There is a relatively high representation in the South West, East and Wales. Households in this archetype tend to have low to medium incomes with a mean annual household disposable income of £11,000. Over 50 per cent are owner occupiers. In this respect, they tend to have low incomes but are asset-rich. They are also sticky consumers with a low likelihood of having switched supplier.

Archetype 4: All other non-metered fuel-heated households

This archetype contains mostly wealthy, “market-savvy” families living in rural detached properties. The majority are couples with dependent offspring living at home. Around 40 per cent own their homes outright. They tend to have high incomes with a mean annual household disposable income of £43,000. Households within this archetype have a high representation in the South West, East and Wales. These households have a high propensity to switch supplier and nearly 50 per cent pay by direct debit.

Archetypes 5-12 – Households heated by mains gas

Archetype 5: Low-income, out of work single adults in rented flats

Around 82 per cent of households in this archetype are social rented. Around 28 per cent are located in London. The households tend to be young, single adults without children, although 13 per cent are single parents and 34 per cent are retired. They have low incomes with a mean annual household disposable income of £6,500. Around 42 per cent are not working. They tend to be sticky customers and a 'priority group' due to low income and benefits status.
Archetype 6: Young working adults in rented flats (London)

Of the households in this archetype, around 42 per cent are under 35 years old without children. Around 55 per cent are social rented households and 43 per cent are private rented. The majority of householders work full time. Around 38 per cent are located in London. They tend to be sticky consumers and a high proportion pay through a prepayment meter; around 31 per cent for electricity and 24 per cent for gas.

Archetype 7: Low-income single adults (lone parents or elderly) in social rented houses

77 per cent of the households in this archetype consist of single adults. One third is over 60 years old. Around 42 per cent are not working with another 36 per cent retired. All are renters, with the majority (73 per cent) social rented. These households have a high representation in the North West, Merseyside, Yorkshire, Humberside, North East and West Midlands. They tend to be sticky consumers and around 45 per cent pay through a prepayment meter for their electricity and 43 per cent for their gas.

Archetype 8: Younger working families in medium-sized rented houses

Of the households in this archetype, 54 per cent are social rented and 42 per cent private rented. The majority are younger couples with children, 45 per cent work full time and 15 per cent part time. They tend to be middle income earners with a mean annual household disposable income of £27,000. They are sticky consumers and are more likely to pay through a prepayment meter than average.
Archetype 9: ‘Average’ mains gas-heated households

- Number of households: 8.2m
- Mean annual gas consumption: 16,386 kWh
- Mean annual electricity consumption: 3,588 kWh

34% of GB households

All households in this archetype (which represents 34 per cent of GB households) are owner occupied. Being such a large group, the characteristics are less clearly defined, and in many respects resembles a ‘average’ mains gas-heated household in Great Britain. There is a mix of household types with 47 per cent in full time employment and 29 per cent retired. These households have a high representation in the North West, Merseyside, Yorkshire, Humberside and Scotland. Around 55 per cent pay by direct debit. There is also some propensity to switch energy supplier.

Archetype 10: Wealthy working families in 3-4 bed semi’s owned with mortgage

- Number of households: 2.3m
- Mean annual gas consumption: 20,202 kWh
- Mean annual electricity consumption: 4,767 kWh

10% of GB households

75 per cent of the households in this archetype have three to four bedrooms. Over a quarter are in London. Income tends to be very high with a mean annual household income of £59,000. The majority of individuals are of working age and 78 per cent work full time. They tend to be “market savvy” consumers (higher propensity to switch energy supplier) who pay by direct debit.

Archetype 11: Asset rich, “empty nesters” in detached houses in less urban areas

- Number of households: 2.5m
- Mean annual gas consumption: 20,557 kWh
- Mean annual electricity consumption: 4,184 kWh

10% of GB households

Over three quarters of these households are living in three to four bedroom houses and all are detached. Around 64 per cent own their house outright. Occupants are mainly retired (43 per cent) and 64 per cent are couples. Income levels tend to be around average with a mean annual household disposable income of £23,000. These households are located in town or fringe areas, in the South East, East Midlands and Eastern regions in particular. Around 64 per cent pay by direct debit but have a low propensity to switch energy supplier.

Archetype 12: Wealthy working families in larger detached houses in less urban areas

- Number of households: 1.5m
- Mean annual gas consumption: 25,200 kWh
- Mean annual electricity consumption: 5,608 kWh

6% of GB households

The majority of these households have four or more bedrooms and all are owner occupied. Around 73 per cent are owners with a mortgage; the remaining households own their home outright. Around 45 per cent of the households are couples with dependent children. Incomes are very high with a mean annual household disposable income of £65,000. A high proportion of households are located in the South East region. Occupants tend to be market savvy with 56 per cent having switched energy supplier more than once.

The full details of the archetypes, and the methodology used to determine them, can be found in CSE’s report on www.ofgem.gov.uk.