AMDEA

The Association of Manufacturers
of Domestic Appliances

Appliances and the drive to net zero homes





Climate for Change

Escalation of energy prices coupled with 10%-plus inflation have prompted a sharp public focus on energy spent in homes. In the drive to Net Zero these concerns can provide industry and government with an opportunity to help householders, receptive to change, to make better decisions for the environment.

Appliances in homes

We all rely on appliances: almost every household in the country[1] has one or more fridges plus washing and cooking machines, not to mention showers, kettles, vacuum cleaners and a myriad of essential small appliances. These total an estimated 170 million large white goods[2] and at least 300 million small appliances[3]. Sustainability improvements in new machines have dramatically reduced energy and water usage, while conserving high performance. Yet households do not always consider efficiency features when purchasing or using their technology.

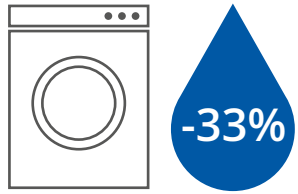
Similarly, lack of care can reduce performance and even lifespan, missing savings for pockets and the planet.

Why do missed savings matter?

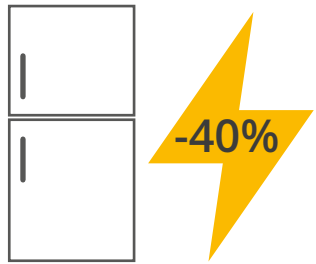
While manufacturers progress carbon neutral production, 80% of an appliance's emissions are estimated to occur during the use phase[4].

AMDEA's proposition

For households and their appliances to play their part in helping to achieve Net Zero, they need active encouragement during **Use, Care and Repair** and **Purchase**.



Today's washing machine uses
one-third less water
than 15 years ago



Today's fridge-freezer uses
40% less energy
than 10 years ago

1 Euromonitor International '*Consumer Appliances in the United Kingdom*', December 2022
2 Applying YouGov Plc survey for AMDEA, 12-13th December 2018 to ONS (2017) figure for number of households
3 Euromonitor International '*Consumer Appliances in the United Kingdom*', December 2022
4 Elsevier Ltd on behalf of Institution of Chemical Engineers, Alejandre C et al, April 2022 '*Optimum operational lifespan of household appliances considering manufacturing and use stage improvements via life cycle assessment*'

Use

Small changes, big effect

Modern machines have programmes with lower energy and water consumption. For example, using the 'eco' button on a washing machine for every load, saves £54[5] annually in electricity and water costs. Yet research shows only half of people use this programme most or all of the time[6].

Good maintenance is also key: it can improve the performance of an appliance helping ensure its longevity. AMDEA and its members promote careful use and maintenance of machines, most notably in our award-winning *Know Watt's What* campaign. We know small changes can conserve energy and water while extending the lifespan of appliances.

To refine understanding we have completed an in-home study with the UKRI Circular Economy Hub at Exeter University looking at what makes appliance users change to more sustainable behaviours. This concludes consumer education is influential for behaviour change, integral to resource efficiency and should be a strong focus in the future, for all stakeholders.

Achieving behaviour change is complex so information needs to be presented simply, giving easy-to-implement proven steps that make meaningful savings. The government has shown a willingness to promote better appliance usage[7] but advice must harness industry knowledge of the installed base of machines to ensure relevance.

Know Watt's What

Plug in to savings

WINNER 2023 TRADE ASSOCIATION AWARDS

CAMPAIGN OF THE YEAR

CE-HUB

UKRI Circular Economy Research Hub

5 https://www.amdea.org.uk/campaigns/know-watts-what/unlock-savings-in-your-home/
6 Ipsos *'AMDEA Appliances Survey'*, 19-22 August 2022
7 BEIS, *'It All Adds Up'*, December 2022

Care and repair

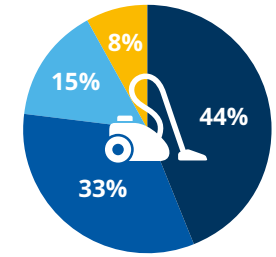
Extending lifespan

When a repair is needed, householders are often faced with a difficult decision if their machine is out of warranty: whether a new machine is more cost effective than mending the old one. The cost of repairs, the majority of which is labour[8], could be driving householders to ditch mendable machines.

AMDEA and its members have taken action to improve the landscape around repairs:

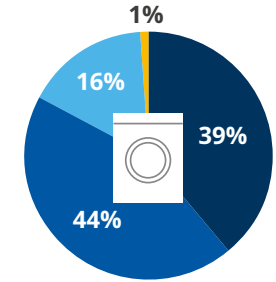
- *Know Watt's What* provides a 'spares and repairs directory' for quick access to parts for over 60 leading brands.
- Manufacturers supply most parts for a minimum of ten years, often longer and are constantly looking at ways of extending this timeframe.
- Manufacturers offer advice on care e.g. when and how to service or attempt a DIY repair.
- Training of engineers.
- Fixed price repairs to make costs more transparent.

The greatest barrier to people repairing versus replacing is cost. Reducing VAT for appliance repair costs could help tip the balance in favour of repairs. For example, a common washing machine problem is a leak from a defective door seal. This repair currently costs about £100 but with VAT removed or reduced it could cost a much more affordable £85.



Costs: small appliances

Spare parts | Transport
Labour | Other



Costs: large appliances

Spare parts | Transport
Labour | Other

Buying

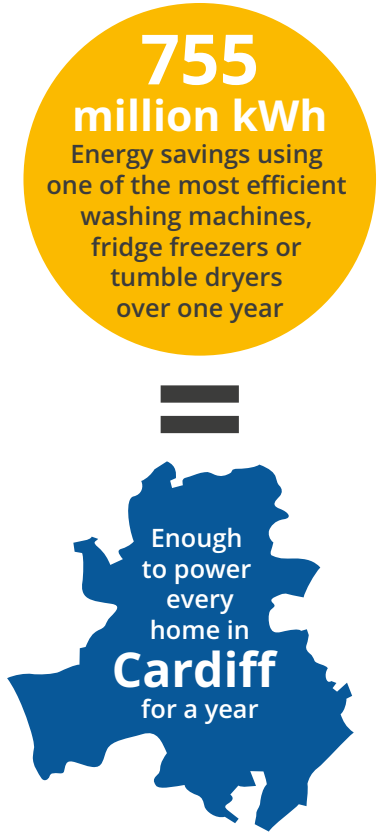
Life tag, not price tag

All households are likely, at some time to need to replace their appliances. But as consumers are driven by the purchase price rather than lifetime energy cost, they need to be persuaded to make long-term choices for themselves and the environment.

If everyone who bought a washing machine, fridge freezer or tumble dryer in the last year had bought one of the most energy efficient models, a potential 755m kWh of electricity would have been saved[9]. This is the equivalent of the electricity produced by 125 wind turbines, enough to power every home in a city the size of Cardiff or a London borough as big as Barnet[10].

People need incentives to look beyond the price tag and at the long-term performance of appliances. Any initiative would also feed through to three other important areas – housebuilders, social housing and private landlords – where currently no incentives exist to install efficient appliances.

The government's ECO+ scheme already exists to help households improve the sustainability of their homes. We believe the government should consider including the installation of greener appliances as part of this scheme.



9 Youreko; Euromonitor International *'Consumer Appliances in the United Kingdom'*, December 2022
10 ONS *'Population and Household Estimates England and Wales Census'*, 2021

Policy comparisons

Other European states are taking steps to incentivise repairs to encourage a circular economy. France has recently introduced anti-waste grants[11] of up to €45 to carry out repairs with accredited professionals. In Sweden[12] tax breaks are offered for repairs – 12% VAT rather than the usual 25%. In Spain, regional governments (Madrid[13] and Galicia[14]) are incentivising with grants for the purchase of more efficient appliances.

Almost 20% of UK domestic energy consumption is derived solely from the use of washing machines, tumble dryers, dishwashers and fridge freezers, and this does not include cookers, or the myriad small appliances people depend on in their homes. Now is the time to expand ECO+ to include appliances and consider all the incentives government can provide.

Government support

Appliances can and should play a role in helping the nation achieve Net Zero. The appliance industry is striving to do its part, but help is required from policy makers to incentivise citizens to make eco-friendly choices when buying, repairing and using appliances. These incentives should include: the purchase of the most energy efficient appliances in 'Green Home Grant' schemes, reducing VAT on repair costs, and – in concert with current government programmes – guidance on usage with clear, applicable measures.

11 Ministry of Ecology, France *'The anti-waste law for a circular economy'*, February 2023
12 Swedish Tax Agency
13 BOCM, Madrid, October 2020
14 Official Journal of Galicia, March 2022