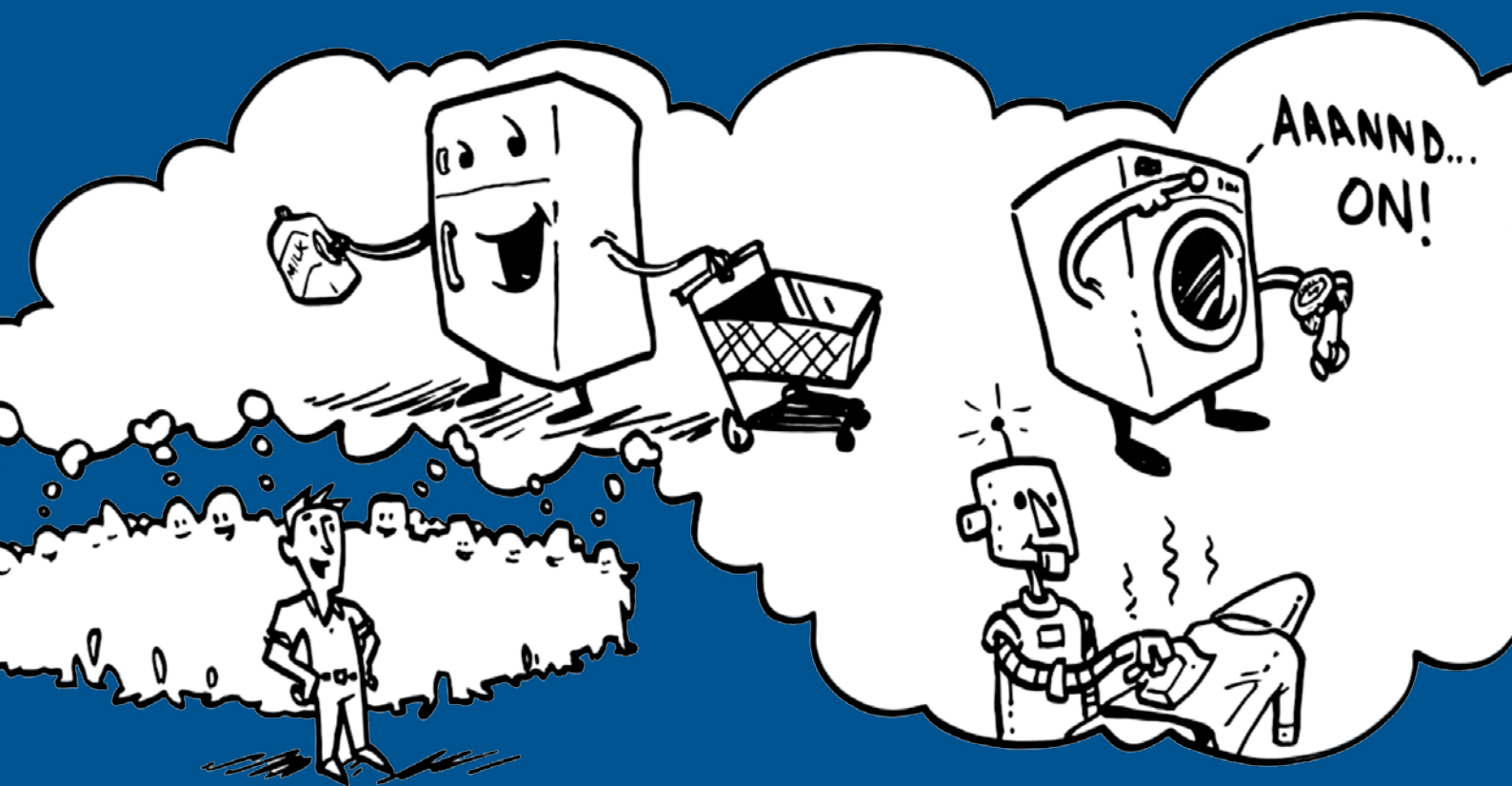


# HOME APPLIANCE 2025: A VISION FOR THE HOME APPLIANCE INDUSTRY IN EUROPE



Promoting jobs, growth, skills,  
innovation and sustainability





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# A message from the President

Welcome to Home Appliance 2025.

This document sets out a vision for the future of home appliance industry in Europe, supported by a 'call to action' for policymakers and new statistics on the socio economic benefits of the sector to the European Union.

We want to secure the competitiveness of the home appliance industry in Europe and advance home solutions and sustainable lifestyles for our consumers by the year 2025.

We hope this document can be a platform for a **European Commission sponsored vision exercise** that addresses the drivers and barriers of the industry's future performance, in partnership with all stakeholders. Additionally we call for a **structured, coordinated and ongoing dialogue** between home appliance manufacturers in Europe and the European Commission.

The home appliance sector is a major manufacturing actor, offering highly skilled, highly paid employment directly to almost a quarter of a million people in Europe; and indirectly to a further three-quarters of a million<sup>1</sup>. Our appliances also improve daily domestic life in all of the 211 million households in the European Union, providing time, energy and health saving solutions to all its citizens.

Despite this, our industry sits at a crossroads. Beyond the general macro-economic environment, manufacturing in the European Union creates challenges, particularly when set in the context of a highly dynamic global marketplace.

At the same time, the pace of innovation and change in home appliance manufacturing is expected to undergo a step-change in the coming decade, as the introduction of the Internet of Things impacts our marketplace.

We have therefore come together as an industry, under the umbrella of CECED<sup>2</sup> to propose a vision 2025 and 'call to action', as the starting point in what we hope can be a more substantive and collaborative exercise.

We thank you for your interest and your consideration.

**Reinhard Zinkann, President, CECED**

<sup>1</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015

<sup>2</sup> The home appliance manufacturing industry in Europe is represented by CECED. Direct Members are Arçelik, Ariston Thermo Group, BSH Hausgeräte GmbH, Candy Group, Daikin, De'Longhi, AB Electrolux, Gorenje, Indesit Company, LG Electronics, Liebherr Hausgeräte, Miele & Cie. GmbH & Co., Panasonic, Philips, Samsung, Groupe SEB, Vestel, Vorwerk and Whirlpool. CECED's member Associations cover the following countries: Austria, Baltics, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## CONTEXT

# Home appliances: working for Europe

## Underpinning the European way of life with innovation

Home appliances like refrigerators, washing machines, dishwashers, ovens, vacuum cleaners and radiators contribute significantly to domestic life and society. Not only do they improve food storage, food preparation and household hygiene, but equally as importantly, they liberate the family from laborious chores, helping them to dedicate time to other pursuits. As a result, economist Ha-Joon Chang has claimed that the washing machine (taken as a proxy for all household technology), has been a more important invention than the internet<sup>3</sup>.



The home appliance industry in Europe has a proud history of developing innovative appliances that support consumer lifestyles. In 2012, the industry made a €1.4 billion contribution to research and development activity in Europe. In recent months, industry leaders have highlighted the prospect

of providing connected home appliances to enable the 'connected home', within the next decade: a trend that Europe can lead.

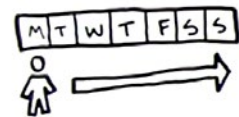
## A European manufacturing success story

Home appliance manufacturing is a sector in which Europe has maintained significant strength. In 2012 approximately 3,600 companies were involved in manufacturing home appliances within the EU 28, including a number of major global brands, many large firms and around 20% of SMEs<sup>4</sup>. The most recent figures available show that the total turnover of the industry in Europe was €48 billion (2013), contributing €53.3 billion to European Union GDP (2011) and €14 billion in tax revenues (2011)<sup>5</sup>.



## High wage, highly skilled jobs

The home appliance industry directly employs approximately 211,000 people in Europe at an average wage of €29,500 per employee<sup>6</sup>. For Europe, unit labour spending is relatively high, reflecting the specialised nature of many jobs in the sector. The scale of the industry's activities in Europe also provides up and downstream employment to many thousands of others. In total, the industry's contribution to employment in the European Union is estimated to be 963,000 jobs.



## On the frontline of ecodesign, recycling and customer value

Home appliance design, manufacturing and labelling has undergone a sustained revolution over the past decades, leading to a highly optimised product offering. Currently at least 23 measures set ecodesign and energy labelling requirements on domestic appliances, from refrigerators (1991) to hoods (2015). Enormous improvements to the design and sustainability of home appliances have been achieved. For example, the average energy efficiency index of a refrigerator placed on the market in 2013 was 40% better than in 2003. In parallel, sales prices of home appliances have declined on average by approximately 4% since 2005, while broader inflation has increased by 20%<sup>7</sup>. This is a great accomplishment for the home appliance industry. The industry also plays a substantial role in taking care of recycling 3.2 million tonnes of discarded equipment each year under the WEEE Directive.

<sup>3</sup> 23 Things They Don't Tell You About Capitalism, Ha-Joon Chang, 2012

<sup>4</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015

<sup>5</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015

<sup>6</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015

<sup>7</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015



## CONTEXT

# But can Europe still work for home appliances?

## Global competitiveness at risk

While currently consumers in the EU enjoy good product choice and see declining prices due to strong competition amongst a plurality of players, the context is changing. High EU energy costs, lagging infrastructure, limited access to finance, and red tape create an unfavourable business environment. The industry is reacting with dynamism to several recent bankruptcies, both through product innovation and company re-organisation; however unfavourable conditions do not support long-term growth. As a result, skills, know-how, assets and businesses that took a century to develop, are under threat.

## Regulation disrupting innovation

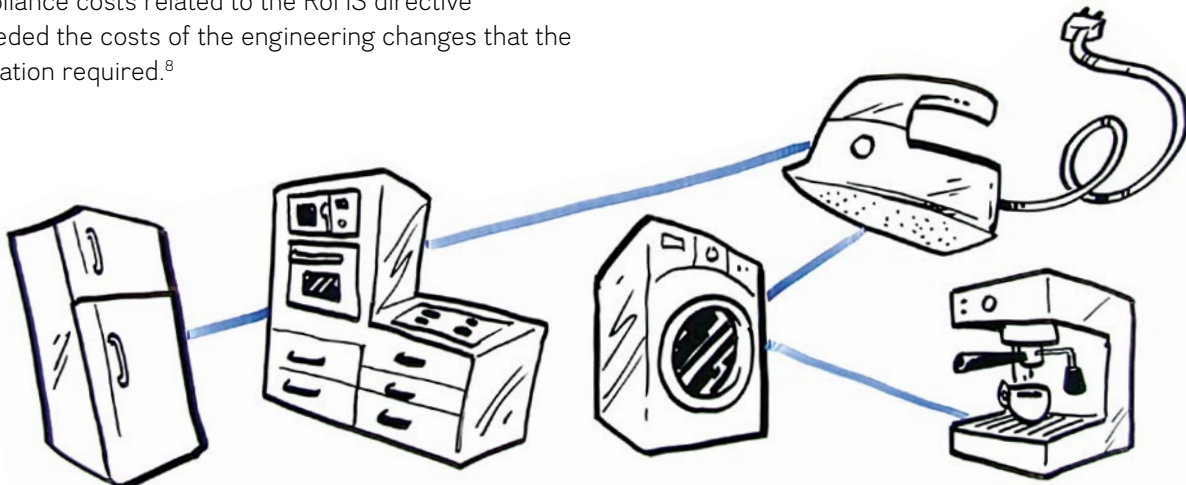
Major and frequently updated design obligations stemming from regulation are disrupting the industry's ability to fulfil its innovation potential in Europe. Not only do changes to the policy framework disrupt the innovation cycle, but the burden of regulatory compliance is having a significant dampening impact on the industry's ability to commit resources where they are needed. For example, research in 2008 for the European Commission found that administrative compliance costs related to the RoHS directive exceeded the costs of the engineering changes that the regulation required.<sup>8</sup>

## Energy savings and revenues could be lost due to limited product choice

Significant design obligations on newly manufactured home appliances have increased production costs, but still maintained appropriate levels of consumer choice. However, if the European Commission overcooks ecodesign by abandoning the least life cycle cost principle, consumer choice could be lost. Limited choice is likely to reduce sales, and without product sales the energy efficiency potential of new energy efficient appliances will not be translated into real energy savings.

## Shortfall in future European engineering skills

Making the shift to digital manufacturing in Europe and maintaining competitiveness in the region will require access to an ever more specialised labour pool. Comparatively however, the EU has now already fallen critically far behind other regions in its promotion of and investment in developing the next generation of engineers.



<sup>8</sup> Study on RoHS and WEEE Directives. Brussels: DG Enterprise and Industry. Arcadis, 2008

## HOME APPLIANCE INDUSTRY

# Vision 2025

The following vision and call to action were developed through a collaborative process involving CECED member companies: Arçelik, Ariston Thermo Group, BSH Hausgeräte GmbH, Candy Group, Daikin, De'Longhi, AB Electrolux, Gorenje, Indesit Company, LG Electronics, Liebherr Hausgeräte, Miele & Cie. GmbH & Co., Panasonic, Philips, Samsung, Groupe SEB, Vestel, Vorwerk and Whirlpool.

Our vision for 2025 is to be:

**“An innovative home appliance sector in Europe enabled to advance sustainable lifestyles, achieve global leadership and provide skills and growth”**



To achieve this vision we call upon European policymakers to work with us to:

- ✓ Achieve smarter and better regulation
- ✓ Advance sustainable lifestyles
- ✓ Make the connected home a reality
- ✓ Accelerate Europe's economic growth

The foundations of this partnership would benefit from the establishment of:

- ✓ A European Commission sponsored, multi-stakeholder vision exercise
- ✓ A platform for structured, coordinated and ongoing dialogue between the home appliance industry in Europe and the European Commission



## PILLAR 1

# Achieve smarter and better regulation

In order to achieve smarter and better regulation, we call upon the European Commission to:

### 1. Establish a structured, coordinated and ongoing platform for dialogue between the home appliance manufacturing industry and the European Commission.

As one of Europe's major manufacturing industries operating in an increasingly competitive marketplace, home appliance manufacturers in Europe call upon the European Commission to establish a platform for ongoing dialogue.

Understanding the differentiated condition and needs of the home appliance sector, relative to other areas of manufacturing, is of growing importance, particularly if the EU is to establish itself as a leading manufacturing hub for the connected home.

We want to work with you to develop a policy roadmap from now until 2025. An opportunity exists today to dedicate resources in support of the industry's desire to play an active role in supporting President Juncker's jobs, growth and competitiveness agenda.

### 2. Ensure that when policy is needed it is clear, consistent, supports our freedom to innovate and creates the conditions for competitiveness.

Home appliance manufacturers in Europe believe that unintended impacts of cumulative layers of regulation are currently stifling important and expected innovations. Also, that they increase costs and reduce design flexibility, resulting in a loss of competitiveness globally.

One example is the duplication of energy efficiency regulation that imposes energy efficiency standards on components within a product (e.g. a motor) as well as on the whole appliance (e.g. a washing machine). This duplication introduces rigidity and limitations into the design process, and is unlikely to optimise the energy efficiency performance of the appliance, or the best lifecycle cost.

This lack of coordination between policies also requires company product development teams to divert efforts from research and development in order to meet multiple legal deadlines. The lack of a streamlined approach to product regulation affecting home appliances creates significant work and expense for the manufacturers and detracts from investment in innovation.

### 3. Apply the New Legislative Framework to carefully calibrate between the merits of regulation and market-based solutions when considering any future legislation.

The home appliance industry in Europe is a proven promoter of energy efficiency and environmental protection.

Legislation, when needed, can be an effective tool to help ensure these goals; however it is important to carefully judge when other mechanisms may be able to achieve a response that meets consumer needs, maintains freedom to innovate, and supports competitiveness.

In order to achieve this, we propose the following three-step process to support decision making on the need for and scope of legislation:

- Step 1: Verify the relevance of an environmental or energy-related demand
- Step 2: If found to be relevant, choose the optimal vehicle (regulation or market approach) and
- Step 3: In case of regulation, adhere as much as possible to the New Legislative Framework by establishing the essential requirements in regulation, and elaborating the details in harmonised standards.



## PILLAR 2

# Advance sustainable lifestyles

In order to advance sustainable lifestyles, we call upon the European Commission to:

## 1. Safeguard our freedom to commercialise new time and resource saving functions for the consumer.

The growth of our industry is directly linked to our freedom to innovate for our consumers. We improve lifestyles with new time and resource saving functions; unlock new possibilities addressing unexpressed and changing consumer needs; and enhance consumer experience through constant innovation in ergonomics and design.



Today's challenge: the prospect for smart and connected home appliances that offer a range of new functions to consumers (including efficient energy management and even active participation in the energy market) is tantalising. However, our ability to commercialise these functions could be lost if constrained by national energy regimes. A single market approach to the energy union would better support the innovation of smart appliances for European consumers.

The benefits accrued by supporting our freedom to innovate extend far beyond the industry. Nordhaus (2004)<sup>9</sup> found that “only a minuscule fraction of the social returns from technological advances over the 1948-2001 period were captured by producers, indicating that most of the benefits of technological change are passed on to consumers rather than captured by producers.”

## 2. Work with us to ensure increased consumer choice to make all lifestyles sustainable.

Becoming an industry that sells millions of appliances to European consumers each year has required us to pay close attention to understanding the diversity of consumer wants and needs.

European energy efficiency regulation focuses on average use patterns of home appliances. This has already led in recent years to reducing consumer choice, potentially denying the most cost and energy efficient solutions for consumers with outlying use patterns. For example a consumer who is purchasing white goods for a holiday home that is rarely used, may no longer be able to find the most appropriate solution in Europe.

As an industry that has a proven track record of voluntary eco-efficiency innovations (e.g. CFC phase out), we are confident that with the right conditions in place, that protect our freedom to innovate, market competition will enable us to re-introduce greater choice for all consumer lifestyles.

One essential precondition for this is to maintain the least life cycle cost principle in European regulation.

## 3. Turn energy efficiency potential into real energy savings.

Continuous improvements to the design of home appliances has led to greatly enhanced energy efficiency and performance, but also higher production costs and reduced consumer choice. These factors, in combination with the economic uncertainty of the past few years have contributed to falling sales figures for new highly optimised, energy efficient products. As such, the potential energy savings that could be achieved as a result of currently available product ranges are not being fully realised. We would like to work with you to seek solutions that will enhance highly efficient product uptake and thereby reduce household energy consumption.

<sup>9</sup> <http://www.nber.org/papers/w10433.pdf>



## PILLAR 3

# Make the connected home a reality

In order to make the connected home a reality, we call upon the European Commission to:

### 1. Establish a 'Connected Appliances' platform with policymakers, consumers and industry to discuss trends and market uptake as part of the EU Digital Single Market.

We need an agenda to establish and capitalise on the conditions in which Europe can play a leading role in manufacturing the connected home appliances of the future. We call upon the European Commission to establish a platform in which policymakers, industry and other stakeholders can together assess the scale of the opportunity for the European Union and the structures necessary to ensure its fulfilment.

### 2. Establish the pre-conditions for further industry investment in appliances for the connected home by establishing clear and consistent policy.

Innovative businesses require legal certainty to have the confidence to invest in new technologies. In order to create the pre-conditions for further industry investment in appliances for the connected home, the European Union must first set clear and consistent market guidelines that provide the legal clarity on issues including data privacy and data security.

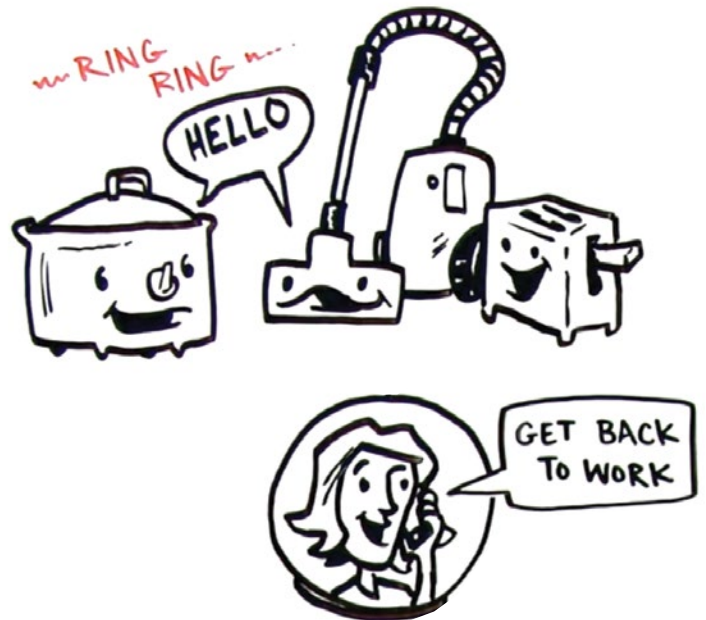
Furthermore, setting clear standards on the interoperability of appliances in the connected home will benefit consumers and help establish such products that have been designed and manufactured in Europe as a global reference.

With this framework in place, the home appliance industry can invest further in a free, functioning and competitive European marketplace.

### 3. Coordinate with industry to align investments in technology innovation with supporting infrastructure.

Realising the full potential of the connected home in Europe cannot be achieved by the home appliance industry alone. For innovative, connected appliances to work effectively and deliver their full benefits to the European consumers and society, appropriate national and domestic infrastructure will also be required.

For example, the greater penetration of high-speed internet connections throughout the European Union, and ultimately the wide availability of gigabit internet speeds will greatly facilitate the proper functioning of the Internet of Things.



## PILLAR 4

# Accelerate Europe's economic growth

In order to accelerate Europe's economic growth, we call upon the European Commission to:

- Promote EU engineering skills by partnering, alongside key industry associations, in a high-level skills council to define future skills needs, education and training programmes, and life-long learning initiatives.**

The role of engineers in European manufacturing operations is increasingly trending towards higher skilled, more competitive positions. The conversion to digital manufacturing processes will also create ever greater competition for jobs within the home appliance manufacturing sector.

We therefore call upon the European institutions to work with us to establish a high-level council drawing together key representatives of those industries for which engineering remains a core operational need to establish a flexible future strategy for Europe; including specific provision to be made for home appliance manufacturing in the Erasmus+ sector skills alliance programme.

In this context it is important to remember that for each job that can be maintained within home appliances manufacturing in Europe, between three and four additional jobs are created by indirect and induced employment.<sup>10</sup>



- Enhance market surveillance by working with national governments to improve best practice sharing and cooperation; thereby unlocking the potential of existing EU regulation.**

Strengthening pan-EU market surveillance can help ensure protection from non-compliant products for consumers and the environment, as well as ensure equal competition amongst economic actors. As such it is vitally important to the ongoing competitiveness of home appliance manufacturing in Europe.

Currently, home appliance manufacturers in Europe are penalised due to products that are non-compliant with EU standards gaining access to the market place.

Additionally, divergent interpretation and application of EU legislation by national market surveillance authorities in Europe disrupt the EU single market for home appliance manufacturers.

To address these concerns in the short and medium term, we encourage the European Commission to build on already existing, or envisaged structures such as the ADCO groups or a European Market Surveillance Forum.

By creating dedicated, product related focus groups consisting of experts from the European Commission, Member State authorities and relevant stakeholders (industry, consumer groups, NGOs, test labs) it would be possible to act proactively, rather than only reacting to already existing problems. These groups could identify potential problems, agree on solutions, and develop coordinated action.

In the long term, we call upon the European Commission to set up a dedicated EU agency supporting national market surveillance authorities.

We believe these steps would help unlock the full potential of existing regulation.

<sup>10</sup> The Economic Impact of the Domestic Appliances Industry in Europe, Europe Economics, March 2015

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