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APPLiA Response to Call for Evidence for WEEE Evaluation

Executive Summary

APPLiA welcomes the evaluation of the WEEE legislation which will provide an opportunity to assess fully if the current WEEE Directive remains fit for purpose. Please find below our initial comments in response to the Commission's call for evidence consultation. We look forward to working with the Commission in the months to come, as the evaluation work progresses.

Key Challenges of WEEE

Extended Producer Responsibility (EPR) concept is outdated
Other actors outside EPR channels, driven by commercial considerations, handle significant volumes of waste. These volumes do not enter formal EPR systems. Not all WEEE is being recovered and recycled properly. While producers have taken an active role in fulfilling their legal obligations, other WEEE actors in the value chain also have responsibilities to ensure all WEEE is accounted for and treated properly, including the important role of consumers in disposal of their electrical products.

Much WEEE is not reported or accounted for
While producers and producer schemes are asked to report the WEEE flows collected and treated, other actors handling WEEE can easily by-pass such reporting obligations, even if the WEEE they handle is properly collected and treated.

Unrealistic WEEE collection targets
Difficulties experienced by almost all Member states in reaching the collection targets (for which they are responsible) opens up the debate about how realistic and fit for purpose the collection targets as defined in the Directive actually are. Through the implementation of the WEEE Directive at national level, we have seen a common approach for Member state authorities to delegate collection responsibility to manufacturers. In practice, this cannot work because the manufacturers are no longer the only significant actor and have no enforcement powers.

Raising the bar on treatment[1] of WEEE across the EU
There is still not a harmonised approach across the EU on the quality of WEEE treatment. Not all actors handling WEEE are recycling according to the EN treatment standards.

[1] For the purposes of the WEEE Directive, the definitions of 'hazardous waste', 'collection', 'separate collection', 'prevention', 're-use', 'treatment', 'recovery', 'preparing for reuse', 'recycling' and 'disposal' laid down in Article 3 of Directive 2008/98/EC shall apply

Our Recommendation - Bring WEEE legislation in line with market realities and the current situation with WEEE management today

WEEE Are All Responsible

WEEE legislation should target all actors dealing with WEEE and give them the same obligations as producers under the extended producer responsibility principle. As WEEE is and will ever more become a resource, markets will be developed in which a level playing field needs to be ensured (which is currently not the case). The Commission should develop requirements for all actors under the future WEEE legislation. One of the key principles of WEEE legislation must be that all actors that can influence collection rates, recovery and treatment should hold responsibility, based on their actual means of leverage and their access to a significant proportion of all WEEE generated.

Better monitor WEEE flows and ensure all WEEE is reported

Better measures to properly report and recycle WEEE and closing the gaps in raw materials' data information and collection is the first and fundamental step to improve knowledge on the quality and quantity of recovered secondary raw materials from WEEE. All treated WEEE, in line with the quality treatment standards, should be reported and registered as being recycled so that these volumes are reflected in the total collection and recycling results in a given jurisdiction. A shared responsibility between all WEEE actors can only be effective if there is an organised, coordinated system/body in place that is monitoring WEEE management.

Review the EU target setting methods

In addition to the establishment of a shared responsibility system to support in achieving collection rates, where all actors should contribute to the attainment of the target, the way the collection target is set and calculated should be reevaluated. We would recommend that the Commission investigate the possibility to continue to use a collection target based on the EEE 65% POM based on the average lifespan of the individual WEEE category rather than a blanket 65% based on the average of the previous 3 years POM.

Recycling of WEEE according to EN treatment standards

WEEE is a valuable resource for the secondary raw materials market but also contains hazardous substances and materials which have to be properly handled and disposed of (in some cases). To ensure uniform conditions for the implementation of the WEEE Directive, the Commission should ensure that EN 50625 / EN 50614 standards are the reference for WEEE treatment. Enforcement of recycling treatment in line with these standards would help ensure market dynamics are not diverting flows from the formal system towards illegal activities.

Empower the role of consumers

The role of consumer behaviour is an important aspect to consider in the drive to increase material recovery from WEEE. Engaging consumers in adopting sustainable choices, particularly in the ways they dispose of their electrical and electronic products can help in increasing collection and recovery rates.

Below we elaborate in more detail on these challenges and recommendations.

Key challenges of the WEEE Directive

Much has changed in the world of recycling e-waste since the introduction of the first WEEE Directive almost two decades ago. Producers and Producer Responsibility Organisations (PROS) have made considerable investments ensuring the collection, recovery and recycling of WEEE. Across EU Member states there are implemented specific WEEE regulations and national systems in place to address the requirements of the legislation. However, there are still challenges in managing properly all of the WEEE generated across Europe. The Global E-waste Monitor 2020 reports that only 17 per cent of global e-waste flows were officially reported as collected and responsibly recycled in 2019[2]. Even though Europe has the highest documented formal e-waste, the Global E-waste Monitor estimates that, in 2019, 12 Mt (16.2 kg per capita) of e-waste was generated in Europe but only 5.1 Mt - 42.5% of that e-waste was documented to be collected and properly recycled.

Better measures to properly report and recycle WEEE and closing the gaps in raw materials' data information and collection is the first and fundamental step to improve knowledge on the quality and quantity of recovered secondary raw materials from WEEE.

Below we explore the key reasons why we think there is still a shortfall in the WEEE legislation fulfilling its full potential.

The concept of EPR is outdated

The Extended Producer Responsibility Principle, as set up under the original WEEE Directive, is out of date and has not been meeting the development of market realities. Since the conception of the first Directive, we have witnessed a significant change in the market dynamics affecting WEEE.

While producers have taken an active role in fulfilling their legal obligations and to ensure that treatment is undertaken correctly over the last decades, it has not been easy for EPR legislation to adapt to the reality of waste and resource markets. A number of problems limit the effectiveness of the EPR approach which has led to difficulties and challenges in monitoring and tracking waste flows, achieving collection and recycling targets and preventing waste undergoing substandard treatment or being illegally exported. The landscape has clearly changed and the value of WEEE is playing a significant role in its collection and recycling by actors other than producers. This can lead to market distortions creating additional administrative burdens for the producers and difficulty for Member states to reach the achievement of national targets as many of WEEE flows are unreported.

There has been the assumption that collection and recycling waste always costs money. It still does in some cases for WEEE that is made up of very old appliances that may need special treatment, due to

[2] Forti, V., Baldé, C. P., Kuehr, R., & Bel, G. (2020). The Global E-waste Monitor 2020: Quantities, flows, and the circular economy potential. (p. 120). United Nations University (UNU)/United Nations Institute for Training and Research (UNITAR) – co-hosted SCYCLE Programme, International Telecommunication Union (ITU) & International Solid Waste Association (ISWA). https://www.itu.int/en/ITU-D/Environment/Documents/Toolbox/GEM_2020_def.pdf

the substances or gases they may contain. The classic example is for refrigerators containing CFC gases. Such WEEE requires special end of life handling and treatment to ensure there is no harmful impact on the environment. In these cases, producers continue to scrupulously take care of such WEEE.

In the majority of cases, reality has shown that the revenues, derived from the recovered materials for a number of categories in the waste stream, including e-waste, can outweigh the costs of collection, treatment and management. This is due to increasing commodity prices, the inherent value of many materials, increased efficiencies in the collection and recycling of waste and the avoidance of hazardous materials.

As a result, other actors outside EPR channels, driven by commercial considerations, handle significant volumes of waste. These volumes do not enter formal EPR systems. With growing experience WEEE has proved to be a complex waste stream to manage. Commercial actors, such as scrap dealers, installers and often also municipalities and retailers, have a significant impact on the total collection results.

As the market for WEEE has become a competitive arena with value driven waste collection and treatment activities, a large part of precious resources remains undocumented and is not coming back into material loops as secondary raw material. This gap is hindering the circular economy and making it impossible for materials to be reused not only in producing some new home appliances, but also in other products, sectors and industries.

Much WEEE is not reported or accounted for

As outlined above, many 'official' and 'unofficial' commercial collectors handle WEEE, from scrap dealers, to retailers, to municipalities, to waste management companies, to recycling companies and others. While producers and producer schemes are asked to report the WEEE flows collected and treated, other actors handling WEEE can easily by-pass such reporting obligations, even if the WEEE they handle is properly collected and treated.

The channels through which WEEE is collected are very diverse and it is difficult to determine how much WEEE actually arises, especially the quantities of WEEE that are captured, but not recorded. This means much of the precious resources from WEEE remains undocumented, which means it is not known if they actually come back to material loops as secondary raw materials.

This gap in actual WEEE generated and the amount formally accounted for has been the subject of many projects and studies that have mapped WEEE Flows over the last 15 years[3]. It is clear there is a disjointed approach on reporting of WEEE collected. There needs to be much more harmonisation of reporting of takeback of WEEE by other actors in the chain, particularly among retailers, some who offer the 1 for 1 takeback or even free takeback, and some who do not.

Unrealistic WEEE collection targets

The introduction of the producer responsibility principle with the implementation of the WEEE Directive has driven producers – either by participation in PROs, producers or individual systems – to collect as

[3] https://libraweee.com/ - The LibraWEEE is a bibliographic compilation of resources such as projects, studies, guidelines and initiatives regarding e-waste, its dynamics and related activities. The WEEE Forum maintains and updates this unique database.

much WEEE as possible, thereby contributing to the achievement of the member states' collection target. Producers have widely strived for maximising the collection, demonstrating that way the producers' commitment to deal with WEEE.

Nevertheless, many EU Member States are facing challenges meeting e-waste collection targets. 26 Member States were not reaching the 65% target in 2019. 18 of the EU Member States were above the 45 % collection rate, applicable until reference year 2018[4].

Difficulties experienced by almost all Member states in reaching the collection targets (for which they are responsible) opens up the debate about how realistic and fit for purpose the collection targets as defined in the Directive actually are. Many factors impede formal collection and reporting such as citizens behaviours, competition for WEEE from scrap collectors, lack of reporting of professional WEEE reuse and recycling, lack of collection of WEEE due to exports for reuse, illegal exports of WEEE, long lifespans of certain EEE, such as PV panels, cooling appliances and others and inadequate enforcement as well as a lack of monitoring of what is going on in the WEEE market. The market for WEEE has also been impacted by the variations in the definition of waste and the move in WEEE legislation from a closed defined list of WEEE to an open scope.

In addition to market aspects, there is much more focus on resource efficiency and circularity in the political landscape. With the aim to make sustainable products the norm, there has been a concerted effort in EU policy measures towards waste prevention. Producers are therefore also investing in waste prevention measures which will ultimately impact the WEEE generated and the collection rate and targets. WEEE legislation should focus on increasing the levels of WEEE collected and recycled properly across the EU. Preventing waste from arising and work towards a circular value chain should be handled in the Ecodesign for Sustainable Products Regulation (ESPR).

The infeasibility for Member States to reach the targets is further demonstrated in the UNITAR study "In-depth review of the WEEE Collection Rates and Targets."[5] Member States are not benefiting from enough flexibility based on their market situation simply because the two possible methodologies for the calculation of the collection rate - weight of EEE placed on the market and WEEE generated - are themselves compromised by multiple factors affecting their effectiveness. As the UNITAR Study highlights, EEE POM methodology (65%) has shortcomings due to the issue of the open scope which is not harmonised and the problem of free riders, and the WEEE Generated methodology is extremely dependent on accurate and complex data on EEE POM and product life spans which are not available and creating too many uncertainties in its calculation. Neither of the two methodologies is appropriate to properly represent the amount of WEEE to be feasibly collected in each Member State. Flaws in the collection methodologies are becoming more apparent.

This situation will remain and only get worse, particularly for cases where penalties will be applicable for waste operators, if the implementation of Article 7 of the WEEE Directive is not reassessed to better match the reality of the situation in Member States. It is necessary to consider the amount of WEEE

[4] Eurostat - https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Waste_statistics_-_electrical_and_electronic_equipment
[5] UNITAR, "*In-depth review of the WEEE Collection Rates and Targets*", https://weee-forum.org/wp-content/uploads/2020/11/In-depth-review_WEEE-Collection-Targets-and-Rates_UNITAR_2020_Final.pdf, November 2020.

that is pragmatically feasible to collect and based on that, develop an appropriate methodology of calculation allowing better harmonisation of reporting and collection at European level.

As one example of collection not meetings today's realities, the WEEE Forum published a detailed position paper[6] clearly explaining the current situation with PV panels as the number placed on the market is increasing every year, but the waste is not collected in significant quantities. With the absence of clear rules in the WEEE Directive for this particular product and because of the difficulties to reach the collection target of 65% based on the POM methodology, we end up with a difficult situation where PROs are required to compensate the low return of PV panels by collecting higher amounts of other category 4 waste appliances, directly impacting the proper collection of other large appliances.

This example has highlighted the need to consider that the different categories of WEEE should be considered in different ways - no one fits all solutions in terms of collection rate for all WEEE streams, particularly with an open scope.

In view of a future revision of the WEEE Directive, we believe it will be a good opportunity to rectify this situation by providing clarifications and/or modifications in the future legislative text. European legislators should reassess Article 7 of the WEEE Directive and to develop a more appropriate methodology of calculation allowing better harmonisation of reporting and collection at European level.

Raising the bar on treatment of WEEE across the EU

Both WEEE and Waste legislation require the application of "state of the art" and "proper" (Article 8) treatment, collection and logistics of WEEE. From 2014 to 2020, APPLiA members were involved in the CENELEC development of European standards EN 50625 series and EN 50614 for WEEE, which cover the process of collection, transport, preparation for reuse and treatment[7] of WEEE (see here[8]). They lay down specifications and clear procedures required to put the principle of "state of the art" treatment into practice – also in accordance with legislation regarding Waste Shipments, General Data Protection, ADR2, General European Health and Safety and Industrial Emissions. The standards and technical specifications were translated into national languages and became the base for three certification bodies. These organisations provide certification services to collection, reuse and treatment operators meeting the criteria within the EN standards.

Currently the standards are actively being used. Eight countries have incorporated the standards into their national legislation, making compliance against the EN 50625 mandatory by law (FR, NL, CZ, IE, LX, BE, SI, LT), other countries like Romania reached agreements where PROs require compliance against the standards by their service providers. The inclusion of the standards into these national regulations is a critical factor ensuring the number of qualified auditors and facilities certified are increased, and in the environmentally sound treatment of WEEE. Many WEEE treatment facilities have been audited in accordance with CENELEC normative requirements, contributing to improved waste management and harmonisation of treatment practices throughout Europe.

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[6] WEEE Forum (2021), *Issues associated to photovoltaic panels and compliance with EPR legislation* - https://weee-forum.org/wp-content/uploads/2021/06/WEEE-Forum-PV-Panels-Issue-Paper-2021-Final.pdf

[7] https://www.cencenelec.eu/media/CEN-CENELEC/AreasOfWork/CEN-CENELEC_Topics/Environment%20and%20Sustainability/Quicklinks%20General/Documentation%20and%20Materials/weee-brochure.pdf

[8] https://ec.europa.eu/environment/waste/weee/standards_en.htm

However, there is still not a harmonised approach across the EU to the quality of WEEE treatment. More efforts are needed to ensure all WEEE collected, regardless by which actor, is recycled according to the EN treatment standards. Enforcement of recycling treatment in line with these standards would help ensure market dynamics are not diverting flows from the formal system towards illegal activities.

Recommendation

Bring WEEE legislation in line with market realities and the current situation with WEEE management today

Achieving the overall aims of WEEE legislation will only be possible when all quantities of WEEE are accounted for and proper disposal by the consumer is tackled. In general, there are sufficient policy instruments covering end-of-life handling but consistent implementation efforts by all actors in the WEEE chain, especially the market surveillance authorities, are needed to maximise recovery and combat illegal disposal and export of WEEE.

WEEE are all responsible - all actors in the WEEE value chain should have legal obligations under the WEEE legislation
One of the key principles of WEEE legislation must be that all actors that can influence collection rates, recovery and treatment should hold responsibility, based on their actual means of leverage and their access to a significant proportion of all WEEE generated.

Collection responsibilities should be assigned to all actors who have access to the various WEEE flows. All private and public entities who have access to WEEE and therefore are involved in the collection, logistics, preparation for reuse, refurbishment, treatment, or recycling of e-waste, or in the associated monitoring, legislative and enforcement activities, should be subject to legal obligations. The UNITAR report clearly identifies the actors involved in WEEE activities. These include, producers, producers-PROS, retailers, local authorities & municipalities, recyclers, scrap dealers & traders, consumers, preparation for reuse operators, national authorities.

The legislation should define clear obligations and requirements for each actor. Each actor should be required to report the quantities they collect and treat. Treatment should be required in line with the EN Standards.

With the introduction of such an "all actors concept", the collection and treatment of WEEE will be driven by market forces: anybody handling WEEE would have the obligation to register and report quantities as well ultimate recycling and recovery rates. In this system, there would no longer be any need for the producer to grant subventions to any party performing collection efforts, as all collected WEEE, whatever legal channel it ends up in, will be reported to the responsible authorities. At the same time allowing commercial recyclers to handle WEEE would not excuse producers from all their responsibilities under the EPR principle; it only means that producers and PROs do not need to compete with commercial actors for access to valuable WEEE. Producers would still remain committed to handle

100% of the WEEE coming back into producer streams. As this attempt to regulate an open market for WEEE shows, producers do not get back all the appliances and materials used. Some end up in recycling streams that are not accessible to the producers. This, in turn, must be taken into account in the objectives of a circular economy and therefore be included in the scope of the ESPR requirements.

For effective control and enforcement, Member States should remain responsible for the attainment of the minimum collection rate as laid down in WEEE legislation but the establishment of a shared responsibility system would support in achieving these collection rates - all actors should contribute to the attainment of the target.

Better monitor the WEEE flows and to include all WEEE flows in the collection target calculation

All treated WEEE, in line with the quality treatment standards, should be reported and registered as being recycled so that these volumes are reflected in the total collection and recycling results in a given jurisdiction. A shared responsibility between all WEEE actors can only be effective if there is an organised, coordinated system in place that is monitoring WEEE management.

In many countries a clearing house has been set up as an impartial entity that monitors, coordinates and financially clears the allocation of WEEE collection for each registered actor - depending on the country this always includes the producers but may also include municipalities, retailers, recyclers, other waste organisations. The clearing house may also report to the authorities.

The clearing house concept should be further for future WEEE legislation that would legally oblige all actors to fulfil responsibilities under the legislation. The following elements should be considered for a future multi-stakeholder coordination body involving all WEEE actors:

- Registry for all actors
- Monitoring and reporting WEEE flows
- Supporting in enforcement activities
- Reporting rates collection to authorities
- Ensures transparency of data - at aggregated level
- Accredited by the competent authorities

The Commission should review the EU target setting methods

Based on the experience of some Member States, ensuring an all actors approach and monitoring all WEEE flows certainly increases collection rates but it is not a guarantee for reaching collection targets, therefore a revision of the calculation methodology of collection targets is also required.

Member states have the most experience in using the 65% of EEE POM target because it is more straightforward and uses readily available data. However, there have been problems encountered as the POM target is not directly related to the amount of WEEE that can be collected in a country. POM is also very sensitive to fluctuations in the consumption of EEE, particularly true during times of recession or for newer technologies such as PV panels where the collection rates are very low as they are not yet

WEEE arising due to their long lifetime. The calculation of the target for PV panels is not reflecting the number of PV panels available as WEEE.

We would therefore recommend that the Commission investigate the possibility to continue to use a collection target based on the EEE 65% POM but consider 2 novelties:

1. **Setting collection targets per WEEE category.** This would deal with issues that have been arising in different countries due to the open scope where many new types of EEE products are being placed on the market but due to their lifespan may not be present in the WEEE available for collection.

2. **POM target based on average lifespan rather than on average of the previous 3yrs.** Consider different time frames than the "one size fits all" average sales of the previous 3 years. In line with the need for different targets for different WEEE categories, a target for each category should be assessed in line with the average lifespan of the product (time product is POM until it has been discarded as waste).
   Example: Take the average lifetime of the product category - e.g. 12 years for large white goods => using e.g GFK data as a basis. Take 5 years around that age: e.g. for large white goods: from year 10 to 15. Take the average POM on that span as a basis: For 2022: reference is 2010. Median calculation span: for POM: 2008 - 2012. The 65% target would be based on this average POM.

Depending on the category, it may be also necessary to further assess the level of granularity and move even to product families within product categories. e.g washing machines within the category of large appliances. How the categories could be assessed could also be further investigated by the Commission. The 10 WEEE categories were reduced to 6. Particularly due to the open scope since 2018, it may be more suitable to divide WEEE into even more categories. The UNU-Keys classification could be a basis for further considerations on how categories could be more effectively arranged to be able to set effective category specific collection targets.

All WEEE collected, regardless by which actor, should be recycled according to the EN treatment standards

WEEE is a valuable resource for the secondary raw materials market but also contains hazardous substances and materials which have to be properly handled and disposed of (in some cases). To ensure uniform conditions for the implementation of WEEE legislation, the Commission should ensure that EN 50625 / EN 50614 standards are the reference for WEEE treatment. The process of making and updating standards is transparent and consensus-based. The EN standards are reviewed every five years and the Technical Specifications every three years, thereby reflecting the state-of-the-art of technologies and market needs.

WEEE treatment is a complex chain of activities undertaken by several operators that can be located in various Member States. Minimum standards guarantee that all parts of the chain are fulfilling the same conditions. The EU should promote these European standards for WEEE at international level with its trading partners to ensure a global level playing field.

The existence of these state-of-the-art EN standards for the treatment, including recovery, recycling and preparing for reuse, of WEEE have made the specifications in Annex 7 of the current WEEE Directive redundant. In that respect, there is no longer the need for such an annex in future WEEE legislation. As outlined above, we would instead recommend that the Commission should ensure that EN 50625 / EN 50614 standards are the reference for WEEE treatment in the legislation. Enforcement of recycling treatment in line with these standards would help ensure market dynamics are not diverting flows from the formal system towards illegal activities.

Recycling technologies vary considerably across the EU. With regard to plastics, for example, there is much improvement potential in recycling technologies that could enhance the supply of recycled plastics of a high quality. Requirements on recycling quality, especially for plastics, would improve the recycling process to ensure high quality of recycled materials that would feed material loops. We support the development of quality grades for plastic recyclates and welcome the standardisation work that will be brought forward by the EU Standardisation Bodies in the context of the mandate coming from the Circular Plastics Alliance[9].

Additionally, Preparation for Reuse Operators should be obliged to carry out their operations in strict accordance with EN 50614. The suitability of WEEE that can be prepared for re-use should be assessed at the first handover point from consumer to collector and be collected in a protective way in order to preserve the product as much as possible.

The importance of the role of consumers

The role of consumer behaviour is an important aspect to consider in the drive to increase material recovery from WEEE. Engaging consumers in adopting sustainable choices, particularly in the ways they dispose of EEE can help in increasing collection and recovery rates. Outreach to consumers has greatly improved over the last years thanks to the strong efforts and investments of compliance schemes and other producer's joint bodies in promoting collection. Enforcement by competent authorities is also key to help ensure WEEE is not ending up in the waste bin. While large appliances are recycled to a very high degree, there is still room for improvement in the collection and recycling of smaller appliances. Involving other, and more actors in the collection process could help address existing challenges. Collection points in general retailers should be increased and there should be better and more harmonised application of the takeback options offered by retailers when purchasing new/replacement products.

For example, the producer responsibility organisations in the WEEE Forum[10] that manage the collection of WEEE are constantly working to make the proper disposal of small WEEE simple and convenient for consumers. This is further enhanced through consumer campaigns as part of the International E-Waste Day[11] on 14 October each year.

[9] M/584 COMMISSION IMPLEMENTING DECISION of 1.8.2022
on a standardisation request to the European Committee for Standardisation and the European Committee for Electrotechnical Standardisation as regards plastics recycling and recycled plastics in support of the European Strategy for Plastics in a Circular Economy
[10] https://weee-forum.org
[11] https://weee-forum.org/iewd-about/

Closing remarks

APPLIA members have a longstanding experience with WEEE and other relevant environmental legislation impacting their product scope. The volumes of WEEE collected and properly recycled have steadily increased through the investments made by industry, in line with the WEEE Directive. Better recycling techniques have been developed through cooperation between producers and recyclers and the introduction of European standards with respect to collection, handling, storage, recycling, preparation for reuse and treatment of WEEE. We are ready to work with the Commission and the consultants conducting the evaluation study to investigate the challenges and the potential solutions to further improve the level of WEEE collected and properly treated and recycled across the EU.

APPLiA - Home Appliance Europe represents home appliance manufacturers from across Europe. By promoting innovative, sustainable policies and solutions for EU homes, APPLiA has helped build the sector into an economic powerhouse, with an annual turnover of EUR 50 billion, investing over EUR 1.4 billion in R&D activities and creating nearly 1 million jobs.