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01_Eye catcher: EU Parliament ITRE Committee votes in line with AIE's position for binding targets in energy efficiency

In accordance with AIE's position, the AIE is very pleased with and welcomes the vote of the European Parliament's Industry, Research and Energy Committee (ITRE) on 28 November last (although with a tight majority) for **a binding target to reduce energy consumption by 40% by 2030 at EU level**. Members of the European Parliament (MEPs) have been more ambitious than the EU Commission which had originally proposed a 30% reduction.

Each EU country will also have to set its own corresponding national energy-efficiency targets needed to reach the overall goal of 40% reduction in energy consumption. These would cover all stages of the energy chain, including generation, transmission, distribution and end-use.

As advocated by the AIE earlier this year, energy performance has a major potential of jobs creations and growth in Europe and is able to boost competitiveness. Energy efficiency is also the path to reduce the European energy balance and improve our independence and self-sufficiency. To put aside the need to increase energy efficiency means channelling investments out of Europe.

In a separate vote, which also took place on 28 November, Industry and Energy Committee MEPs agreed that **by 2030, a minimum of 35% of all energy consumed in the EU would need to come from renewable, cleaner sources**.

For the transport sector, at least 12% of the energy consumed in each member state would have to be produced from renewables, such as the sun or wind.

- **Moreover, the support schemes for electricity from renewable sources** put in place by the national authorities need to make sure that financial programs, supporting measures which increase the share of electricity produced from renewables, **are stable and predictable. They should refrain from making frequent changes and avoid all retroactive changes.**
- MEPs amended the legislative proposals to make sure that **consumers who produce electricity on their premises are entitled to consume it and install storage systems without having to pay any charges, fees or taxes.**

Quick facts & next steps:

The 40% binding target for energy-efficiency would translate into an energy consumption at EU level of maximum 1132 Mtoe of primary energy, and 849 Mtoe of final energy. This would mean a reduction by 34%, and 31%, respectively, compared to 2005 levels.

The two legislative resolutions will be voted on by the full Parliament during the January plenary session to give MEPs the mandate to start negotiations with EU governments.

02_European news [Directives / Projects / Events]

02-01: Energy Union Governance: MEPs want certainty for energy transition

The governance regulation is a key part of the Clean Energy Package, setting out a harmonized way for countries to set up their national energy and climate plans for the next decade. The proposed law also streamlines national reporting requirements for progress on renewables and energy efficiency targets and establishes mechanisms to make sure countries don't fall behind.

On 7 December 2017, the European Parliament's ITRE and ENVI committees adopted their report on the Energy Union Governance Regulation and on how the EU should meet its energy and climate goals for 2030.

It includes a definition of the energy efficiency first principle and a requirement for Member States to consider energy efficiency potentials when making decisions impacting their energy system.

The report calls on countries to submit their national plans every five years covering 10-year rolling periods and getting stronger each time. It strengthens the Commission's powers to act in case there is a gap between the bloc's goals and countries' combined commitments.

It also states the EU should become a net-zero carbon economy by 2050, which would require countries to develop long-term energy and climate strategies not just for 2030 but for mid-century.

The report also suggests introducing the concept of a "carbon budget" into EU law, to identify how much CO2 can still be emitted without breaching the 1.5-2 degrees global warming scenarios in the Paris agreement.

Next steps:

There's less than one week to go until EU energy ministers meet in Brussels on 18 December to try to forge a common position on key files in the clean energy package. The Estonian presidency's ambition is high: It wants the Council to reach a general approach on the **Renewable Energy Directive, the Governance Regulation and the directive and regulation for the electricity market design proposals.**

The last one was added to the agenda after a discussion among deputy ambassadors last week. "The Estonian presidency gave itself a lot of work, the discussion is very hard among countries," an EU official said. One of the trickiest issues to solve is the proposed "550 rule," which seeks to put an emission limits of 550 grams of CO2 per kilowatt hour on power plants that are paid to be on standby. While countries may be able to agree on a watered down and more flexible rule that could accommodate the concerns of coal-using regions, the EU official said Spain, Romania, Poland, Greece, the Czech Republic and Hungary could still put up resistance during the meeting.

Renewables and governance are ready: Deputy ambassadors discussed the two files on Friday, for the last time before the Energy Council, and the Estonian presidency will prepare the final compromise texts in the coming days. On renewables, the main outstanding issues are around transport, heating and cooling. For governance, there are still diverging views on the ambition, or strength, of the text's requirements.

The whole Parliament will decide on its position in January 2018.

02-02: Mobility Package: Commission takes action to reinforce EU's global leadership in clean vehicles.



The Commission proposes new targets for the EU fleet wide average CO2 emissions of new passenger cars and vans to help accelerate the transition to low- and zero emission vehicles. **On 8 November last, the Commission took a decisive step forward in implementing the EU's commitments under the Paris Agreement for a binding domestic CO2 reduction of at least 40% till 2030. Both for new cars and vans, the average CO2 emissions will have to be 30% lower in 2030, compared to 2021.**

The **Clean Mobility Package** includes the following documents:

- The **Clean Vehicles Directive** promotes clean mobility solutions in public procurement tenders and thereby provide a solid boost to the demand and to the further deployment of clean mobility solutions. **The Commission defines the term “clean vehicle” and for the first time sets mandatory procurement targets for such vehicles at Member State level.** Only electric (including plug-in hybrids), hydrogen and natural gas buses qualify as “clean bus”.
- New CO2 standards to help manufacturers to embrace innovation and supply low-emission vehicles to the market. The proposal also includes targets both for 2025 and 2030. The 2025 intermediary target ensures that investments kick-start already now. The 2030 target gives stability and long-term direction to keep up these investments. These targets help pushing the transition from conventional combustion-engine vehicles to clean ones.
- **Interesting for AIE members is the alternative fuels action plan** which also sets recommendations for how countries should proceed with the deployment of electric charging points and other non-fossil based fuels. The aim is to increase the level of ambition of national plans, to increase investment, and improve consumer acceptance.
- The revision of the **Combined Transport Directive** and the **Directive on Passenger Coach Services**, to offer alternative options to the use of private cars, will contribute to further reducing transport emissions and road congestion.
- The **battery initiative** has strategic importance to the EU's integrated industrial policy so that the vehicles and other mobility solutions of tomorrow and their components will be invented and produced in the EU. There are proposals dealing with the promotion of large battery construction in the EU, key for the development of electric cars.

Next steps in 2018:

The Clean Mobility proposals will now be sent to the co-legislators and the Commission calls on all stakeholders to work closely together to ensure the swift adoption and implementation of these different proposals and measures, so that the benefits for the EU's industry, businesses, workers and citizens can be maximised and generated as soon as possible.

02-03: 'Small is beautiful' Campaign: Don't burden small businesses and consumers, empower them to boost the energy transition!



Brussels, 9th of November 2017 – Together with other trade associations representing key players in Europe's energy transition, **AIE** urges policy makers to take a step-wise approach towards the market integration of small-scale renewable and high efficiency cogeneration installations. "AIE member companies are indeed facing this problem and right know the balancing problem is a stop for new PV systems", says Sören Rise from TEKNIQ, AIE's member of Denmark, "because a PV owner has to find

somebody who will buy the very little amount of kWh, but nobody would buy from these very small PV systems."

Small-scale renewable and high efficiency cogeneration installations are generally run by private consumers, households, communities, farmers, cooperatives or SMEs and benefit the local economy. However, European power markets are mostly not yet « fit » for small installations. **Removing the balancing responsibility exemptions and priority dispatch will result in disproportionate costs and technical and administrative burdens.**

Rather than encouraging the participation of consumers or SMEs in the energy transition, the current proposals on the table would act as a disincentive.

For Rikka Liedes from STUL, AIE's Finnish member said: "In the future it would be ideal that all the installations join the balancing, but as stated in the declaration electricity markets do not provide efficient contracting of balancing and aggregation services yet. **Now it is more important to support all sizes of renewable energy generation.**"

The signatories of the declaration launched the "Small Is Beautiful" campaign, aiming at highlighting the benefits of small-scale, clean and locally owned installations to move progressively towards a decentralised energy system.

James Watson, CEO of SolarPower Europe said: "Small installations empower territories, small businesses, and consumers. When it comes to solar, they are also the biggest job providers. We must reflect on the energy transition we want to see emerging in Europe." **These benefits are, however, threatened by the European Parliament's current proposal requiring all power generators to be "balancing responsible" and the blanket removal of priority dispatch.**

Signatories of the declaration urge policy makers to maintain priority dispatch and the exemption of balancing responsibilities for small scale renewable and highly efficient cogeneration installations. A balanced approach is key to enable the advent of an increasingly distributed energy system, empowering energy consumers and contributing to the economic and social dynamism of local communities and small businesses.

> Download the [Declaration of the signatories](#) | > Read all [about the Smallisbeautiful campaign](#)

02-04: De-risking Energy Efficiency Platform (DEEP)

Source: [EU Build-UP](#)



The **De-risking Energy Efficiency Platform (DEEP)**, launched by the Energy Efficiency Financial Institutions Group ([EEFIG](#)) in the context of its [De-risking project](#), is the largest pan-European open-source evidence-base containing over 7800 industrial and buildings-related energy efficiency projects.

The platform provides detailed analysis and evidence on the performance of energy efficiency investments to support the assessment of the benefits and financial risks, including factsheets and case studies of financial institutions deploying capital into energy efficiency.

By becoming a user of the tool DEEP, you have the opportunity to:

- Enhance your understanding of and access to energy efficiency finance related business opportunities
- Streamline underwriting procedures through the development and use of a common language for energy efficiency underwriting
- Decrease due diligence and transaction costs
- Have a better risk assessment through high quality and credible data framework

> More information on the DEEP Platform: <https://deep.eefig.eu/>

03_ AIE activities and Sector related news

AIE activities and networking.

03-01: AIE participates to the Smart Readiness Indicator study

Background

End of February 2017, a 1.5-year study was launched to provide technical support to the Directorate-General for Energy of the European Commission in order to feed the negotiations and decision process regarding potentially setting up a 'Smart Readiness Indicator for Buildings' in the framework of the [revising Directive 2010/31/EU on the Energy Performance of Buildings](#).

Such a 'Smart Readiness Indicator' (SRI) would give recognition for smarter building technologies and functionalities which enhance the energy efficiency and other pertinent performance characteristics of the building stock. It could be an incentive for the integration of cutting edge ICT-based solutions for energy efficiency into buildings, which can assist in creating more healthy and comfortable buildings with a lower energy use and carbon impact, and facilitate the integration of renewable energy systems.

To satisfy the objectives of the study, the consortium will investigate the potential design, evaluation and proposal of a robust and harmonised methodology to determine an SRI for European buildings.

AIE's contribution

The AIE participated to the first stakeholder meeting which took place on 7 June. The first meeting was dedicated to introducing the objectives and scope of the study, the work plan and the first findings.

A second stakeholder meeting will take place on 21 December and will equally be attended by AIE representatives. The aim of the meeting is to share the progress of the study and the next steps, and to explain how comments have been taken into account. This meeting will be an important milestone, as participants will learn about the shape of the calculation methodology for a potential indicator.

03-02: Electrical safety in dwellings: first actions decided by FEEDS

The European Forum for Domestic Electrical Safety [FEEDS] met on 5 October moderated by AIE and hosted by the European Copper Institute and FISUEL. Attended by experts of the fire brigades, consumer and tenants' associations, manufacturers of domestic electrical equipment and insurance companies, the first working groups were launched with the aim to work on the data and statistics and the best practices. Contacts with Eurostat are foreseen and the tool World Safety Barometer will serve as a reference to continue and enforce the work.



At the **Fire information exchange Platform (FIEP)** launched by the European Commission on 16 October, 25 Member States and 25 associations came to discuss key challenges for fire safety in buildings. FEEDS had the opportunity to present the risks and dangers of the existing ageing and under-renovated buildings stock and the importance to inspect the electrical installations, backbone of all systems in a dwelling. The EU has yet implemented an EU strategy for road safety, which is also a Member State competence and it could

do so for fire safety. In 2001, the road safety strategy was put in place and lead to great reductions in the number of deaths. Together with 15 partner organisations, the Fire Safe Europe (FSEU) envisages a fire safety strategy based on a holistic approach to fire safety, aimed at gathering comparable data, cooperation between Member States, and setting a vision with clear goals for fire safety.

Concluding the meeting, the European Commission identified five main work streams for the new platform as well as a possible work stream, and which the European Commission may consider, is the **issue of domestic fires**.

At this end, an event was organized on the 22nd of November with the participation of AIE to bring policymakers and stakeholders together in order to **explore perspectives and work towards a holistic approach to energy poverty and electrical safety**. Participants had the opportunity to discuss, exchange views and best practices, and explore perspectives for a policy response to energy poverty, including the electrical safety aspect.

- Residential Electrical Safety: The White Paper 'How to Ensure Progress' can be downloaded in full from the [Digital AIE Library](#) or directly on [Leonardo Energy's website](#).

03-03: Belgian associations ICS and FEDELEC form new **'TECHLINK'**: one organization for the technical profession.



they bring together the entire installation sector in one day.

Being an electrician, heating engineer or plumber... In the past, these were completely different professions, but due to new technologies, they are increasingly growing closer together. **Install Day, the trade fair for professionals** from the Belgian installation sector has therefore been set up by **driving forces FEDELEC (AIE member) and ICS (HVAC)**, both professional installation organisations, together with the **'Confederation Building' association**. Defending the interests of more than 3,000 independents, SMEs and large companies in the sector,

During Install Day **'TECHLINK'**, the new name of current merger between former associations FEDELEC and ICS was launched.

As **Willy Pauwels**, General Director of [Techlink](#) concluded during the press conference at Install Day: "The number of companies that make use of the electrical, HVAC and sanitary market is constantly increasing. The merger between ICS and Fedelec is therefore totally in line with this.'

Techlink will follow up Fedelec as a member of AIE. Furthermore, Techlink is part of the 'Confederation Building' association, being the largest federation for the construction sector in Belgium. Together with this umbrella organization they represent electrical and HVAC (or mixed) companies at local, regional, national and European level. **Techlink is** also active in many organizations within the installation and construction sector, **connecting different stakeholders with each other**. Technicians, manufacturers, schools and other influential voices come into contact via Techlink.

> A [new Techlink website](#) is in development (French and Dutch)

> The [new organization chart](#) of Techlink

03-04: ECA South Africa launches new magazine 'SA Electrical Contractor' and newsletter 'Wired'

It's a great pleasure to read that the South African Electrical Contractors Association ECA SA was inspired by AIE's last Council in Oslo to start their digital magazine and newsletter 'SA Electrical Contractor' and 'Wired'.

As **ECA President Johnny Cunniff** wrote in his first foreword: "The vision of establishing our own in-house magazine and launching it at our annual Presidential Excellence Awards is a now a reality. This first issue of SA Electrical Contractor has been accomplished with a great deal of hard work and dedication. ... The idea of producing our own publications began at the European Association of Electrical Contractors (AIE) 2016 conference in Oslo, Norway in September, 2016. **Mark Mfikoe - ECA's national Director** - found out what the ECAs in other countries were doing and he came back inspired to do the same in a South African context." ...

"In June this year, we launched **'Wired'**, our electronic newsletter that goes live on the first and third Tuesday of every month – and judging by the analytics, Wired has gained popularity and is widely read and enjoyed by ECA members and non-members in the electrical contracting industry", according to Johnny Cunniff, ECA President.

In this edition you will find **topics** on:

- The history of the Electrical Contractors' Association of South Africa 1950 – 2017
- Electrical Safety
- Info on fair policy and contractual rights
- Social security benefits
- Transforming your cables through innovative solutions
- And much more...

Likewise AIE, ECA (SA) aims through advocacy in regulatory framework; education, training and development; advisory services; labour-related representation; as well as marketing publicity and strategic linkages, the ECA(SA) **to continuously ensure that its esteemed EC members are kept abreast of all new industry developments.**

On the question **‘Why does the ECA(SA) even bother doing all this?’** Dimatkatso Matshoga states in her article on ‘The electrical contracting business’ that the answer is simple: ECA SA wants to assure that electrical contracting businesses are getting to a point where the contractors exude an uncompromisingly competent business ethic.

The SA Electrical Contractor magazine can be viewed directly at [AIE’s digital library](http://mags.contactmedia.co.za/ecasa/1/) or via <http://mags.contactmedia.co.za/ecasa/1/>

03-05: ‘Energiewende’: German villages go 100% renewable.



Thermal solar plant at Neuerkirch, Germany, part of the country's transition towards clean energy. [AEE/Adelphi/Tobias Vollmer]

Local communities are at the forefront of the **clean energy transition in Germany**, with some villages relying 100% on renewables.

Neuerkirch and Külz are two small villages in Western Germany – of 300 and 500 souls respectively. And yet, they feel a part of something bigger that goes even beyond the country’s energy transition, the ‘Energiewende’.

Neuerkirch and Külz abandoned their old fossil fuel heating system for a 100% renewable heating system – a biomass plant supplies 75% of the energy and a solar thermal plant provides for the rest. Only a few homes are not connected to the central system. Apart from the biomass and solar plants, the region is also known for its wind farm. Local communities receive hundreds of thousands of euros annually for leasing their land to the turbines.

Sharing the benefits, transparently

Toni Christ is the former mayor of Mastershausen, a small town of 1,000 inhabitants in the rural area of Rhineland-Palatinate. A few years ago, the municipality invested €64 million in renewable power capacity. Investors built 14 wind turbines for €50 million and a couple of solar power plants for €11 million. The new grid connections cost them €3 million.

Based on 25-year contracts, the town now cashes in at least €260,000 per year for the land lease. The revenue can climb up to €350,000 depending on how strong the sun shines or the wind blows.

Mastershausen used the revenue to fund the construction of a fast Internet network, roads, playgrounds and a library. The town hall gives out money to families with newborns. And it funds, of course, the local energy transition via subsidies for house insulation and public transport.

To be fair, the energy transition would not have been possible without the feed-in tariffs that operators receive when selling renewable power to the regional grid. But on the other hand, the wind turbines produce much more energy than the village needs. With backup sources, it could be entirely self-sufficient.

04_ Future events & meetings <http://www.aie.eu/aie/page/Calendar>

04-01: Kindly save the following dates for AIE internal meetings:

FIRST DATES FOR 2018:

JANUARY 2018

24.01.2018 | **AIE Policy Coordination Committee [PCC]** | **Brussels**

FEBRUARY 2018

08.02.2018 | **AIE-WSE Experts European Platform [AIE-WSE]** | **Budapest**

MARCH 2018

01.03.2018 | **AIE General Secretaries [GSC]** | **Place open**

MAY 2018

02-03.05.2018 | **AIE Technical Task Force [TTF]** | **Brussels**

OCTOBER 2018

25-26.10.2018 | **AIE Technical Task Force [TTF]** | **Paris**

04-02: Discover other European events on the AIE website:

> **4-5.12.2017** **Digital and Solar Storage** | Munich, BMW World, Germany

> **SOLAR POWER EUROPE** | partner **#DigitalSolarStorage** + other **Upcoming events**

> **18-23.03.2018** | **LIGHT + BUILDING** | Frankfurt, Germany

> **KNX at Light and Building** | **KNX Award 2018** - Hand in your project now!

KNX Association International is pleased to announce that applications can now be handed in for the KNX Award 2018, which will be granted at the light+building fair 2018 in Frankfurt (Germany). The KNX Award rewards the smartest KNX projects in home and building control around the world, which stand out as regards innovation and technical progress.

05_ Publications – [check new AIE and related publications at our library on ISSUU](#) or direct links to electrical sector magazines online

AIE members and other related organisations from the electrical value chain are invited to inform us on interesting articles, brochures, scientific reports that can be added to our AIE online ISSUU Library!

05-01 Articles/reports

> **Three times smart: Users, Buildings, and Electricity Grid**

Source: BuildUP

This Overview Article presents **selected findings of the recently completed project SCDA – Smart City Demo Aspern in Austria** with importance for the ongoing development of the Smartness Indicator.

Findings with importance for the development of the Smartness Indicator

Bad quality of building design and lack of quality of the works affecting the energy performance of the building might also affect business models based on the participation of buildings in the electricity market. Specifically, occupants reported problems with overheating in the summer season, resulting in the installation of cooling devices running on electricity, although, according to the requirements of the Energy Performance Certificate (EPC), [residential buildings must be designed in a way that overheating does not occur](#). In contrast to other countries, [the Energy Performance Certificates in Austria are not yet fit for use as a quality control tool for checking as-built energy performance of buildings](#).

Overall, observations during the study led to the conclusion that, some construction defects would probably not have been detected because occupants would not have paid attention.

Lessons learnt from the SCDA-project for the development of the Smartness Indicator are:

- Occupants' interest in saving energy is low, while interest in saving cost is high. This is the conclusion of a [study published on Energy Policy in 2013](#) and it is also confirmed by the results of the user research carried out by the SCDA-project.
- Results show that appropriate building automation is more important than individual user empowerment in order to support energy saving user behavior.
- Buildings were regarded as black boxes with defined properties. However, the as-built situation deviates from what is stated in the building documents including in the EPC.
- Non-energy properties of building installations such as noise of mechanical ventilation systems jeopardise the intended use and thus the planned energy balance.

The findings from the SDCA-project are especially valuable because activities took place under real life conditions.

Conclusions

The Smartness Indicator could support the energy sector in identifying buildings “ready” to participate in the electricity market. However, it will be necessary to clearly communicate what “readiness” actually means:

1. The *theoretical readiness* of the building to participate in demand response, etc., because on paper, the building is equipped with some basic ICT elements and/or renewable energy technologies.

or

2. The *practical readiness* of the building to participate in demand response, etc., because the as-built situation complies with defined criteria that the building must meet in order to participate in the energy market.

The project SCDA - Smart City Demo Aspern received funding from the Austrian Research Promotion Agency FFG – Forschungsförderungsgesellschaft. Project duration was April 2014 until September 2017. It is planned to continue research activities until the end of 2018, and beyond with an enlarged programme. More information is available at: <http://www.ascr.at/en/>

> World Energy Outlook 2017: Renewables set to become cheapest electricity source



Renewables will make up two-thirds of global investments in new power plants by 2040, as rapidly dropping costs for clean energy technologies make them the cheapest source of generation for many countries, according to the [International Energy Agency's](#) (IEA's) World Energy Outlook released today, 14 November 2017.

Green energy will account for 40 percent of global electricity needs by 2040, and 80 percent of new generation capacity in the European Union, the agency said.

Wind power is expected to become the EU's leading source of electricity soon after 2030 due to strong projected growth both on- and offshore, according to the IEA's New Policies Scenario, which assessed existing and announced policies.

Global energy needs are expected to rise more slowly than in the past but still expand by 30 percent between today and 2040 — the equivalent of adding another China and India to today's global demand, it said.

A big chunk of that increase is due to growing electricity use, with more electric cars on the road and a growing share of electrical appliances with smart energy features. China can play a key role in shaping the global picture, with its policies potentially accelerating the clean energy transition, the IEA said.

However, the shift to clean fuels does not mean it's the end of oil. The World Energy Outlook predicts oil demand growth to remain robust up until the mid-2020s, mainly driven by a boost in supply from the U.S.

> IEA Booklet 2017 [can be bought here](#)

> **Cleaner, Smarter, Cheaper:** responding to opportunities in Europe's changing energy system

Source: [BPIE/European Energy Union Choices group](#)

Laurence Tubiana, CEO of the European Climate Foundation states that Europe stands in front of a game-changing moment looking at the current energy transition. The drop in the cost of clean technology has gone far beyond all expectations, tipping the economics in favour of decarbonisation. Meanwhile, global action on climate change further accelerates clean energy innovation and deployment, creating ever stronger momentum.

Responsibility lies now with European politicians to deliver the right policies. With this report, they invite decision-makers to embrace the new opportunities in the energy sector and to decisively opt for higher ambition as the only viable pathway for Europe.

> **Download** the [full report here](#) or take a review in our AIE Digital Library.

European Association of Electrical Contracting Companies | AIE – the European Association of electrical contracting companies - represents through its 15 national member associations about 125,500 specialist contracting companies employing about 1,200,000 workers in the EU-countries and beyond. The AIE represents companies from all sizes, the big majors and a majority of small and medium size enterprises [SME]. AIE member companies have an in-depth knowledge and high-quality expert skills to carry out all kind of electrical engineering and infrastructure works [high, medium and low voltage]. The overall turnover of the sector is approximately 137 billion Euros. Monitoring the EU agenda/Directives relevant for the electrical sector, the AIE points out the key strategies and main priorities for the modern electrical contractor. With the increasing complexity of technical installations, the private consumer and house owners are becoming more and more dependent on the knowledge and creativity of the electrical contractor. He is an expert adviser who is able to explain to the client the possibilities and advantages of new technology in a technical and environmental way. Kindly visit our website: www.aie.eu or contact us at info@aie.eu.