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OF INTELLIGENT ENERGY EFFICIENCY SERVICES

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EFIEES contribution to the consultation on SET-Plan Education and Training Roadmap

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EFIEES

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EFIEES represents private companies ensuring an overall management of energy demand to end-user (Energy Efficiency Service Companies, EESCs). These companies provide operational maintenance and management of equipment of their industrial, tertiary and residential customers (collective or individual), public and private, particularly sporting facilities, schools, and hospitals. They commit, by long-term contracts, a technical, financial, economic and environmental performance.

EFIEES members are involved in the production/distribution of heat in several Member States as well as in operation of District Heating networks.

General remarks

EFIEES welcomes the European Commission's **SET-Plan Education and Training Roadmap** as it is aiming to respond to the challenges which energy sector and EU societies are facing on their way towards **energy transition**.

In order to achieve its climate and energy goals, the European Union needs to invest in **research and innovation** and to support the development of **new technologies** as well as the advancement of **existing solutions**. Education and training should follow these ambitions with a focus on the relevant legislation such as Energy Efficiency (2012/27/EU) and Energy Performance of Buildings (2010/31/EU) Directives and recent International and European Standards such as EN 15900 on energy efficiency services, EN 16247-1 on energy audits etc.

Education and training on energy efficiency

Despite energy challenges that EU is facing, energy efficiency and in particular energy efficiency services are not regarded as an education issue. In reality, energy efficiency should become an integral part of education for engineers, architects, energy managers, urban planners, as well as training for building technicians and other relevant disciplines.

Sufficient availability of **experts in energy efficiency** is extremely important for a successful implementation of Energy Efficiency Directive which requires *inter alia* putting in place **relevant training and certification programmes** which accredit skills for energy efficiency. Current experience of our member companies shows, in all Member States, **the lack of skilled workers** with the view of evolution of their tasks from simple maintenance towards more added value services aimed at saving energy on the long term.

Special attention should be paid to training and education for **energy advisory programmes** that lead to the application of **energy technologies and services**. The same applies to programmes focusing on **qualification of energy auditors** in order to achieve sufficient availability of experts.

Trainings for technicians such as **installers of energy building-related elements** should be put in place to meet requirements of Energy Performance of Buildings Directive (EPBD). Following provisions of EPBD, in order to promote solutions leading to **nearly-zero energy quartiers**, research and educational systems should be ready to respond to these needs.

Education and skills upgrade in the field of **overall energy management services to end-users** (industries, tertiary, collective buildings, public premises, district heating and cooling networks etc.) should be adapted with a view to **optimise their energy consumption, CO₂ emissions and to develop renewable energies**. A focus should be on **measurement and verification methods of energy consumption** for technicians and typology of energy efficiency service contracts for commercial professionals.

The buildings sector represents 40% of the European Union's total energy consumption. Untapped potential for energy savings in **buildings systems** requires education and training for **energy managers in municipalities and business/industry** with knowledge on aims of overall energy management and possible solutions such as **energy efficiency service contracts including Energy Performance Contracting** and their financing.

Education and training in energy efficiency should cover all grades and types of relevant disciplines involving academia and professional trainings. Academic research should focus on efficiency of **energy systems including buildings systems** in order to meet energy savings along the entire energy chain.

Education and training for efficient and renewable heating and cooling systems

Heating and cooling represent 47% of the EU final energy consumption. Consequently, development and advancement of heating and cooling technologies must play a crucial role in the EU strategy for tackling energy and climate challenges. **Making heating and cooling more energy efficient, renewable and decarbonised requires new technologies and skills.**

All these factors have a significant impact on raising demand for specialists able to develop technologies such as on low-temperature heating, heat and cold storage, more efficient inclusion of renewables in heating and cooling systems (i.e. biomass), the development and deployment of recovered heat utilisation technologies etc. **The latter require special programmes for highly-qualified researchers developed in cooperation between research, academia and business with a support of EU funding.**

At the same time, technological progress in heating and cooling such as **efficient District Heating and Cooling, high-efficiency cogeneration, use of biomass and recovered heat** calls for skilled engineers, technicians and network operators among workforce. This structural demand shift should be addressed by targeted education and training programmes.

Education and training should support local jobs creation

Energy efficiency services and local renewable energy sources in heating and cooling (biomass) are the key drivers for **local jobs creation, growth and competitiveness in the EU**. Developing technologies and skills in these fields are success factors which bring economic, social and environmental benefits at the same time.

The involvement and coordination on the part of the European Commission, Member States, research, academia, social partners, and business are pre-condition for the transformation of the energy sector. Also, expedient efforts in this field will contribute towards boosting growth and competitiveness in the EU economy thanks to technological progress and a significant increase in the number of highly qualified professionals.