

DESL

Co-funded by the
Erasmus+ Programme
of the European Union



Developing Energy Efficient and Smart Lighting
Education in Vietnam & Myanmar (DESL)

Awareness Raising Seminar

March 2, 2020
Thu Dau Mot city, Vietnam

KEY ACTION 2: COOPERATION FOR INNOVATION AND THE EXCHANGE OF GOOD PRACTICES

Through this Key Action EU aims to

- Support modernisation, accessibility and internationalisation of higher education institutions in Partner Countries around the world
- Support the partner countries to address challenges facing their higher education systems
- Programme countries partners not only contribute to technology transfer, training and capacity building but also learn from partnership and each other's practices

Results and outputs are intended for partner countries



Key Action 2: Capacity Building in the field of higher education

Grant agreement number: 2019-1993/001-001

Start November 15, 2019; Duration 3 years



Finland



Netherlands

University of Ljubljana



Slovenia



Vietnam



Vietnam



Đại Học Quốc Tế Miền Đông
Eastern International University

Vietnam



Vietnamese - German University

Vietnam



Myanmar



Myanmar



Motivation

- Electricity demand is higher than supply in developing countries/ many places are unelectrified (Myanmar 65%)
- Lighting is major consumer of electricity in developing countries (35% of electricity in Vietnam), much higher in Myanmar
- Application of energy efficient lighting systems and practices not only reduces electricity demand but also reduces CO2 emissions
- Partner countries lack technical knowledge and expertise
 - Research and development
 - Lighting Design and application
 - Quality control
- Shortage and need of well-trained human resources for the lighting industry in Vietnam



Barriers of Energy Efficient Lighting in Developing Countries

- **Information Barriers:** Lack of awareness and information on energy efficient lighting among professionals, public
- **Regulatory Barriers:** lack of government interest, insufficient enforcement of policies, need for more qualified personnel
- **Technology Barriers:** lack of adequately equipped and staffed independent test labs, limited experience of energy efficiency testing amongst engineers
- **Environmental and health risk perception Barriers:** concerns about quality of light, concerns about environmental impacts of electronic components used



Overcome the Barriers- DESL Objectives

- Raise the awareness and to identify needs and opportunities in efficient lighting
- Develop new courses in energy efficient smart lighting based on the local needs
- Modernize the laboratory infrastructure to enhance the learning environments
- Enhance and upgrade the skills and competences of teaching staff
- Strengthen the cooperation between university, industry, public sectors and society for the promotion of energy efficient lighting



Expected Outcomes

- Enhanced skills and expertise of students, access to advanced education and research in lighting field
- Improved academic excellence of teaching staffs, enhancement of skills and mobility of teaching staff
- Improved quality of education and research in the field of smart and energy efficient lighting
- Enhanced linkage and cooperation between HEIs, Industry, public bodies and society in the partner countries



Seminar Program

08:30 – 09:00	Registration	
09:00 – 09:10	Welcome remark from VGU	President of VGU
09:10 – 09:20	DESL project introduction	Pramod Bhusal, Aalto
09:20 – 09:50	Energy efficient lighting: Needs, Challenges, and Possibilities	Pramod Bhusal, Aalto
09:50 – 10:20	Lighting design through simulations	Matej Kobav, UL
10:20 – 10:30	<i>Break</i>	
10:30 – 11:00	Smart lighting for offices: User comfort versus energy saving	Evert Loenen, TU/e
11:00 – 11:30	Visual and nonvisual effects of light	Grega Bizjak, UL
11:30 – 12:00	Automatic blinds control in smart offices: Opportunities and pitfalls	Evert Loenen, TU/e
12:00 – 14:00	<i>Lunch</i>	All
14:00 – 14:30	Make your city smarter and more livable with connected lighting	Signify Vietnam
14:30 – 15:00	DQHOME: Smart home solution	Dien Quang Lamp Joint Stock Company
15:00 – 15:30	Development of Smart Street lighting technology using LED in HCMC, VN	HCMUT
15:30 – 16:20	Q & A	All
16:20 – 16:25	Close	

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