Strategic partnering for applied photonics

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As for the future, your task is not to foresee it, but to enable it

Antoine de Saint-exupéry
A sustainable future

**Green Growth**
- Specialized knowledge
- Sustainable business
- Partnering

**Smart City**
- Digital society
- Co-creation
- Public/Private Innovation

**Healthy society**
- Education
- Physical health
- Mental health
Municipality of Albertslund

- Suburb of Copenhagen with 30,000 residents.

- Build in the 1960s, planned by the experimental principles of urban and traffic planning.

- Living lab for urban development, democracy, and industrial building.
The Albertslund Concept

Challenges offer opportunities – Surf the waves

Partnering
Triple helix – Scientific institutions, private companies, public actors

Living Lab
The city as a living lab – New solutions 1:1
Sustainable societies

Public actors

Sustainable growth

Green growth

Scientific institutions

Private companies

Partners:
- 16 municipals
- 25 companies
- 5 universities
- 1 national board
Living lab - The A Lamp

A cooperation between Municipality of Albertslund, Philips Lighting, DTU Photonics, DONG Energy, ark-unika and Odgård design.
New LED street lamp – Much more than a lamp

Street lamps as unique points in a smart grid:
- IP-adress for each lamp
- Individual management for each lamp
- Lightintensity controlled by time, light or traffic
- Traffic information
- Wi-Fi
GreenLab for test and development of energy efficient lighting
SSL - Contribution to daylight
- Impacts on health and well-being among older citizens

- SSL lighting setup in 20 citizens home
- Citizens test the lighting for 3 weeks
- Physical and mental well-being is measured
Full scale test apartment

- Testing different light designs
- Testing installations and interior
- Evaluated and developed with citizens
- Final results to be realized in 142 apartments
National lighting network
THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

- Micro- and nano-electronics
- Photonics
- Nanotechnologies
- Advanced materials
- Biotechnology
- Advanced manufacturing and processing
Task Force on SSL for Cities

– Work Group 2: Procurement specifications, Innovation and Procurer skills

Recommendations

• Setting up good procurement specifications based on existing application standards (CEN, CENELEC, IEC, CIE)
• Incorporation of selection, award and exclusion criteria in the public tenders
• Education programme for municipal procurers and lighting planners
• Engage the Regions in financial support, communication and execution
• Securing efficient dissemination of results and experiences made across boarders
• Collaborative action between European, regional and national levels
Thank you for your attention!