

# AIT Research Areas and Fields in Future Infrastructure Themes

Department

Research Area and Research Field

## Energy

### Energy Infrastructure

- Smart Grids
- Smart Buildings
- Photovoltaics
- Thermal Energy Systems

### Integrated Energy Systems

- Smart Cities and Regions
- Complex Energy Systems

## Mobility

### Transportation Infrastructure

- Environmentally-friendly transport infrastructure
- Cost-effective and resilient transport infrastructure
- Innovative road infrastructure safety strategies

### Low-emission Transport

- High performance material
- Light-weight design of vehicle components
- Sustainable process

### Multi-Modal Mobility Systems

- Human factors for personal mobility
- Integrated management of transport systems
- Real-time dynamic management of transportation systems

## Safety & Security

### Intelligent Vision Systems

- Multi- Camera Vision
- High-Speed Imaging

### Future Networks and Services

- Advanced Applications in Sensor Networks
- Next-Generation Content Management Systems
- Secure Information Access in Distributed Systems

### Highly Reliable Software and Systems

- Assessment and Testing of Autonomous and Safety-Critical Systems

## Health & Environment

### Biomedical & Biomolecular Health Solutions

- Preclinical and Clinical Diagnostics
- Molecular Diagnostics
- AAL Ambient Assisted Living
- Advanced Implant Solutions

### Resource Exploitation and Management

- Exploitation of Biological Resources
- Microbial Detection
- Green Processes

## Innovation Systems

### Foresight & Governance

- New R&I Processes and Systems
- Anticipatory Governance

### Technology Experience

- Contextual Experience
- Experience Foundations