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WP3.3 – Training Material
Best Practices from European Universities

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Partners:

Training Objectives

By the end of this session, participants will:

- Understand key sustainable energy management practices across European universities
- Identify structural, financial, and behavioural challenges
- Recognize transferable strategies
- Reflect on how to apply lessons within their own institution
- Strengthen institutional capacity for energy transition

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Best Practices by University of Graz, Austria

1. Institutional Carbon Management (ICM)

- Climate neutrality target: 2040
- Rector chairs Climate Protection Advisory Board
- Environmental management framework
- Data-driven emissions tracking
- Interdisciplinary collaboration between scientists and administration
- Strong stakeholder engagement

This approach embeds sustainability into institutional governance.

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Best Practices by University of Graz, Austria

2. Efficient Electrical Energy Use

- 100% certified green electricity
- LED lighting retrofits
- Expansion of photovoltaic systems
- Integration of geothermal systems in new buildings
- Strategic institutional investment

Key success factor: High-level leadership commitment and structured governance.

Best Practices
by University of Montpellier, France

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1. Campus Energy Awareness

- Small, visible actions to promote energy sobriety
- Network of sobriety ambassadors
- Visible energy consumption reporting
- Staff training on ecological transition
- Practical behaviour guidelines

Key success factor: Low-cost, highly transferable behavioural approach.

Best Practices
by University of Montpellier, France

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2. Central Energy Management System

- Climate-based heating regulation
- Automatic lighting and computer shutdown systems
- HVAC optimisation
- Sub-metering
- Building renovation projects
- Alignment with French Tertiary Decree (-40% energy reduction target)

Best Practices
by University of Palermo, Italy

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1. Energy Consumption Monitoring Platform

– Real-time monitoring with alerts to reduce energy waste
– Transferable to other HEIs with sensors and staff training

2. Photovoltaic Systems Installation

– Expanding solar panels to increase renewable energy & cut costs
– Modular, scalable approach supported by subsidies & stakeholder buy-in

Best Practices
by University of Palermo, Italy

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3. Energy Awareness Campaigns

– Posters, brochures & emails with practical energy-saving guidance

– Low-cost & easily replicable through multidisciplinary teams

4. Greenhouse Gas Emissions Inventory & Carbon Footprint

– Comprehensive GHG inventory with cross-department engagement

– Campus as testing ground for scalable carbon reduction strategies

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Best Practices by Vilnius TECH, Lithuania

1. SAVES / Student Switch Off Project

- Dormitory-based energy-saving competition
- Real-time energy dashboard
- Student ambassadors
- Quantifiable energy savings
- Strong long-term habit retention

Most effective engagement: Face-to-face interaction combined with digital tools.

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Best Practices by Vilnius TECH, Lithuania

2. Sustainability Hub (Living Lab Model)

- Established in 2022
- Multidisciplinary sustainability platform
- Data modelling zones
- Eco-design and sustainable consumption labs
- Indoor air quality monitoring
- Micro-credentials in energy efficiency and circular economy

Integration of research, education and stakeholder collaboration.

Best Practices
by University of Novi Sad, Serbia

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1. GReENERGY & GReENERGY2.0

– Installed solar panels and green roofs/walls to reduce energy use in public buildings

– Raised awareness and strengthened cross-border partnerships for sustainable energy

– Expanded renewable capacity with solar plants and green wall installations

– Engaged stakeholders via workshops, open-door events, and promotional campaigns

Best Practices
by University of Novi Sad, Serbia

1. CREATEGREEN

– Solar power plants with micro-meteorological sensors to optimize energy efficiency

– Cross-border collaboration and public engagement to promote renewable energy adoption

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Best Practices
by University of Alicante, Spain

1. Renewable Energies: Consumption & Installation

– 100% renewable electricity import
– Multiple photovoltaic installations covering buildings and parking areas

2. Carbon Footprint Calculation

– Annual carbon footprint calculation, tracking progress and supporting GHG reduction strategies
– Integration with renewable energy projects and energy-saving measures ensures measurable CO_2 reductions

Best Practices
by University of Alicante, Spain

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1. Energy Consumption Monitoring & Smart University

- Real-time monitoring, enabling data-driven energy efficiency decisions
- Smart University initiative connecting 9 Spanish universities to promote sustainable campus management

2. Desalination Plant

- On-campus reverse osmosis plant produces desalinated water for irrigation and training purposes
- Research and innovation focus, with plans to power the plant via photovoltaic energy for sustainability

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Common Best Practice Patterns

- Strong leadership involvement
- Carbon accounting systems
- Renewable energy expansion
- Real-time monitoring platforms
- Behavioural engagement initiatives
- Integration into governance structures

Energy transition is most successful when institutionalised.

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Self-Assessment

- Do we have a formal carbon management system?
- Who is responsible for energy governance?
- Do we monitor energy in real time?
- Are sustainability roles institutionalised?
- Is funding diversified?
- How do we engage staff and students?

Action Planning Framework

1. Define clear energy targets
2. Assign responsible unit
3. Secure funding
4. Define measurable KPIs
5. Define measurable KPIs
6. Monitor and report annually

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Key Strategic Takeaways

- Energy transition is institutional transformation
- Infrastructure investment delivers impact
- Behavioural change ensures durability
- Governance structures enable continuity
- Monitoring systems drive accountability
- Leadership commitment is essential

Conclusion

European universities demonstrate that:

- Climate neutrality requires structured governance
- Renewable expansion is feasible
- Data transparency drives change
- Funding innovation is necessary
- Cultural transformation supports long-term success

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Do you have any questions?

Thanks!

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