

# G7 Environment

Universities for Sustainable Development

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**G7** 2017  
ITALIA



MINISTERO DELL'AMBIENTE  
E DELLA TUTELA DEL TERRITORIO E DEL MARE

# Session I, topics discussed and speakers

## 10.00-13.00 Session 1: Teaching and Research for Sustainable Development

### Topics addressed:

- Relevance of sustainability in teaching courses and research programs;
- The ways in which Universities manage their facilities and personnel and adopt internal measures addressed to cut carbon and energy bills and sustainably integrate with the external context (i.e. cities, transportation networks, local communities).

### Speakers:

CoChair: Prof. Denis Guibard, France

Prof. John Robinson, University of Toronto – Canada

Prof. Yvan Lagadeuc, University of Rennes 1 – France

Prof. Marco Rieckmann, University of Vechta – Germany

Prof. Kensuke Fukushi, University of Tokio – Japan

Prof. Angelo Paletta, University of Bologna – Italy

Prof. Callie Babbitt, Rochester Institute of Technology – USA



# Session II, topics discussed and speakers

## 14.30-17.30 Session 2: Universities implementing Sustainable Development and Sustainable Development Networks

### Topics discussed

- How Universities contribute promoting knowledge and science-based regulations and innovation on sustainability;
- University role in the creation of new and tailored start-ups and spin offs and in the identification of new potential markets;
- Role of University in public-private partnerships/networking for the implementation of Circular Economy.

### Speakers:

CoChair: Prof. John Robinson, Canada

Prof. Stewart Elgie, University of Ottawa – Canada

Prof. Denis Guibard, Telecom Management School – France

Prof. Mario Schmidt, Pforzheim University – Germany

Prof. Kensuke Fukushi, University of Tokio – Japan

Prof. Giovanni Sannia, University of Naples Federico II – Italy

Prof. Thomas Coon, Oklahoma State University – USA



# The Team... at the MAST facility



# Messages from Session I (1/2)

Universities are focal centres for high-level education, analysis and knowledge diffusion. They also contribute to shape and provide skills for the transition towards sustainable development.

## But they need to:

- Enhance the transdisciplinary educational dimension of university programs (e.g. graduate and undergraduate degrees) in sustainability and creating innovative engaging initiatives (e.g., service learning; e-platform). Include sustainability subjects in general curricula for all students;
- Innovate Curricula, based on new approaches to teach sustainability (“action-oriented transformative pedagogy”) that connects to real world problems;
- Better align their actions with primary and secondary education and life-long training of employees and professionals, and develop tools for educating decision-makers and leaders to sustainability;
- Facilitate the flow of scientific information and results through academic publications to broader audience and stakeholders.



# Messages from Sessions I (2/2)

Many Universities are adopting internal measures addressed to improve sustainability and to cut carbon and energy bills.

## But they need to:

- Raise on students' and staff communities to promote sustainable behaviors and lifestyles that catalyze relevant actions for the entire hosting urban community (e.g. mobility, housing, urban regeneration);
- Share information and good practices (e.g., sustainability guidelines or a sustainability charter for universities), on the ways in which they manage their facilities and personnel, adopt internal measures for being more sustainable, and sustainably integrate with the external context (i.e. stakeholders and communities engagement).
- Develop common indicators and metrics for monitoring their environmental performance, to facilitate benchmarking activities and engagement on targets for reducing environmental impacts, in view of improving effectiveness of National/International Assessments with respect to the SDGs.



# Messages from Sessions II (1/2)

Universities support key actors in defining and implementing sustainability and circular economy by:

- training graduates in all fields by creating the research-based knowledge required for the innovation of technologies, regulations and business models;
- contributing to policy development for sustainability and clean growth;
- contributing to the expertise of all stakeholders, including institutions, business (large companies, SMEs) civil society, etc and enable them to assess their social, economic and environmental impacts;
- promoting new and tailored start-ups/spin offs and identifying new market potentials (by promoting entrepreneurial culture within the entire academic community, performing scouting entrepreneurial ideas engaging students, promote relations with the ecosystem, etc)



# Messages from Sessions II (2/2)

**But Universities need** to improve their role in public-private partnerships (Cluster/Platforms/Centers), where they closely cooperate with industries, policy makers, legal/fiscal/financial actors, authorities, civil society to:

- i) develop more effective R&I agendas, trainings, policies and communication actions;
- ii) create longer and resilient value chains, capable of a more efficient technology transfer and products commercialization;
- iii) efficiently promote priorities towards institutions elaborating regulations/funding programs; and
- iv) align R&I funds, policies and infrastructures at regional, national and the international level, by avoiding duplication and maximizing synergies and the leverage effects.





# Conclusions

**Universities are significant players in the sustainable growth: they can play a role beyond traditional research and education, becoming living labs, where the physical campus becomes a test-bed for designing, implementing, studying and teaching sustainable practices, technologies and infrastructure, and agents for change and experimenting of technology.**

Universities can do what markets can't: they can study, teach and engage communities in implementing transformative change.

They need your joint support to:

- see their role in facilitating sustainability in partnerships with all stakeholders better recognized;
- implement the mentioned needs;
- be better interconnected, for a more effective sharing of good practices, challenges and opportunities.



*Thank You!*

