



Low Carbon at Work

Modeling agents and organizations to achieve transitions to a low carbon Europe



Final Seminar, 10 December 2013, Brussels



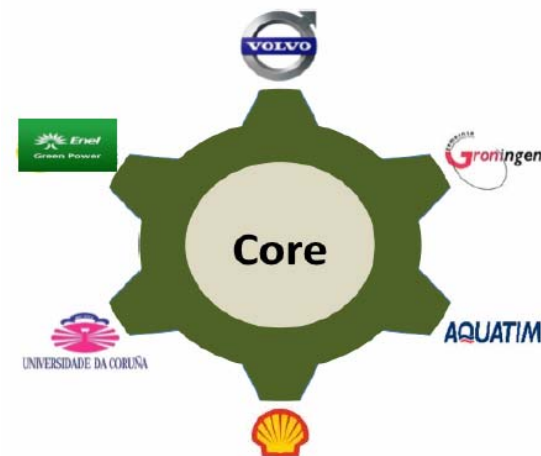
Identifying barriers to and drivers of sustainability in organizations

- Large-scale organizations are responsible for a significant amount of greenhouse gas emissions.
- In spite of a number of EC sustainable development strategies for reducing emissions, they have not been sufficient to ensure significant reduction rates.
- It is important to identify barriers and drivers of sustainable changes in everyday practices in workplace.



What LOCAW context is?

- The LOCAW project analyzed everyday practices in the workplace, and factors that influence transitions to sustainable patterns of production and consumption.
- LOCAW examined organizations in 6 different countries, occupying different positions in the sustainability debate (private / public).

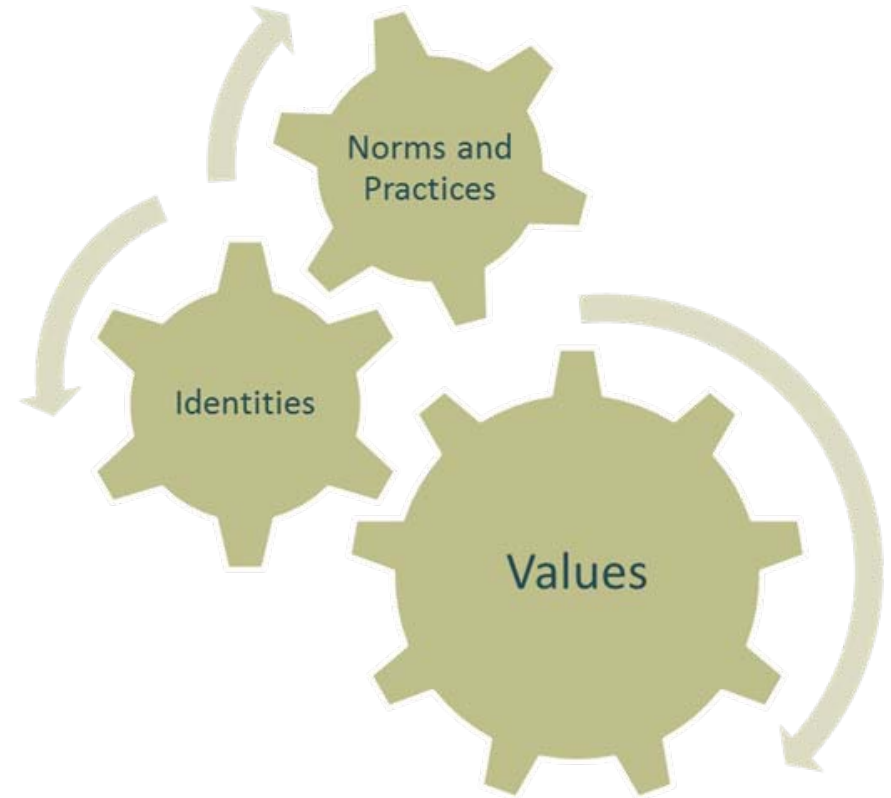


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The workplace

- People spend an important part of their lives at work, within a community of values, norms, beliefs and everyday practices.
- A place where identities are negotiated, where individual values are transformed and where sustainability-related behaviour is either promoted or restricted.





The role of Universities and Municipalities

- **UNIVERSITIES**
 - They are key actors in sustainability transitions as workplaces and as learning communities, with a direct and indirect impact on society.
- **MUNICIPALITIES**
 - They have an impact on the formulation and implementation of policies, where civil servants can be seen as examples of promotion of sustainable behaviour.



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Involving multinationals as critical actors

- **THE HEAVY INDUSTRY**

- Multinational, high carbon-producing companies are critical actors in terms of climate change.
- They have the potential to have a significant impact in reducing emissions through changes in their production processes, with effects
 - on the lifestyle choices of consumers,
 - on the practices of their employees, and
 - on production processes across the world.



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The green innovation and leadership

- **RENEWABLE ENERGY**
 - They are well situated to be the site where green innovation emerges and an important part of the solution to our carbon-dependent lifestyles.
- **PUBLIC SERVICE COMPANIES**
 - They can lead the effort to reduce emissions, as they are not subjected to the same pressures as private companies.



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What is the contribution of LOCAW to eco-innovation?

- LOCAW provides a theoretically and empirically grounded analysis of everyday practices in the workplace.
- LOCAW identifies how carbon consumption practices in the workplace and the home can be transformed.
- LOCAW enhances our understanding of how these two important areas of our lives can be made to work together to achieve a transition to a sustainable society.



What LOCAW brings to the eco-innovation area?

- LOCAW used participatory future scenario development tools, such as *back-casting* workshops to create normative visions of a sustainable future for 2050 for the organizations, and to define the pathways to reach them.
- LOCAW used agent-based models to simulate these pathways and see how they worked out in relation to the desired vision, clarifying the interactions among relevant actors.



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Investigating the determinants of everyday practices and behaviours

- Analyzing patterns of production and consumption in the workplace.
- Analyzing organizational strategies to reduce emissions and to implement the EU regulations regarding the “greening” of their production processes.
- Analyzing factors affecting everyday practices and behaviours at work of employees on different levels of decision making.
- The relation between behaviours and practices at work and outside work.
- The patterns of interaction between relevant agents and stakeholders and the resulting barriers to and drivers for the implementation of more sustainable practices and behaviours. ¹⁰



Investigating the determinants of everyday practices and behaviours

- LOCAW evaluated the role of unions in transforming workplaces:
 - Analyzing the relationship between unions and companies in defining carbon-reduction strategies
 - Focusing on the creation of mechanisms that promote communication between unions and management and the generation of creative solutions to promote more responsible and low carbon production processes.

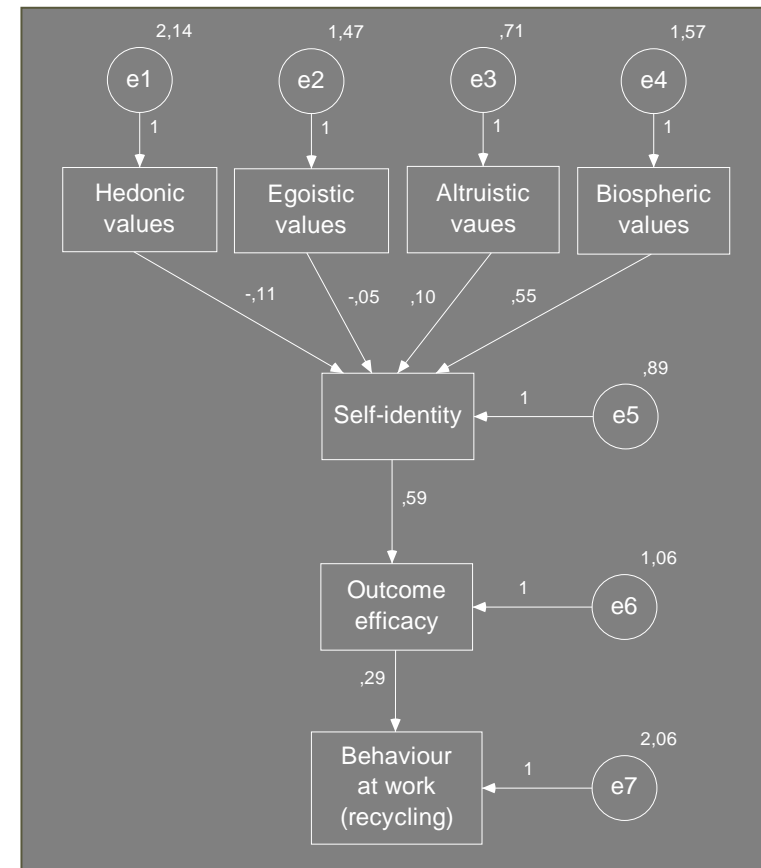
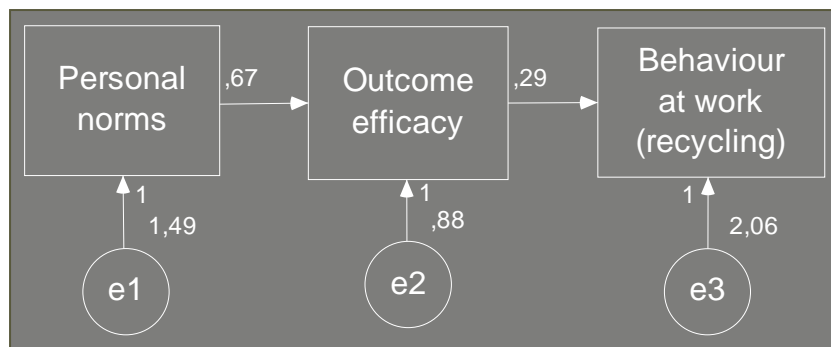


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Investigating the determinants of everyday practices and behaviours

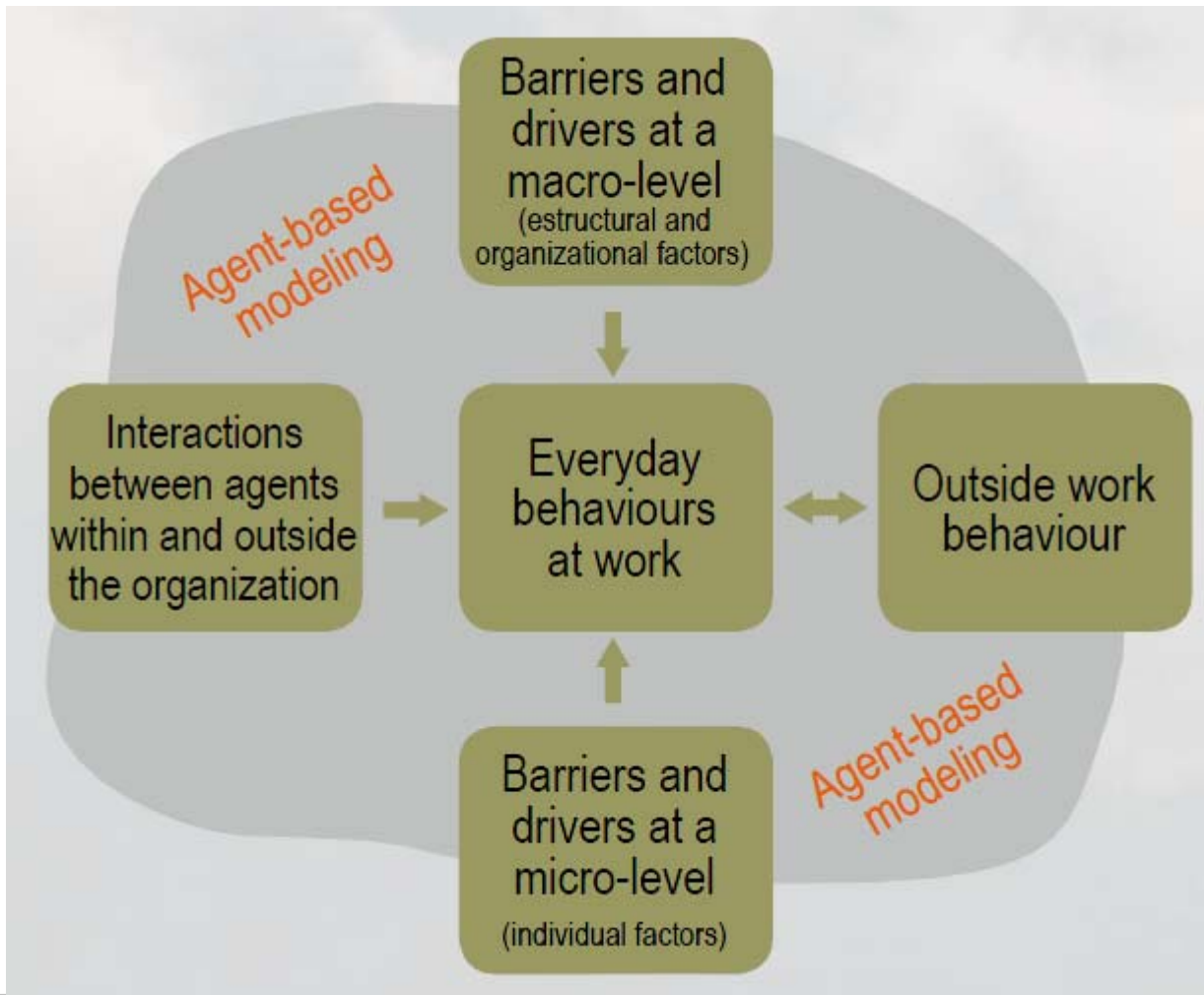
- LOCAW evaluated individual factors affecting behaviour in the workplace
 - Values
 - Identity
 - Efficacy
 - Norms
 - Behaviour



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The LOCAW approach

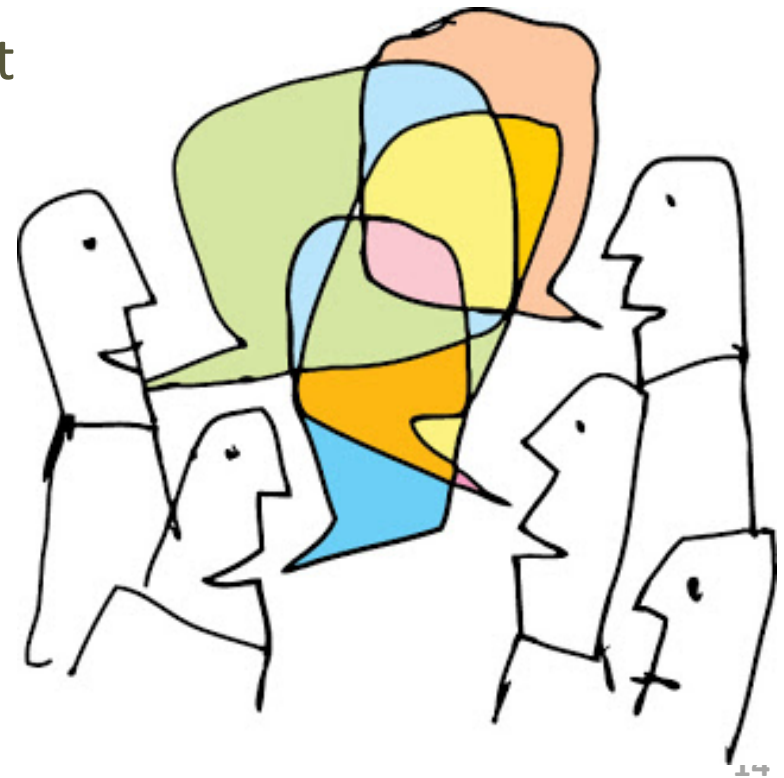


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Integrating findings: A multimethod approach

- Social science research methods
- Back-casting scenario development
- Agent-based modeling





Some remarks

- LOCAW has worked with organizations to incorporate results to the organization s sustainability strategy.
- LOCAW has had a good gender balance in all the tasks and responsibilities of the project.
- LOCAW has generated theory and empirically supported research conclusions.
- LOCAW has generated employment along its period of development.
- LOCAW generated academic, social and organizational benefits.