Towards a Behavioral Indicator for the Evaluation of Energy Conservation at Work

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Context

- The University and *éco21*
- The State of Geneva and *Ambition Négawatt*
- The Energy Weeks (EW)
- *Grand-Pré* and *Hôtel des Finances*

Measuring Behavioral Change

- Identify the savings due to the EW
- Behavioral change *vs.* global consumption
- Behavioral change *vs.* equipment changes

Consumption Measurement Methodology for *Grand-Pré*

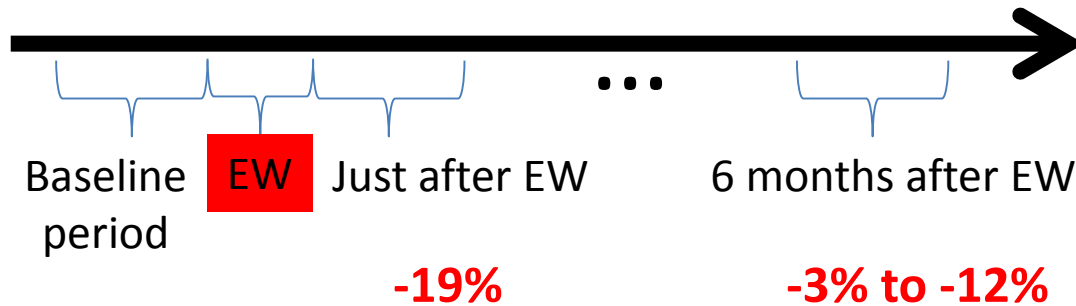Baseline period   EW   Just after EW   ...   6 months after EW
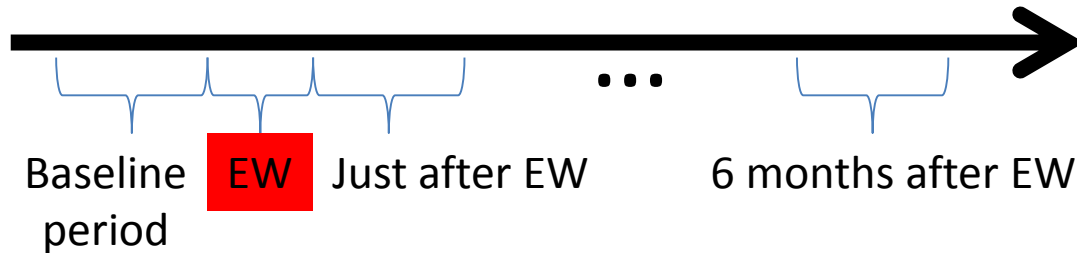
Consumption Measurement Methodology for *Hôtel des Finances*
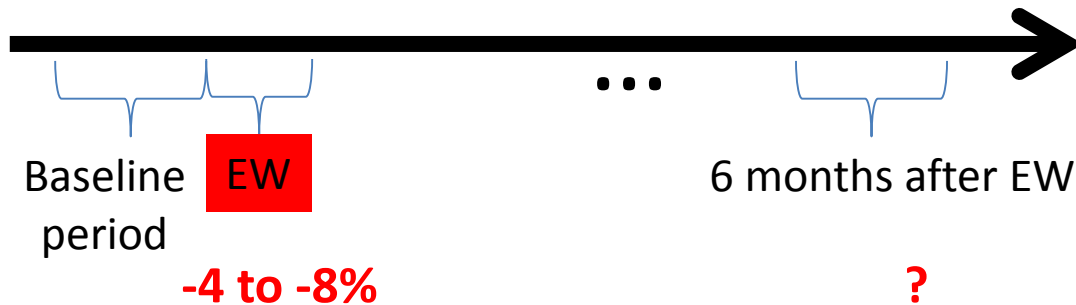
1. Temperature correction
2. Construction of a pseudo-baseline week
3. Analysis using a model

Results

- *Grand-Pré*

| Baseline period | EW | Just after EW | ... | 6 months after EW |

-19%   **-3% to -12%**

- *Hôtel des Finances*

| Baseline period | EW | ... | 6 months after EW |

-4 to -8%   **?**

The Environmental Awareness Indicator (EAI)

Transtheoretical stages of change:

- **Precontemplation** ("No, impossible…")
- **Contemplation** ("Maybe if…")
- **Preparation** ("Probably, but how…")
- **Action**
- **Maintenance** ("Yes, but…")
- **Termination** ("Yes, of course…")

Results of the Questionnaires

	Number of employees	Number of answers		% of employees doing the eco-friendly actions		Increase of employees shifting towards action
		Q1	Q2	before the Energy Week	after the Energy Week	
Grand-Pré	400	86	34	65%	84%	19%
Hôtel des Finances	1000	141	119	65%	78%	13%

Global Dynamics of Change

Global Dynamics of Change

Hôtel des Finances
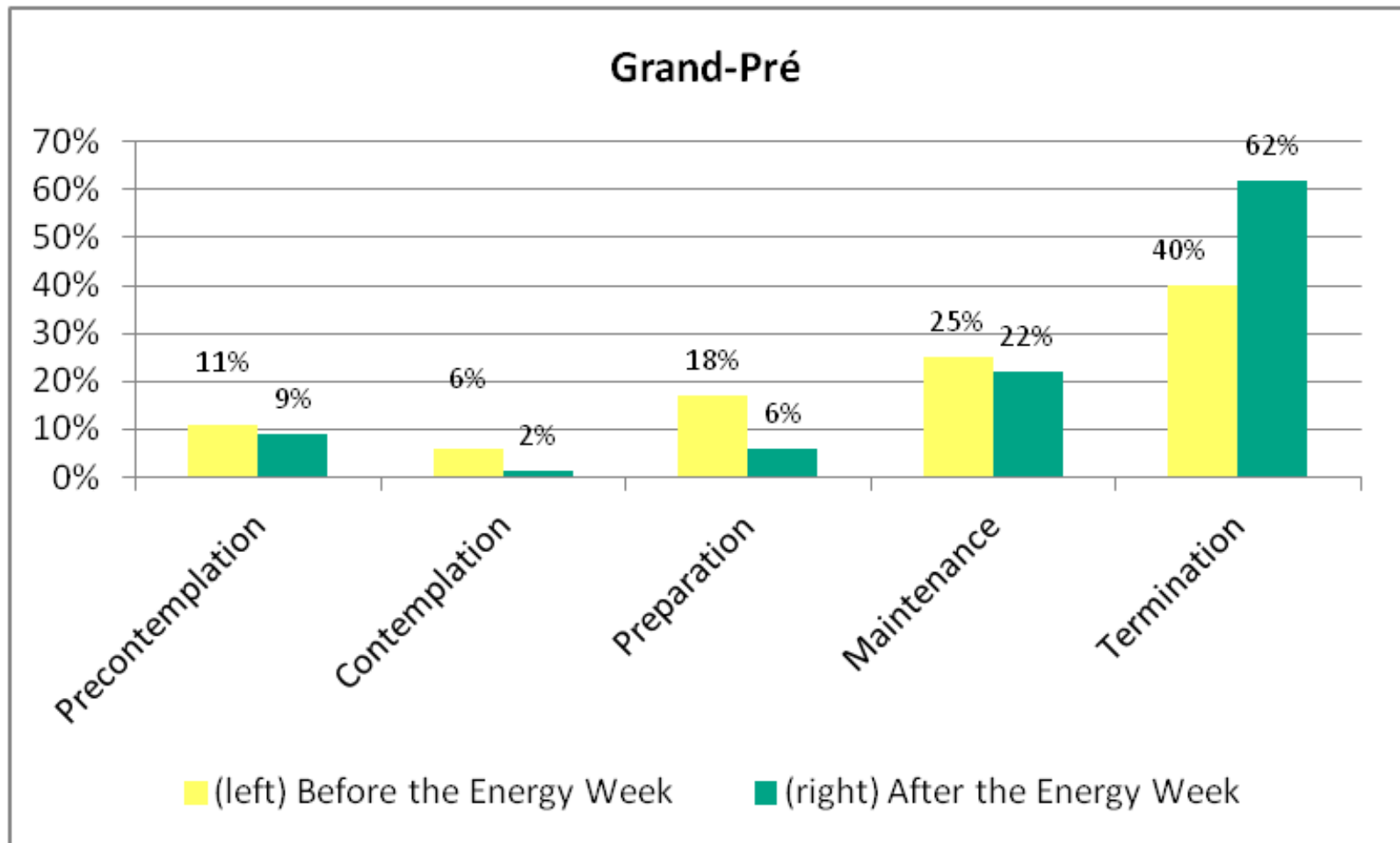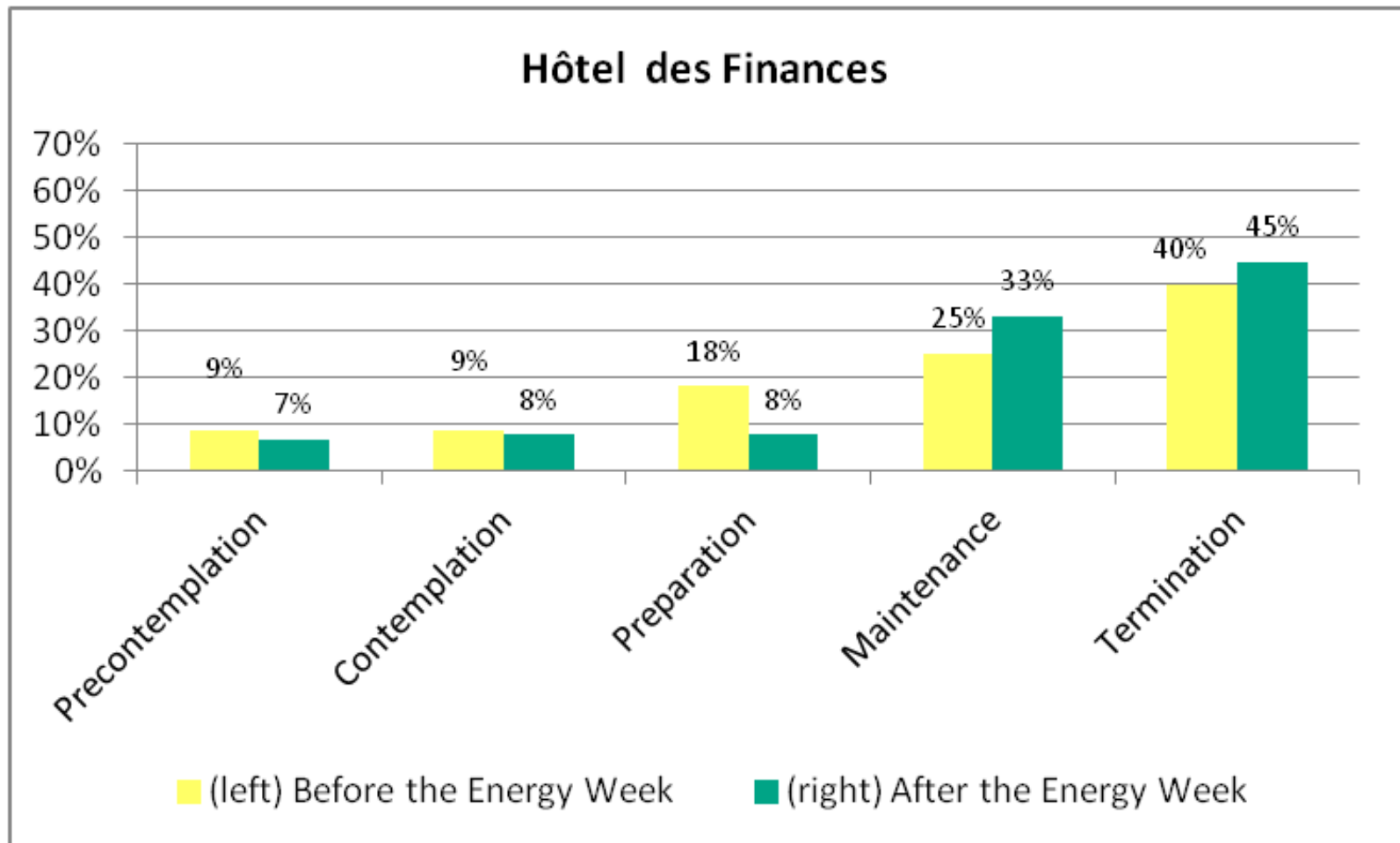
A Tool for Behavioral Monitoring

STAGE OF CHANGEMENT	BEHAVIORAL MONITORING	
	Message type	Environmental promotion
Precontemplation	Information	Inform on issues to initiate awareness
Contemplation	Information	Try to convince by giving reasons for change
Preparation	Practical guide	To make action easier
Maintenance	Encouragement	Encourage the continuation of engaged efforts
Termination	Enhancement	Exemplarity, spreading the good practices