



Strategic Technology and Innovation Management Programme 2016

Toolkit for resource efficiency in manufacturing companies

Dr Mélanie Despeisse md621@cam.ac.uk The Toolkit for Resource and Energy Efficiency (TREE) helps companies raise awareness about sustainability and ecoefficiency by promoting good operational and management practices for resource efficiency in manufacturing. The toolkit consists of 5 elements:



The STIM 2016 project specifically focused on the development of **Factory Heroes**, a collaborative game aiming to develop the players' knowledge about eco-efficiency & sustainability leadership. It simulates various situations with typical challenges faced by manufacturing companies, covering all five elements of the toolkit and the following key learning points:

Trade-offs

• Manage multiple issues in various areas: analyse, prioritise and plan to adapt to rapid changes while keeping the team on track towards company goals.

The bad, the good and the proactive

- Learn to see improvement opportunities: bad practices are often overlooked as long as operations are up and running.
- Ensure good employee engagement to maintain good practices: create new routines and habits to avoid reversing back to pre-improvement performance levels.



Teamwork

- Understand the value of cross-functional teams: a variety of skills are needed to ensure daily operations are running smoothly while identifying solutions for long-term performance improvement.
- Experience the challenges of working with cross-functional teams: need for leadership, teamwork and strategic planning to respond to emerging issues, maximise on individual strengths, efficiently complete specific tasks (short-term) and achieve goals (long-term).

