

Sustainable Transformation Mini-track

Gabrielle Peko

University of Auckland

g.peko@auckland.ac.nz

Valeria Sadovykh

PwC and University of Auckland

valeria.a.sadovykh@sg.pwc.com

David Sundaram

University of Auckland

d.sundaram@auckland.ac.nz

Claris Chung

University of Auckland

claris.chung@auckland.ac.nz

Sustainable management aspires towards balancing and integrating social, economic and environmental dimensions. Existing roadmaps, frameworks and systems do not comprehensively support sustainable transformation nor do they allow decision makers to explore interrelationships and influences between the sustainability dimensions. This leads to silo based decision making where vision and strategies are not mapped to execution, and sustainability modelling and reporting processes are uncoordinated. This is true at the micro level in the life of individuals and families and at the macro level in organizations, supply chains and societies as a whole.

The purpose of this minitrack is to explore concepts, models (qualitative, quantitative, optimization, simulation), processes, frameworks, architectures, roadmaps, and systems that will enable individuals, families, organizations, supply chains, and ultimately society to become more sustainable. We seek papers on approaches that enable us to support, share, measure, benchmark, model, quantify, qualify sustainability goals, best practices, performances, and indicators.

Topics of interest included but were not limited to:

- Sustainability and Sustainable Management
- Sustainable Development Goals of the UN

- Sustainability modelling and reporting
- Classical Dimensions of Sustainability such as Financial, Environmental, and Societal
- Dimensions of Individual Sustainability such as Good Health and Wellbeing
- Quantified Self
- Responsible Consumption and Production
- Organizational and Supply Chain Sustainability
- Sustainable Smart Cities and Nations and Societies
- Gamification for Sustainability
- Family Sustainability
- Sustainable Processes and Systems
- Sustainability Apps, Tools and Technologies
- Green Information Systems and Information Technologies
- Sustainability Best Practices Models

This mini track was proposed for the first time this year and attracted only two good papers. Unfortunately we could select only one of them, *Implementation Barriers of Industrial Symbiosis: A Systematic Review*. Industrial symbiosis describes a regional inter-firm approach towards a more sustainable industry. However, the implementation of industrial symbiosis is hampered by a multitude of various barriers. Although prior work has dealt with identifying barriers, an encompassing overview is missing to date. Therefore, in

this paper, barriers were identified by the means of a literature review and analyzed through qualitative content analysis. In total, 402 barriers for the implementation of industrial symbiosis were identified. They were grouped into nine categories: economic, technology, financial (hard, quantifiable factors); cooperation, management, knowledge, information (soft factors, which are difficult to quantify); policy/regulation, and public/market (contextual factors). The insights gained can be used to develop strategies and tools for further development and advancement of current industrial symbiosis practice to overcome existing barriers.