

Session 5 LCS and Behavioural Change

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The Session 5 focused on the relationship between low-carbon societies (LCS) and people's behaviour change. Essential research questions in this field may include, but not limited to: i) how the people's behaviour pattern and lifestyle would be in the forthcoming LCS; ii) how the social acceptance to LCS be developed and transition to LCS occurs; and iii) what kind of behavioural change is emerging and/or necessary to shift towards LCS and how such behavioural change could be promoted. Three speakers presented various approaches applicable to address these questions and inspired discussion among the meeting participants.

Wilhite pointed out that individual factors, socio-cultural contexts, built environment and the range of options available are all important factors to determine people's behavioural patterns. This implies that there is a strong need for behavioural research to keep both individual aspects, such as perception, knowledge and attitude to the climate change issues, and other external aspects in mind at the same time. In studying human behaviour, customs and culture must be taken into account as well as individual behaviour. For example, the energy saving measures may need to vary depending on local factors such as climate, daily habits (e.g. lighting of rooms), bathing, etc. Aoyagi-Usui illustrated the different perception on climate change issues in different countries as the result of quantitative research in China and Japan. She also pointed out that key information sources influencing people's behaviour are also different in different settings. For example, a study found that Japanese tend to be more affected by the information provide through the mass media; while Shanghai people are likely to be more affected by information provided through their direct social network such as family members and their neighbours. Nyboer highlighted that there is a great discrepancy between "what was declared" and "what was done" both at an individual level and societal level. He reviewed a series of unsuccessful political campaign on environment and climate issues conducted in Canada in the past few decades; then stressed a need for adopting more straight forward approaches such as regulatory and financial measures to provide direct positive and negative incentives to induce people's behaviour change.

Multi-dimensionality and socio-cultural diversity of LCS and Behavioural Change issues were well acknowledged among the meeting participants; then significant amount of interests and expectation to the research area was expressed. Importance of linkage between behavioural research with other research areas, such as scenario and modeling research, was also noted for further activities.

Major findings

- Potential determinants of people's behaviour on climate change and LCS includes individual factors, socio-cultural contexts, built environment and the range of options available.
- Perception on climate change issues in different countries differs in different countries. Key information sources influencing people's behaviour are also different in different settings.
- There is a great discrepancy between "what was declared" and "what was done" both at an individual level and societal level. A series of political campaign on environment and climate issues conducted in Canada in the past few decades were regrettably unsuccessful.

Main issues discussed

- Three different approaches, i.e. practical observation and conceptualization approach to understand the determinants of pro-LCS behaviour, comparative research on people's perception and behaviour in different countries with quantitative data, and climate change policy analysis on Canadian experience, demonstrated that a wide variety of behavioral science approaches are available for LCS research.

- Interdisciplinary approach, both within the social scientists and beyond this discipline, to the LCS research is essential and a language to communicate each other would be necessary.
- Individual behaviour pattern is affected by the social and cultural context: therefore, comparative studies in different countries could be a good way to understand the nature of actual people's behaviour on LCS and capacity to change. It also help us understand the uniqueness of possible LCS in different settings.
- Policy makers may need quantitative assessment and indicators to better understand public LCS perception and their capacity for actions.
- Education and information provision could be crucial for behaviour change which leads to the LCS, but may not be sufficient. Some compulsory approaches such as regulatory and financial measures may be necessary to ensure the people's actions.
- It should be noted that invisible and long-term nature of climate change and LCS makes it difficult for people to understand issues and to take appropriate actions.
- Roles and impacts of the mass media should be well taken into account.
- There might be a need for adopting further straight forward approaches such as regulatory and financial measures to provide direct positive and negative incentives to induce people's behaviour change.
- Review on a spectrum of policies and measures which provide positive and negative reinforcement for pro-LCS behavior could be useful.
- Behavioral research on the demand side control of energy use may contribute to LCS.
- Focused study on emerging middle class behavior in developing countries could be important.
- Testing key theories in behaviour science discipline, such as practice theory, social capital theory, and innovation diffusion theory, against their applicability to LCS behavioural issues could be useful.
- Expectation to behavioural change research is very high; while contributions from this research area is relatively limited.

Further activities to be undertaken by LCS-RNet

- Bridging gaps between behavioural change research with other discipline addressing LCS is essential. To this end, further involvement of behaviour scientists in scenario and modeling research is encouraged; while linkage with research on financial and technological aspects of LCS should be also strengthened.
- Promotion of further behavioural research on LCS aiming to provide quantitative and visible data may contribute to the future policy making. The following research may significantly help policy makers take necessary risks in introducing relevant and effective measures which leads to LCS:
 - Quantitative assessment and provision of indicators to better understand public LCS perception and their capacity for actions; and
 - Review on a spectrum of policies and measures which provide positive and negative reinforcement for pro-LCS behavior.