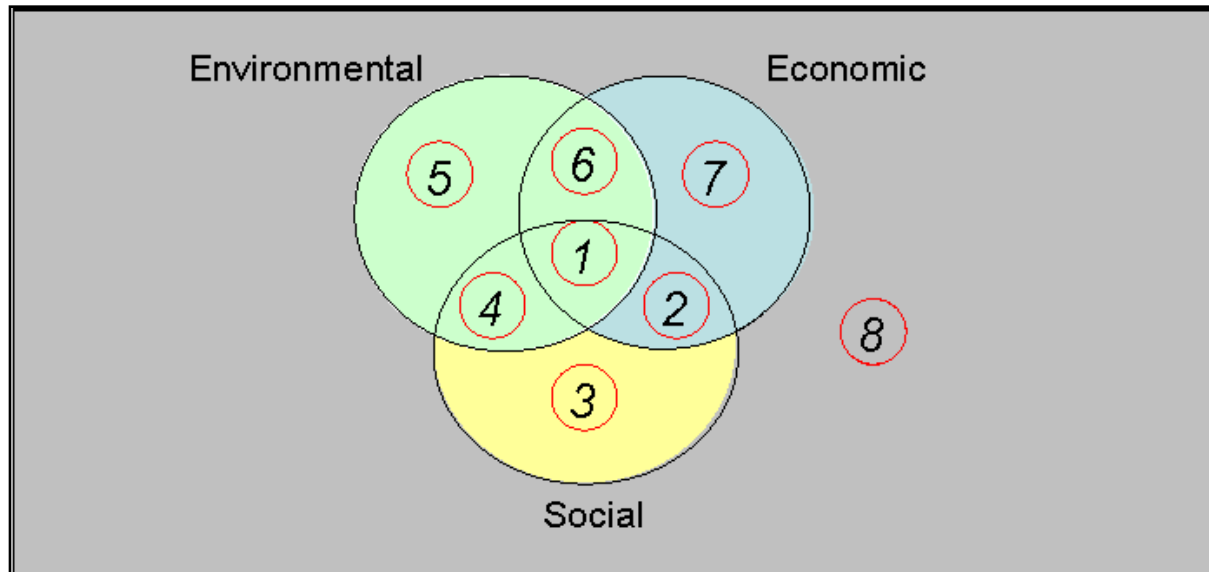
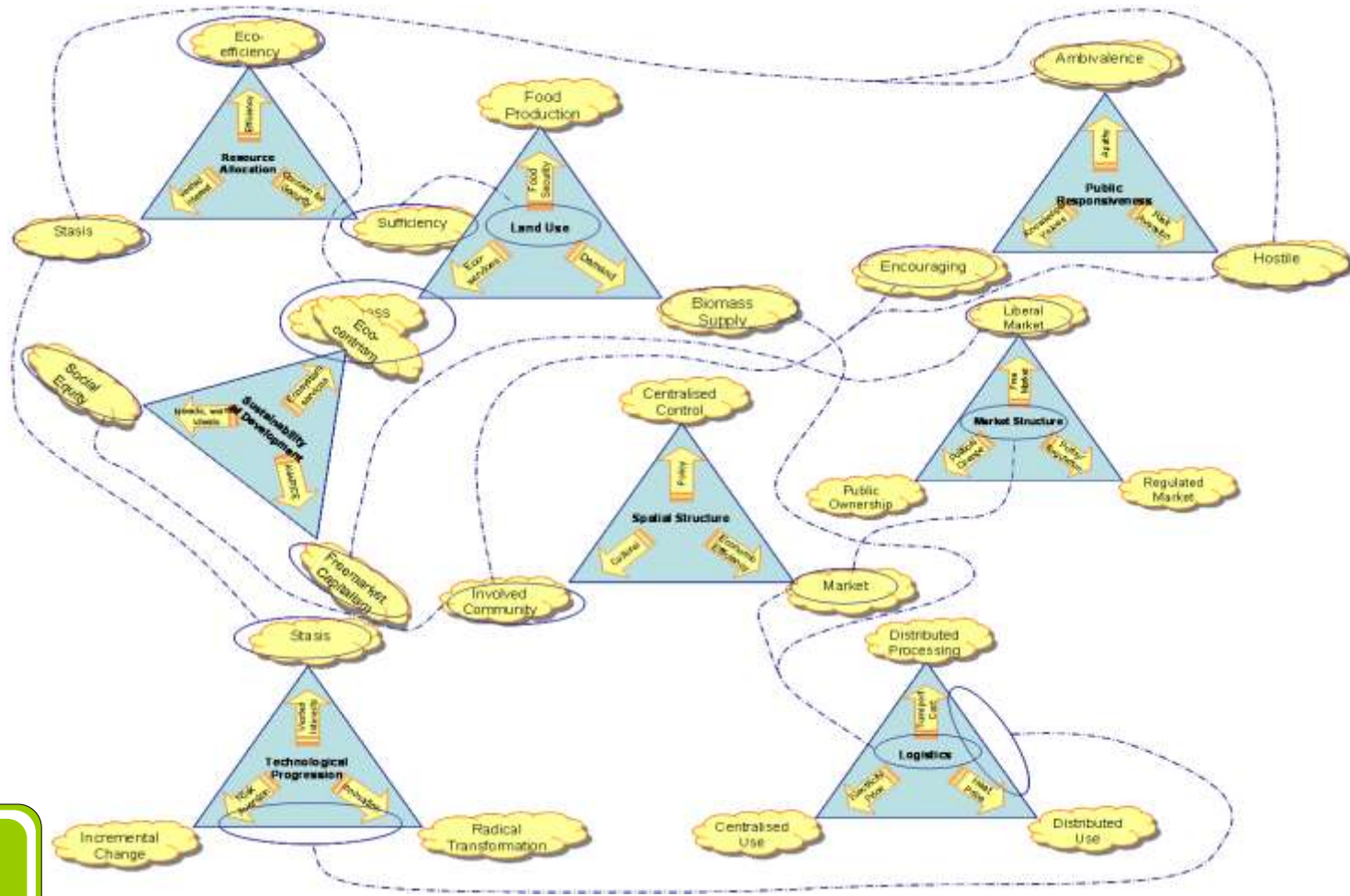


Use of MCDA in the first four TSEC-BioSys focus groups

- First four focus groups: qualitative criteria and objectives at different scales
- Criteria workshop: fundamental criteria and objectives in all eight combinations of the three lobes of sustainable development:



Qualitative system model as a basis for developing narratives



Evaluation of the narratives



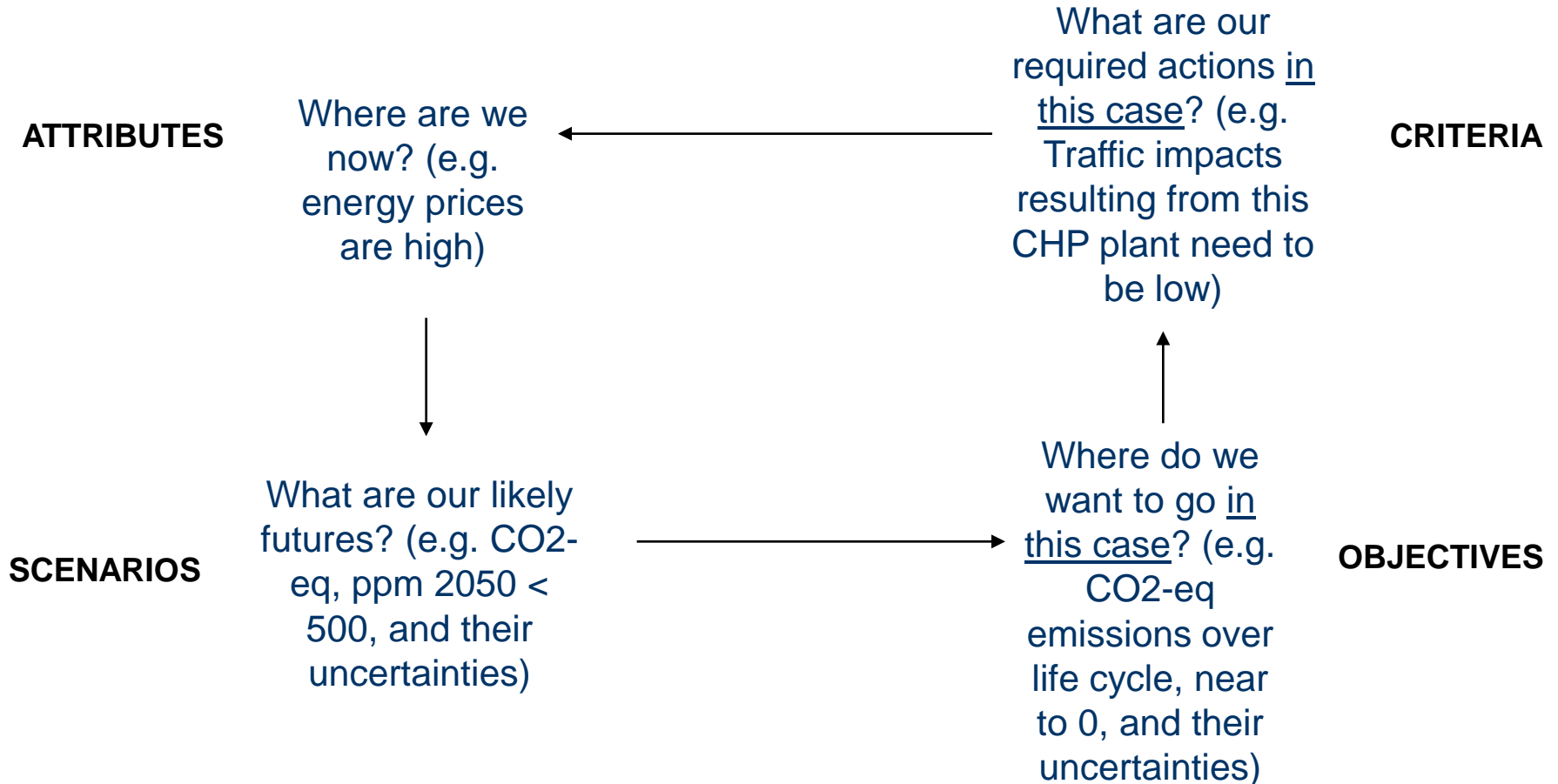
- Effectiveness of narratives
 - (a) informational content is consistent irrespective of the narrator.
 - (b) learning of the reader is independent of the teaching of the narrators
- **Content analysis** was used to determine the consistency of the narratives
- **The Q methodology** provides an avenue for the systemic study of perspectives, that may be present in a given policy (Stirling et al, 2003), was used to determine the independence of the learning of the reader from the teaching of the narrators and also helped to reveal the perspectives of the different groups



Policy development process - Oct 2008



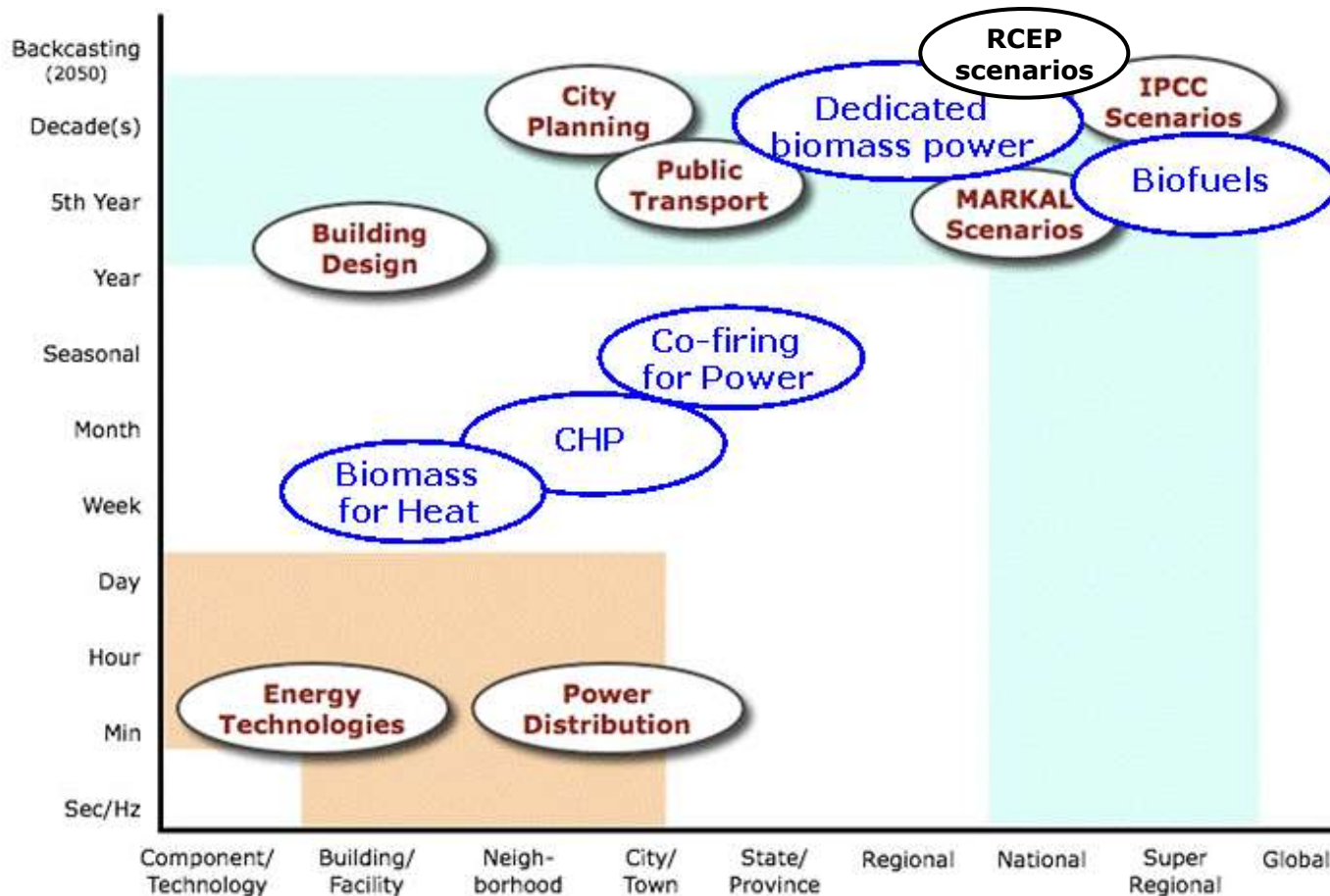
System: UK bioenergy, 2008-2050; Case: Dunsfold Park CHP plant



¹Belton, V and Stewart, T (2002) Multi-Criteria Decision Analysis: An Integrated Approach, Kluwer, Boston.

²Greening, L and Bernow, S (2004) Design of co-ordinated energy and environmental policies: use of multi-criteria decision-making, Energy Policy 32: 721-735.

Geographical and temporal scales for bioenergy technologies, comparative activities and RCEP (2000) (after Connors, 2007)



Oct 2008 workshops – participant evaluations



- Bellagio principles¹ for the assessment of sustainable development
- The process was felt by nearly everyone to have potential to contribute to sustainability. The specific implementation was criticised in certain ways (representation, topics discussed, slightly rigid methods)
- Some felt that the narratives partly determined the outcome
- “Matrix” approach to participatory discussions (first smaller groups, then larger groups) was praised
- The use of Q methodology and subsequent discussions; comparisons of quantitative estimates of system scenario and case objective attributes; and the development of criteria using the “matrix” approach were generally regarded as successful on this occasion



¹Hardi, P and Zdan, T (1997) Assessing Sustainable Development: Principles in Practice, IISD.

December 2008 workshops: PLEASE COME

- 4 December 2008 at University of Surrey: Themes 2 & 3 workshop
 - develop Theme 2 narratives. A variant of the method used to develop the Theme 1 narratives will be used
- 9 December 2008 at Imperial College: all Themes workshop
 - participants will first read and evaluate the Theme 1 and Theme 2 narratives, using the Q methodology
 - the October 2008 workshop methodology will be followed. Criteria will be developed for the UK bioenergy system including that of the research agenda



¹Hardi, P and Zdan, T (1997) Assessing Sustainable Development: Principles in Practice, IISD.