



Modelling Future Policy Needs

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Principal

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Overview

- The key policy needs
- The modelling response
 - Where we are currently at
 - Where we need to go and
 - What SCPnet could do

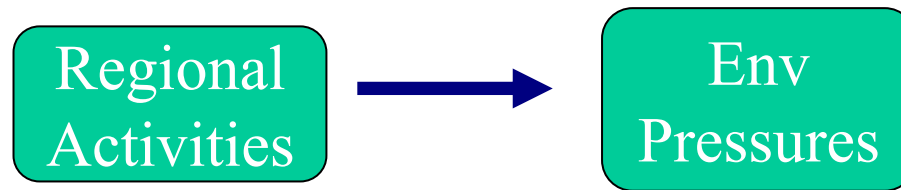
Key policy challenges?

- ‘Application of’ living within environmental limits
 - Particularly CC mitigation
- Integration of spatial and economic
- Understanding (& evaluating) RDA/Regional impact on behaviour
 - Particularly integrating environment into core activities
- Understanding how the environment affects the Regional Economy (?)

...and the modelling response

- SCPnet
 - REEIO
 - REAP
 - Triple Bottom Line
- WMRO
 - Integrated Spatial Policy Model

All have this basic structure.....



- ✓ asking whether economy within environmental limits esp REAP
- ✓ WMRO developing spatial-economic integration
- ✗ Understanding RDA/Regional impact on activities/behaviour
- ✗ Understanding impact of environment pressures on activities

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..... would need this basic structure



Is this possible?

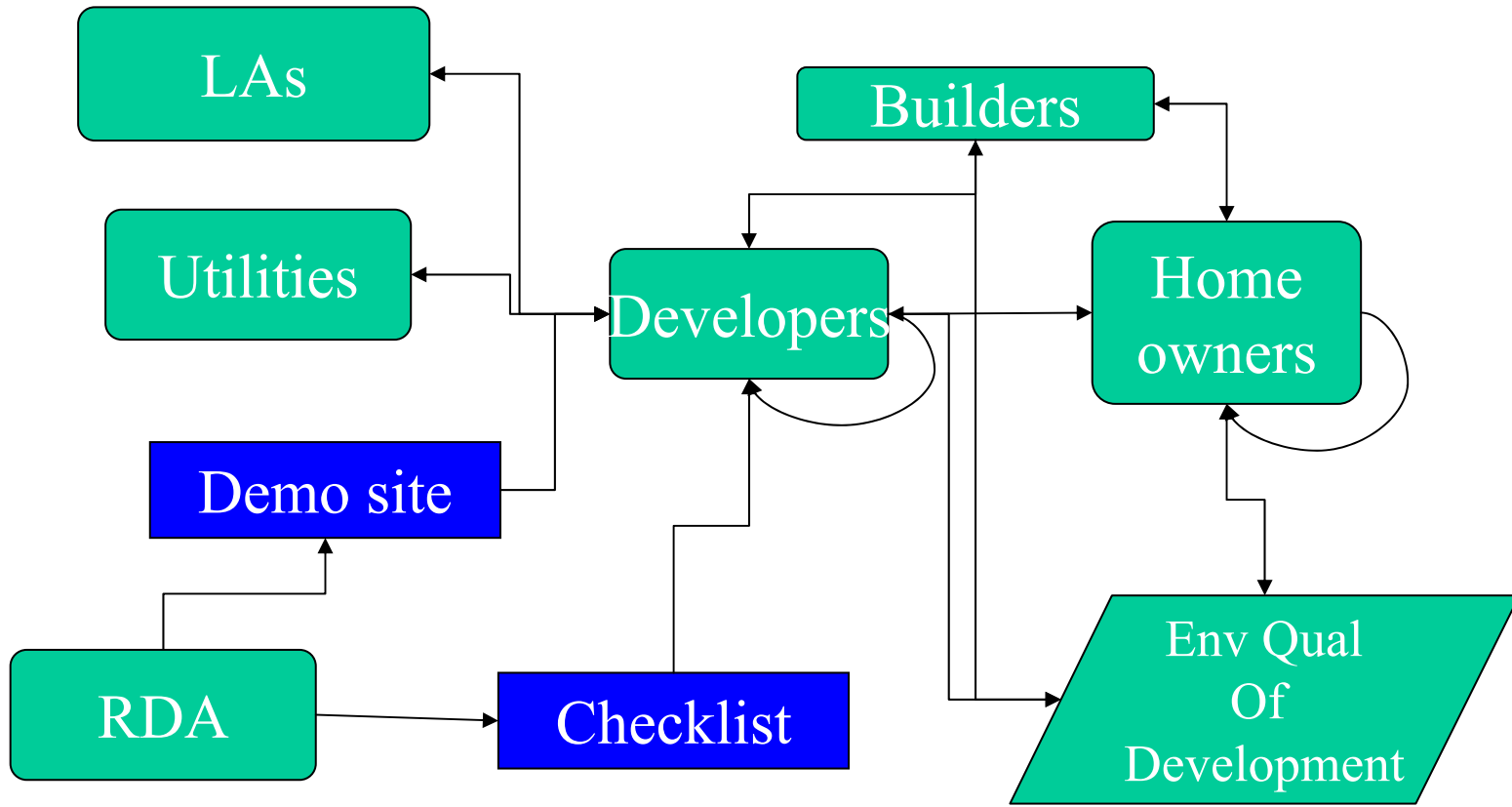
We are all doing it (more or less)....



A basic (simplistic!) **logic model** or causal chain:

- Activities/outputs → outcomes → impacts
- Key agents are developers but poss add others eg LAs

More complex model – Agent Based Model



More systemic modelling possible

- Models are 'just' simplified descriptions of relationships between entities
 - Can be mental, pictorial, narrative, mathematical... (eg 4Es, System innovation)
 - The more formal, the more precise, but not necessarily accurate
 - Formal modelling technology available to represent more entities & more relationships – Agent Based Modelling/Simulation
- Why do them?
 - Should help communication & learning....
 -by making beliefs and assumptions more explicit

So what?

- Poss for more policy relevant complex formal models but
 - First need to share learning/understanding of informal models (eg more specific application of 4Es model)
 - This learning can be then formalised into models of different levels of formality
- SCPnet and others could start to promote sharing of current less formal models
 - Could share recent/forthcoming evaluation work....