

# Integrated decision-making about housing, energy and wellbeing

# Welcome

- Complex Built Environment Systems group (CBES) at UCL
  - Bartlett School of Graduate Studies
  - UCL Energy Institute
- EPSRC Platform Funded Group – ‘Unintended Consequences of Decarbonising the Built Environment’
- Scene setting
- Housekeeping

# Stakeholders

Affinity Sutton	Age UK	Arup
BME National	Centre for Regional Economic and Social Research, Sheffield Hallam University	Centre for Sustainable Energy (CSE)
Centre for Sustainable Planning and Environments	Chartered Institute of Building Services Engineers	Consumer Focus
Core Cities	Department for Business, Innovation and Skills	Department for Communities and Local Government
Department for Environment, Food and Rural Affairs	Department of Energy and Climate Change	Department of Health
Department of Sociology, Lancaster University	EDF Energy	Environmental Change Institute and UKCIP, University of Oxford
English Heritage	Good Homes Alliance	Government Fuel Poverty Advisory Group
Greater London Authority	Homebuilders Federation	Leeds Sustainability Institute, Leeds Metropolitan University
New Economics Foundation	Parity Projects	Positive Money
Public Health England	Shelter	Sustainable by Design
Sustainable Healthcare Network	Sustainable Development Foundation	Treasury
University of the West of England	Usable Buildings Trust	Willmott Dixon
Zero Carbon Hub		

# How did we arrive at today?

## Our starting point

- How can we best develop and implement policies aimed at reducing the energy demand and carbon emissions of buildings?
- We know from history that single focus policies lead to 'unintended' effects
- Lots of examples

# 1920 USA National Prohibition



- At best, the policy led to only modest reductions in alcohol consumption
- Deaths by alcohol poisoning increased by 300%
- Hundreds of thousands of illegal 'speakeasies'
- Increase in organised crime
- 9% of federal budget receipts lost to the public purse

# What can we learn from such examples?

- It is inevitable that policies such as the Green Deal and Energy Company Obligation (ECO) will lead to 'unintended consequences'
- Some will be positive and others negative

'UNINTENDED CONSEQUENCES'



INTENDED CO-BENEFITS

+

EXPLICIT TRADE-OFFS

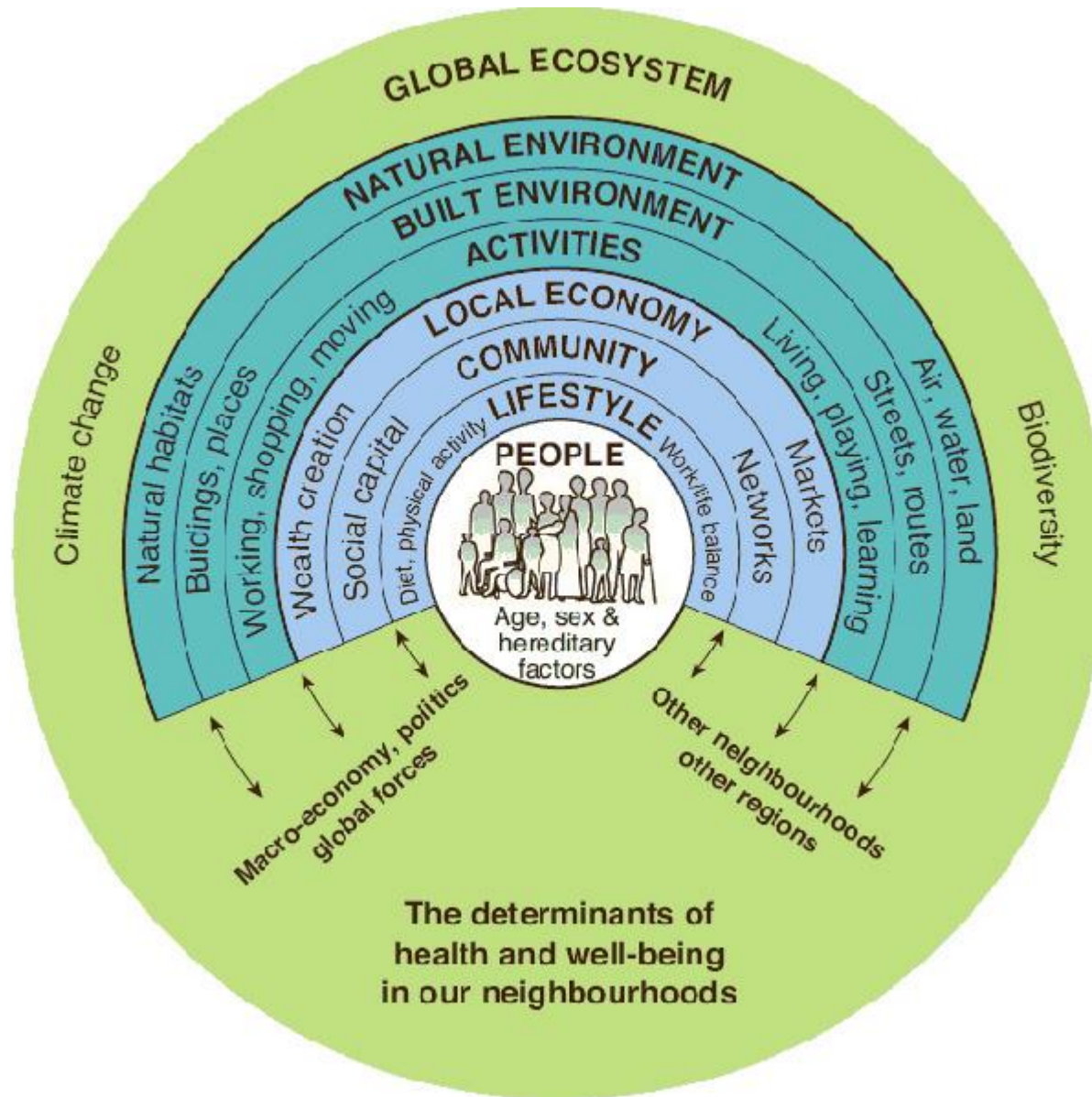
# So, how to proceed?

- How to predict the possible future states of such complex systems?
- Conventional scientific approaches may have been appropriate for systems capable of being analysed into simple components
- However, not applicable to such complex systems
- A different approach

# Where are we now?

- We need to consider a much wider system
- Insights regarding decarbonisation
- But, vitally, it will also allow insights regarding *integrated* decision making about the wider system of housing, energy and wellbeing.





# Range of policies open for consideration

- Very broad range
- However, at this workshop we do not want you to focus on policy *solutions* – that will come later.
- Instead, today we are trying to understand the system as it is at present.



# What should the process look like?

- Start with the system
  - Features of complex systems
- Incorporate a wide range of outcomes
- Integrates different kinds of knowledge
  - Policy, “community”, industry, academic....
  - Participatory

# Broad methods

1. Collaborative mapping and policy simulation method (SDM)
2. Policy assessment process (MCDA)

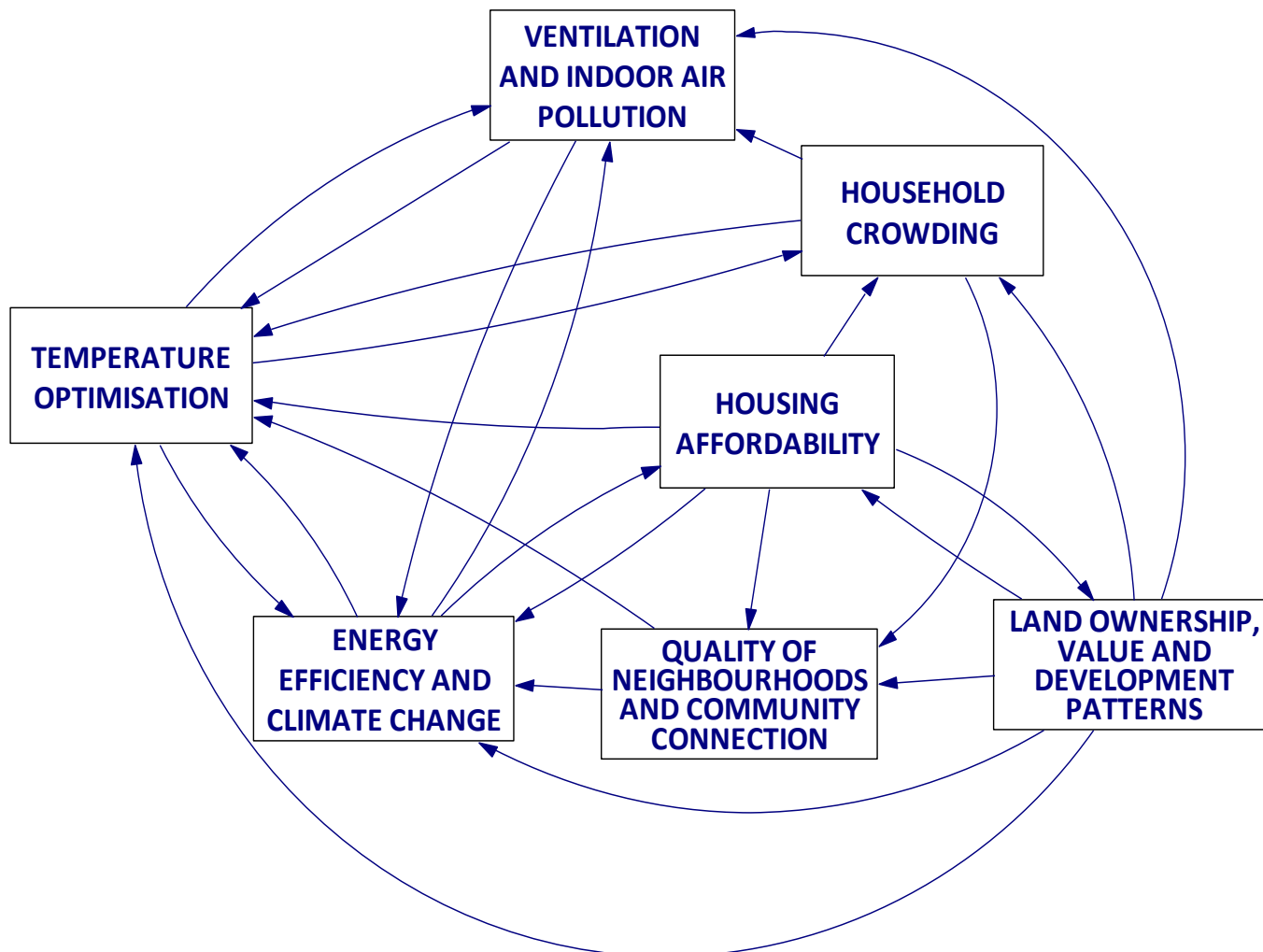
# Participatory process

1. Recruitment of stakeholders
2. Interviews
3. Development of concept map
4. Development of policy simulation tool
5. Simulations
6. Policy and research insights and decision support tool

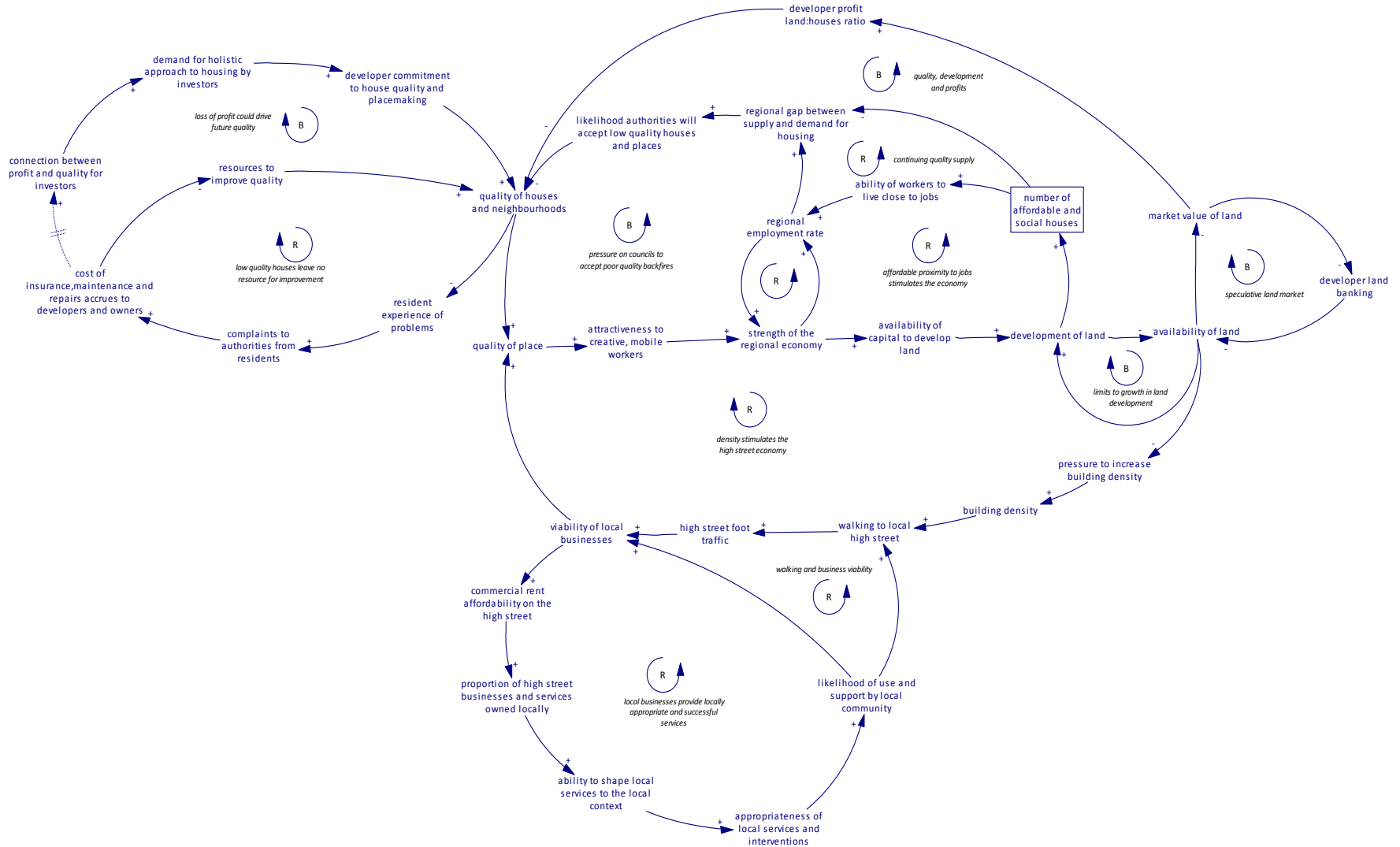
Workshops

# Relationship between sectors

## Overall Causal Loop Diagram (CLD)



# Land ownership, value and development patterns







# What are we hoping to achieve?

## Today

- Some shared understanding of systems modelling – vocabulary etc.
- Some shared understanding of how some parts of the system work together
- A shared system map and criteria for future policy analysis

## By the end of the process

- Some useful policy insights from qualitative mapping, simulation modelling and MCDA work
- Identifying and making explicit the trade-offs
- Identifying the most appropriate/powerful policy levers for an integrated approach to housing, energy and wellbeing

# Shape of the day

**2:00** Welcome and introduction to the project – Mike Davies

**2:15** Introduction to the collaborative mapping and simulation method – Alex Macmillan

**2:30** Supported small group work on the qualitative mapping – World Café style

**3:30** Break for tea, coffee and snacks

**3:50** Introduction to the policy assessment process – Evelina Trutnevyte

**4:00** Supported group work on the policy assessment criteria

**4:50** Closing remarks, feedback and next steps – Alex Macmillan

**5:00** Join us for drinks, canapés and networking until 6:00

# Guidelines for today

1. We will stick to time
2. Please switch your mobile off or only take phone messages if it is an emergency
3. We want you to do the talking
  - a. We would like everyone to participate
  - b. One person talk at a time – please keep your contributions short
4. All ideas are valid, there are no right or wrong answers
  - a. Every person's knowledge, experiences and comments are welcomed – we want to hear a wide range of opinions
  - b. Listen to each other – people need not agree
5. Please allow for the possibility of being inspired, even when you would prefer to immediately shut out the ideas based on your current rationale.
6. Chatham House Rules apply

We want everyone to feel comfortable sharing when sensitive issues coming up
7. We will take notes from the discussion
  - a. We want to capture the essence of what you have to say
  - b. We will feed the results back to other participants who missed the session
  - c. We will not identify anyone by name or make attribution of any statement to an individual person in the products of our research

**End**

