

# Transdisciplinarity for Housing

Sustainability Renuka Thakore

Supervisory team: Jack Goulding & Mark Toogood



#### **AIM**

- To review theoretical development in Housing;
- To assess practices contributing towards housing sustainability;
- To identify housing sustainability interventions linking theories to practices applying transdisciplinarity approach.



### sustainability

services carbon efficiency Government

Strategic Interventions

VALUE LEVEL "What we must do"

#### **Overcome** Challenges

Resources Commitment Priorities Partnerships Human behaviour Mixed tenure Weak leadership

#### Reduce **Impact**

Carbon emissions Cost & time Fuel poverty Stock depreciation Market Lost information High energy use

#### Sustainable **Development**

Economic Social Environmental Development Technical

Translations towards Housing Sustainability

# NORMATIVE LEVEL

"What we want to do"

#### Integrated sustainability for energy efficiency sustainable housing

#### **Economic**

- Increased competitiveness
- Energy affordability Energy security
- Reducing resource scarcity

#### Social

- Improved state of living conditions
- Public health Reduce social inequality
- Increase social cohesion

#### **Environmental**

- Energy savings
- Energy efficiency
- Reduce carbon emissions
- Material conservation
- Water
- conservation

#### **Development**

- Balanced energy
- efficiency programmes
- Improved
- consumer behaviour
- Sustainable development

#### **Technical**

- Efficient
- technologies
- Increased technical capacity
- Exchange of technical support

PRAGMATIC LEVEL "What we are capable of doing"

# Approach

#### Objectivity

Neo-classical Econometric testing Market analysis

Economic theory Behavioural economics Welfare economics

#### Subjectivity

Causal mechanisms Structuralist interpretations

Systems of actors

Theories of society & action

Political/ethical theory

Sociological theory

# Multidisciplinary

Central-local relations New economics Organisational behaviour

Institutional and Organisational theory Public service reform

#### Interdisciplinary

Principal/agent relationship Networked forms of governance

Approach

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Network Theory New institutional theory of organisational fields

#### Complexity

EMPIRICAL LEVEL "What exists"

#### RESULTS

Transdisciplinary Framework for Housing Sustainability

## **CONCLUSION**

- Captured challenges of the energy efficiency problem in housing;
- Engaged housing stakeholders to identify strategic interventions;
- Linked theories to practices;
- Theories & methods cannot be generalised due to its contextual nature.

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Review

rationale