

Transdisciplinarity for Housing

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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.

engagement environmental

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
- Sustainable development

behaviour

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

Sociological theory

Structuralist interpretations Systems of actors

Theories of society & action

Political/ethical theory

Central-local relations New economics Organisational behaviour

Multidisciplinary

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.

various

Review

MXED

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rationale