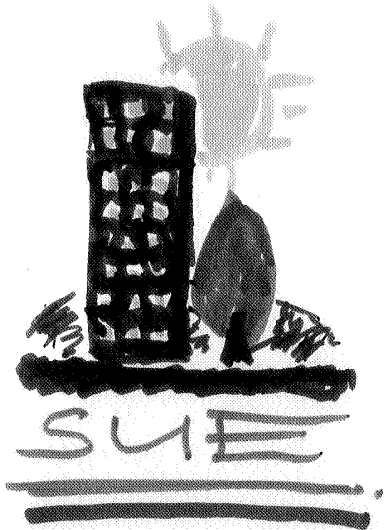
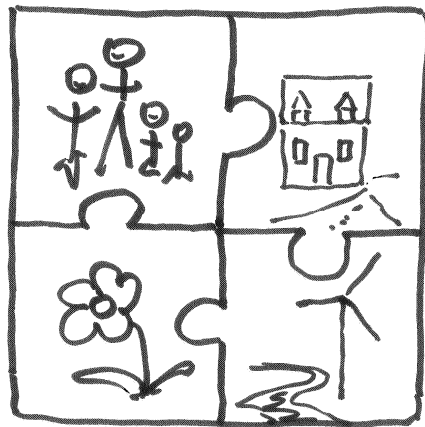
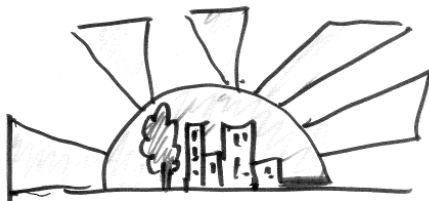


Report of the SUE workshop

held on

21st September 2007

at One Great George Street, London



Introduction

'Towards a Sustainable Urban Environment' (SUE) is an EPSRC initiative, and is a significant research investment by EPSRC. The call for the first round of SUE was issued in 2001. The programme currently supports:

- 12 multidisciplinary consortia (including one for which the funding has just finished)
- A project engaging on the regeneration of Birmingham Eastside
- A dedicated knowledge transfer consortium (ISSUES)
- A Citizen Science for Sustainability Network fostering dialogue between local communities, NGOs, researchers and practitioners

Six new consortia (SUE2) have been announced and are due to start work shortly.

EPSRC has also funded three networks to promote UK-China collaboration around research for sustainable cities, looking in particular at the research challenges arising from the construction of Dongtan, an eco-city under construction outside Shanghai.

The programme currently supports research grants totalling £38M, and over 400 researchers and investigators.

The funding for the next phase of SUE (SUE3) is currently scheduled for 2009/2010.

The objectives of this workshop were to:

- Introduce the SUE2 consortia
- Provide networking opportunities for SUE researchers
- Generate material to aid programme dissemination
- Get input of SUE investigators to SUE3
- Generate ideas on how to improve KT for the SUE programme as a whole

The afternoon session on knowledge transfer was run by ISSUES, and will be reported separately.

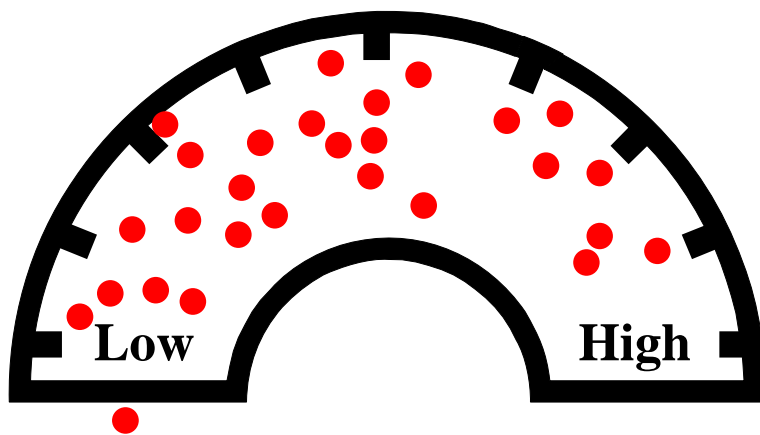
SUE objectives

The SUE programme has 3 objectives:

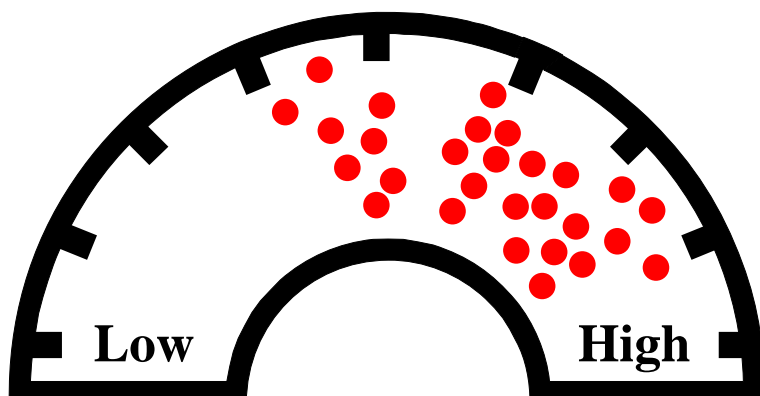
- Develop and promote a strategic research agenda to address sustainability in the urban environment for the 21st century and beyond.
- Strengthen the capability of the UK research base in sustainability issues within the urban environment.
- Engage with end users of research in industry, commerce, and the public and service sector.

Attendees were asked to indicate how well they believe the programme is currently meeting these objectives by indicating where they felt the programme stood with a coloured dot:

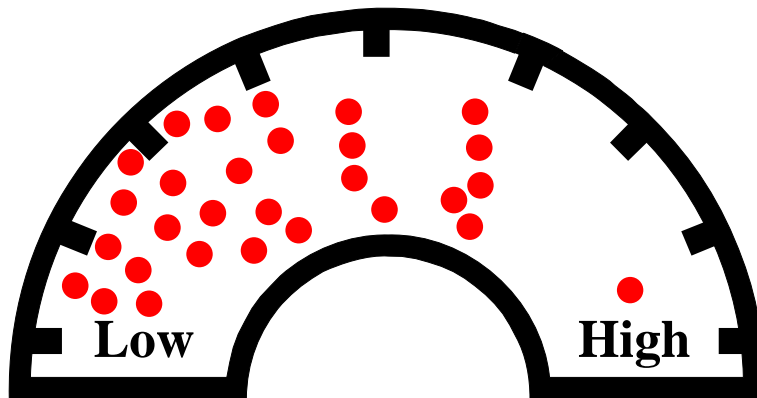
Develop and promote a strategic research agenda to address sustainability in the urban environment for the 21st century and beyond.



Strengthen the capability of the UK research base in sustainability issues within the urban environment.



Engage with end users of research in industry, commerce, and the public and service sector.



We have significantly strengthened the capability of the UK research base in sustainability issues within the urban environment. The programme must continue to develop a strategic research agenda and engagement with end users should be strengthened.

The SUE programme so far – research areas

The first round of SUE was awarded in four clusters:

- Urban and Built environment
- Waste, Water and Land Management
- Transport
- Metrics, Knowledge Management and Decision Making.

The second set of SUE consortia were encouraged to take a more holistic approach. EPSRC also co-ordinates the cross-council Energy programme, and there are many links to this through provision of energy, energy use in buildings and adaption to climate change. (Some of the SUE2 consortia were jointly funded by the Energy programme). Clearly this will have influenced the range of research in SUE.

Attendees were asked to write down the research areas covered by their consortium on cards, limiting themselves to 4 or 5 cards per consortium. The full list of research areas is given in annex 1.

The broad research themes* include:

- **Sustainability assessment and decision making** – a wide range of research including including holistic assessment, carbon quotas, models and decision making tools
- **Transport** – accessibility, logistics, planning
- **Pollution and environmental impact** - environmental quality and engineering solutions to urban pollution
- **Health** – small cluster
- **Building performance** – domestic and non-domestic
- **Urban design** – including open spaces, urban form and social inclusion
- **Service provision** – water, waste, energy, transport, links to urban design
- **Social needs and behaviour** – large cluster, covers various social and economic aspects of sustainability and importance of behaviour
- **Stakeholder engagement** – includes community engagement, stakeholder and end-user engagement, dissemination and knowledge transfer, skills.

The programme includes a vast range of research topics and expertise. How can we make the most of this and build on it? Do any areas need strengthening? Are we missing anything important?

* There are many ways to cluster the research areas, and themes are all inter-connected.

Outputs and outcomes

What do you get for £38M?

Delegates were asked to write down the outputs and outcomes from their consortium (both outputs already achieved and outputs planned.) The full list of outputs and outcomes is given in annex 2.

All consortia have a website, and all academic partners will publish their results in high impact journals.

Beyond this, the outputs of the programme are numerous. Outputs and outcomes will include:

- Case studies
- Training courses
- Workshops, conferences, newsletters, dissemination events
- Community engagement
- Guidelines, guide books, tailored guidance for stakeholders and end-users
- Books
- Models and tools to support decision making
- New projects and programmes
- Understanding of the urban environment system

All with the aim of ultimately leading to...

Changes in policy, practice and behaviour.

<p>The output of the SUE programme will be enormous. How can we make the most of this?</p>

Research gaps

Attendees were asked to discuss the research gaps in the current SUE programme. The full list of ideas is given in annex 3. Broad themes included:

- The big picture – what does a sustainable urban environment look like?
- Efficient use of resources (including energy) and links to climate change
- Health and well-being
- Understanding and influencing behaviours
- New technologies to deliver a sustainable urban environment
- Societal influence and interactions
- Policy and implementation

A number of issues were also raised:

- What's wrong with having GAPS? – need answers to most important problems rather than answering all problems
- Learn the lessons from other disciplines – greater integration across sectors/areas
- Better integration(researchers and end users) across SUE is required to find gaps (from day1)
- Problem : 'silo mentality' need to create a community of SUE researchers and practitioners
- Strengthen link between research agenda and policy agenda
- Clear evidence that SUE is worth £38M and 86p
- Depth of impact - is the research actually leading to changes in behaviour? (ie either in the public or policy and implementation)
- Research outcomes for whom?
- Identifying gaps must not equate to 'spread betting' if SUE is to have a strategic direction. Intensification of research effort in currently addressed areas is a legitimate 'gap'
- Outcomes are not necessarily immediate and tangible. 'Here and now' impacts are key but SUE must also work to inform and challenge policy
- Gaining insights and understanding into what enables research projects to make a difference, or not!

Strengths, Weaknesses, Opportunities and Threats

Four break-out groups were asked to undertake a SWOT analysis of the SUE programme. The combined results are given in annex 4. Several themes emerged:

- **Influence/impact** – comprehensive outputs, good opportunities for putting new knowledge into policy and practice, but impact not as great as it could be so far.
- **Stakeholder engagement** – there are a wide range of stakeholders involved in the programme and potential to work with more (particularly end users). Maintaining their engagement is not always easy. Some can dominate.
- **Interdisciplinary working** – this a strength of SUE, though can sometimes cause difficulties. There is potential to bring in other disciplines and link to other existing programmes.
- **International engagement** – there is potential for greater international engagement.
- **Training/capability** – the programme has created a new community with depth and breadth and trained a large number of people. It provides the opportunity to train researchers across disciplines.
- **Procurement process/funding** – significant funding invested in the programme. One group commented that they preferred the SUE2 process.
- **Cross-Programme integration** – need more cross-consortia engagement.

Summary and Next steps

SUE is a broad, highly multi-disciplinary programme involving an impressive range of research and a wide range of project partners. We have succeeded in raising the UK research capability in sustainability issues for the urban environment. The outputs of SUE will be numerous and wide-ranging.

To make the most of SUE we need to:

- Increase cross-programme engagement
- Develop a strategic research agenda for SUE3
- Ensure the outputs of SUE inform policy and practice.

Next steps

- EPSRC will take forward the ideas developed at the workshop for a SUE logo
- EPSRC and SUE investigators to consider how to develop greater cross-programme integration
- EPSRC will discuss SUE3 with relevant government departments (including CLG, Defra, Department for Transport and Department of Health)
- EPSRC will seek input on SUE3 from Economy, Environment and Crime Programme project partners and non-academic contacts
- Through the Citizen Science for Sustainability network (Suscit), we will seek community input for SUE3.

Publication of the SUE3 call is planned for early 2008.

Annex 1 – Research Areas

Sustainability Assessment and Decision support

- Life cycle – impacts
- Assessing sustainability (holistically)
- Decision support
- Urban design decision making and ICT support
- Multi-criteria analysis (evaluation of risks and uncertainty)
- Sustainability assessment
- Value/pricing of environmental and built interventions
- Development of appropriate and assessment tools (models) to assist decision making
- Development and implementation of option generation tools
- Individual carbon quotas – the options and choices and lifestyle implications
- Density and design - Decision making
- Handling complexity in sust regeneration
- Multi criteria assessment, Economic efficiency, Society equity
- Stronger evidence based on sustainability performance of existing urban forms in relation to social, transport, economical, energy criteria
- Integrating fragmented knowledge on sustainable regeneration, Km for sustainable regeneration

Transport

- Environmental improvements to urban traffic systems
- Transport and access
- Transport logistics (of waste)
- Scale/scope of barriers to implementation of transport – land use policies
- Urban land use and transport - Use density and mix, Network provisions and pricing, Spatial configurations

Pollution and environmental impact

- Articulating Environmental Inequalities
- Biodiversity
- Indoor pollution and environment
- Natural environment and biodiversity
- Engineering Solutions to Brownfield problems
- New solutions to treating contaminated land
- Transport of pollutants
- Urban pollution
- Environmental impacts, Resource use
- Carbon sequestration and its retention in urban soils

- Urban river ecology
- Potential environmental benefits from vehicle technologies
- Evaluating environmental equity
- Atmosphere
- Environmental quality – user centred

Health

- Health and internal environment
- Health impacts of external pollution
- Health impact assessment

Building performance

- Building refurbishment
- Assessment of current building stock – comfort, energy, process, people
- Energy and buildings
- Detailed measurement of the energy use in UK homes
- Carbon emissions from non-domestic building
- Public conveniences – away from home toilets
- Control of people of their working and living spaces

Urban design

- Surface built environment and open spaces
- Built environment and open space provision
- Housing provision
- Urban design interventions
- Synergy between biodiversity and social benefits of urban green space
- Urban design, social inclusion
- Characterising and measuring urban form
- Urban futures
- Property/planning in relation to brownfield

Service provision

- Regional spatial development, Building type and density, Energy generation, Transport, Water and Waste
- Waste to energy (incl bioenergy)
- Waste management
- Water and waste water
- Resource recycling and materials flow
- Sustainable urban drainage

- Decentralisation of service provisions (water, energy, waste, transport)
- Infrastructure energy and utility provision
- Sub-surface built environment infrastructure and utility services
- Energy effectiveness in regions

Social needs and behaviour

- Behavioural modelling - Households and firms location, Travel choices, Costs of living and production, cost of transport
- Generational and evolution of diversity – mixed-use, economic diversity, social mix
- Integrated behavioural modelling framework - Land use and transport, Energy, water, waste
- Effective use of sources of finance for transport/LU schemes
- Social sustainability and local economic impacts
- Organisational behaviour and innovation
- Social acceptability
- Social needs, aspirations and imposed policy
- Crime and fear of crime
- Designing neighbourhoods to support sustainable behaviours
- Impact of urban environments on social capital
- Testing tools for engaging marginalised groups in dialogue with sustainability researchers and professionals
- Behavioural changes with technological opportunities
- Sociology/governance

Stakeholder engagement

- Stakeholder engagement
- Sustainable regen skills gaps and capacity building
- Looking for drivers for dissemination, Distortions in measuring research quality and awarding research grants, Classify knowledge by type
- What turns end users on, Find connections between academic research and practice, Finding ways of making outputs lead to outcomes, Synthesis of SUE research
- Provision of knowledge repository to provide corporate memory in long term (10 years +) regen programmes
- Effective collaboration within and between organisations
- Engagement and inclusive visioning with all stakeholders
- Community (resident and business) engagement
- Developing community led foresight processes for urban sustainability

Annex 2 - OUTPUTS/OUTCOMES

CASE STUDIES

- Case studies for different cities: London, Sheffield, Avonmouth, Siracusa (Sicily) (PurE)
- Case studies for management of MSW, contaminated soil and groundwater, and alternate/renewable fuel for energy, and transportation (PurE)
- Case studies of options for home energy provision (PurE Intrawise)
- Learning from works and understanding why it failed (Suregen)
- Comparative study of metropolitan regions of London and S.E. of England, Beijing Regions, Sao Paulo region, Los Angeles region (Revisions)

TRAINING

- 8 Phds! – trained early career researchers (City Form)
- CPD/shortcourse on designing to support sustainable behaviour (CityForm)
- Bespoke training courses – CPD green roofs, developer decision making

EVENTS AND MEDIA

- Roadshow – for end users
- Dissemination events – multi-stakeholder seminars (CityForm)
- Art exhibitions and community engagements (Vivacity)
- 3 workshops plus 2 international conferences (SUE-MoT)
- Conferences/newsletters
- Set of short films articulating community perspectives and concerns about (their) urban environments (SusCit)
- High profile media coverage of funding – Radio 4, New Scientist (CityForm)

NEW UNDERSTANDING

- The carbon footprint of a “typical” UK city
- The acceptability and benefits of individual carbon quotas
- The contribution of urban carbon sequestration of living plants
- Transport and security - Design vs Crime (AUNT-SUE)
- Understanding the dynamics of Sust. Regen and team building (Sureregen)
- Life cycle assessment of urban biowaste treatment options
- Identification of key indicators of sustainability (SUE-MoT)

CHANGING BEHAVIOURS AND PROCESSES

- Better use of existing technologies and services for urban mobility (Futures)
- Redirection of business/organisational development for more sustainable urban transport decisions – eg lift sharing (Futures)
- Alternative futures
- Alternative urban regeneration landscapes

DIALOGUE AND ENGAGEMENT

- Ongoing dialogue between local communities NGOS, and sustainability researchers and practitioners (SusCit)
- Processes for effective stakeholder engagement (SUE-MoT)
- Aspirational outputs – effective* ways of linking research and practice, gap analysis between research and practice, intelligent feedback to ESPRC * new or old! (ISSUES)
- Example of community-led research agenda for urban environment and how this differs from current mainstream research agenda (SusCit)

NEW RESEARCH PROJECTS AND PROGRAMMES

- KT - Urban buzz - £5M 2 years 260 funded partners – Building sustainable communities
- Research bids for knowledge transfer of funding to urban buzz and DEFRA (City Form)
- Dongtan networks
- Urban futures: water cycle implications (WaND)
- SUE 2 - Urban Futures
- Densities (new consortium) follow-on project Thames Gateway (Vivacity)

GUIDANCE AND GUIDANCE NOTES

- Housing guide (Vivacity)
- Crime guidelines (Vivacity)
- Toilets guidelines (Vivacity)
- Practitioners guide published by C.I.R.I.A. (WaND)
- Guides on methods for the generation of options addressing land use and transport problems (Distillate)
- Guidebook on methods to achieve effective collaboration within and between organisations (Distillate)
- Guidance on strategic and local development – spatial policies (compact vs dispersed, etc),, transport policies (pricing, investment etc) (SOLUTIONS)
- Guidance on funding mechanisms for local authorities and for potential funders – development of toolkits (Distillate)

- Guide for the use of key indicators informing problems and effectiveness, of intervention outcomes (Distillate)
- London and South-East, Cambridge, Tyne and Wear - options recommendation of long term planning (Solutions)
- Understanding micro economic spatial processes (policy guide) (Vivacity)
- Guidance for regional spatial strategies (Revisions)
- Supplementary planning guidance – Biodiversity pts system, Planting guide, Biodiversity action plan
- Tailored guidance and examples for key stakeholder groups (decision support, modelling pollution, sustainability) (PurE and PurE intrawise)
- Design guidance for planners, urban designers and developers on designing neighbourhoods to support sustainable behaviour (CityForm)
- Ci:aire bulletins (end user guides)
- Position paper: “waste to resource management” (with Hampshire C-C)
- Reports for regions greater south East (GLA, EEDA, SEEDA) one-North East (ReVisions)
- Data shared with Council, land owners, developers – land use survey, habitat survey, biodiversity survey, street network use
- Inputs to DEFRA new technology prog. for waste
- ‘Expert’ topic paper for CLG on evidence about density impacts on social, transport, greenspace sustainability issues – based on published and pipeline of academic papers – geared to influencing planning policy guidance (City Form)

BOOKS AND JOURNAL ISSUES

- Book: sustainable urban form – (Chapters by all City Form academic partners) – pub by Springer
- Book (SUBR:IM) – published by Blackwells
- Book on 24 hour sustainable cities (Vivacity)
- Special issue of waste and resource management (warm)

DECISION MAKING TOOLS

- Regen process simulator (Suregen)
- Benchmarking accessibility, eg trips to GP per month (AUNT-SUE)
- IT tool to explore potential consequences and learn from ‘what –ifing’ before real life decision making (Suregen)
- Web-based preference/pricing tool (impact of interventions on property values) (Ursula)
- Methods, models, tools for characterising pollution and its effects/impacts – environmental, Social, Health Cost (PurE)
- Building performance simulations (refurb buildings)
- Health impact assessment method: water management (WaND)

- Revisions – integrated modelling tool – for testing regional spatial strategies (Revisions)
- Models of waste “energy footprint”
- Models of waste transport
- Full cost accounting model for sustainable urban developments (SUE-MoT)
- Refurbishment assessment tools
- Visualisation tool – communication Design and Long-range decisions integrates aesthetic economic and ecological functions (Ursula)
- Integrated assessment toolkit and decision support system toolkit (for use on a workbench) (SUE-MoT)
- Better models for air quality prediction from incineration
- Decision support framework for sustainability comparisons (PurE and PurE Intrawise)
- IT tool to support continuous monitoring in region programmes (Suregen)
- Tools for assessing social capital and environmental equity (SUE-MoT)
- Water sustainability planning and design toolbox (WaND)
- Urban design process model (Vivacity)
- ‘Intelligent’ stakeholder portal CD-ROM/Web (WaND)
- Financial- physical model (trade off between cost/values of interventions) (Ursula)
- Micro-scale model of LU & T – sustainability testing for local design (Solutions)
- Models of waste processing
- GIS-CAD tool to enable (non)-‘experts’ to visualise new transport developments and influence their design (‘Visit’) (AUNT-SUE)
- Interactive PC-based waste audit tool (for SMEs)
- A survey technique and tool for capturing the carbon emissions of house holds
- Macro-ecological model (covers ecological goods and services provided by the river) (Ursula)
- GIS-based consultation tool to enable transport authorities to assess ‘reasonable’ accessibility and prioritise scheme that will reduce exclusion (‘Amelia’) (AUNT-SUE)
- Street design index and planning tool (GIS-based) to reduce social excl. at Street level (AUNT-SUE)
- Outputs: regen simulator workbench : IT decision support system, that industry will use! (Suregen)
- Tools, guidance, training for EPSRC science and engineering community on engaging marginalised and excluded communities (Suscit)
- Resource consumption and waste production model for households
- Improvements to existing sketch and strategic models, and incorporation of new techniques (Distillate)
- Hadrian - Ergonomics based capability tool ‘ accessible journey planner / for designers of transport facilities (AUNT-SUE)
- Policy influences – eg teleworking – decision support tool (Futures)

Annex 3 – Research Gaps

BIG PICTURE

- What does a sustainable urban environment look like?
- Research unwitting effect – creating complexity – not simplicity
- What makes (UK) cities inherently unsustainable?– general aspiration seems to be “win the lottery and move to the country – or even a different country. Sub question: what makes European cities different?
- Relationship between social and technical systems – energy, transport, ICT, etc and transition to sustainability
- Impact of out of city centre facility (supermarkets etc)
- Lack of large scale systemic modelling capability (simulation of responses to changed urban development allowing for complex interactions)
- Integration, complexity, systems connectivity
- International link and developing countries – research market opportunities

ENERGY USAGE AND RESOURCES

- Climate change implications of urban infrastructure
- Urban scale modelling of non domestic energy usage
- Resource inventory from buildings to consumer products – hierarchical approach to resource recovery
- Climate change (link to)
- Energy efficient policies and instruments for renovation of existing build
- Housing growth – economy
- Energy service contracts and new build
- Resource recovery and reuse (materials and nutrients)
- Consumerism – impacts of globalisation and displacement of resources
- Footprinting – beyond carbon? – materials, water, food nutrients

HEALTH AND WELLBEING

- Health and well being (vs QoL PIs)
- Sustainable urban –living → wellbeing
- Urban migration and support for the displaced community
Health/welfare/services
- Urban environments and obesity – linking sustainability urban form and public health
- Connection between urban populations and their essential requirements – food, water, natural resources (building materials)
- Health – healthy cities/neighbourhoods

BEHAVIOURS

- What turns people on., what makes them switch in some aspects of life but not others” change car,/not use car, change phone, house choices - move /retrofit SD, clothes
- Consumer preferences and impact on life cycle internalisation of environmental costs
- Understanding individual (and institutional) behaviour (to improve tools and methodologies)
- Dispelling “ignorance” in a complex field
- (1) Longer term behavioural change in transport – monitoring
(2) understanding and overcoming barriers to integrated decision making in transport/energy/services
- How do we change behaviour? – got the tools, got the policies but nothing changes ie people research not techno/IT research or integrating people research with T/IT research
- Influencing behaviours (people, regulators, investors)
- Behaviour modification to achieve carbon savings
- Behavioural change in response to changed urban arrangements – if people are in closer proximity to supply and treatment of energy, water, waste
- Stronger evidence base – esp on behavioural responses to environmental conditions eg density, car parking/use
- How to make teleworking ‘real’

NEW TECHNOLOGIES

- When and how to retrofit in urban env.
- Technology retrofitting in urban environments
- Proper multi-criteria assessment tools
- Technological change and its impact on energy consumption
- Optimisation of hybrid L&C systems including heat pumps
- Intelligent/smart grids/microgrids (control issues)
- Smart recovery technologies for rare and precious materials
- Need more focus on technical innovation – eg models, design solutions – that can reach the market place
- Construction and assembly in the urban environment for sustainability
- ICT and the urban environment

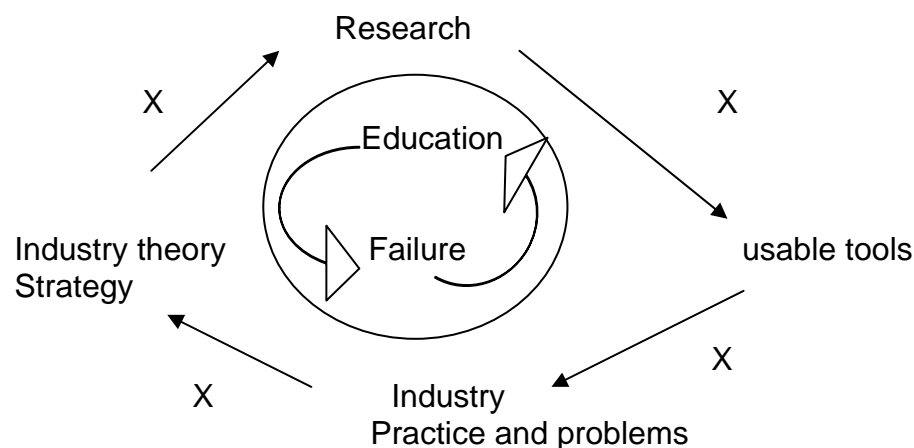
SOCIAL ASPECTS

- Poverty/social exclusion
- Fostering homeland security
- Urban options for ‘key workers’
- Being young in urban environment – youths
- Ethnicity/migration and the impact on/of a physical environment
- Lab/manufacturing/employment mobility and community and cities

- Migration in urban environments – inward (eg from within the EU), outwards (removing skills/people/business activities)

POLICY AND IMPLEMENTATION

- Application of knowledge to effect change (incentives, communication)
- How could the economic model/drivers be changed to deliver sustainable outcomes
 “the market/status quo” → £ model → unsustainable outcomes
 Social/env Econ objectives → new £ model → sustainable outcomes
- Roadmapping sequence of levers to make a difference
- Sustainable urban finance
- Sustainable urban governance
- Social technical links with policy
- Service delivery and management
- Implementation failure, practical usability, poor balance academic v. industry
- Systems innovation and transition – cities/regions as socio-technical systems. Governance of transition process
- Creating virtuous circles



- Wrong scale of focus
 Macro ←→ micro
 GAP

What we don't know we know

- Mainstream roll out of research and its application (within the urban context) to communities and other stakeholders (where's the effect?)
- Measuring relative benefits of different interventions over time
- Developing and disseminating authoritative science
- Effective strategies and tools for communicating how to live more sustainably to the general public
- Local generation – de-centralisation of energy, water, heat, waste, and other “central services”

Annex 4 – SWOT

STRENGTHS	WEAKNESSES
<p>Comprehensive outputs</p> <p>Wide range of partners non academic and stakeholders</p> <p>Stakeholder involvement</p> <p>Stakeholder (and community?) involvement</p> <p>Improved cross/inter disciplinary work</p> <p>Inter-disciplinary working</p> <p>Inter-disciplinary working</p> <p>Facilitates multi-disciplinary research</p> <p>Number of people trained</p> <p>New insights/skills</p> <p>Capacity building – creation of a new community</p> <p>DTA/DTG</p> <p>Breadth of programme</p> <p>Broad focus</p> <p>Consortium building</p> <p>Depth and breadth of community</p> <p>Diversity of approaches</p> <p>Funding</p> <p>SUE 2 better procurement process</p> <p>SUE1 informed SUE2</p> <p>Two stage process (outline etc) (helps link to industry)</p> <p>Allowed longer term social science research</p>	<p>Inter-disciplinary working</p> <p>Difficult to integrate research once award won!</p> <p>Move into comfort zone</p> <p>Lack of soc. Sc. Integration</p> <p>Consortium building</p> <p>Not using appropriate expertise</p> <p>Lack of women</p> <p>Breadth of programme</p> <p>Lack of cross SUE engagement</p> <p>Inter consortia collaboration at investigator and researcher level</p> <p>Too few programme level activities</p> <p>Lack of opportunities for intellectual engagement across programme</p> <p>Maintaining engagement of stakeholders</p> <p>Lack of ‘customer’</p> <p>Too little communication with target audience</p> <p>Working to programme of end users</p> <p>Limited impact (...as yet)</p> <ul style="list-style-type: none"> - lack of National Engagement (eg Defra) <p>The degree to which we have influenced practice</p> <p>Connection to UK strategic research agenda!</p> <p>Lack of international dimension</p> <p>Engaging international community</p> <p>Low international engagement</p> <p>SUE1 / SUE2 transition</p> <p>Procurement process (SUE 2 better)</p> <p>Designing SUE 3 before outputs of SUE1 known</p> <p>Equitable assessment/accountability</p> <p>High overhead for large consortia</p>

OPPORTUNITIES	THREATS
<p>Translate finding into policy Putting new knowledge into practice Coordinated output Progress reports/outcomes Interoperability standards Knowledge pool and methods of dissemination</p> <p>Future suggests growing market</p> <p>Gordon Brown's Eco- towns</p> <p>Regional engagement</p> <p>Working with end users Links to forward-looking companies</p> <p>Public interest/concern Better media management £38M! Publicity</p> <p>Links with ESRC/NERC/MRC Opportunity to pull funding in from other sources</p> <p>Coordination with EU research EU collaboration</p> <p>Greater cross programme integration (Mechanism to encourage this)</p> <p>Capacity building Training across disciplines</p> <p>Bringing in more disciplines</p> <p>Links to existing programmes:</p> <ul style="list-style-type: none"> • Health • Demographic • New technologies • Climate change 	<p>Timescales (long cycle of behaviour change)</p> <p>Timing of outputs and adapting to changing policy Government policy (lack of) Conflict between move from evidence based policy to policy based evidence</p> <p>Justifying funding spend Funding loss before the programme is complete Academic competition</p> <p>Beneficiary disconnection Activities taken over by major stakeholders Initiative fatigue among external stakeholders</p> <p>Public opinion (flooding) Influence of media</p> <p>Unrealistic expectations</p> <p>Staff retention</p> <p>Single issue dominance (eg climate change)</p>