CONSENSUS:
Consumption, Environment and Sustainability

FUNDING: EPA STRIVE 2009-2013

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WP1: Governing Sustainable Living

• Review EU SCP Governance:
  – Expansion of tools, frameworks, policies but implementation gap
  – Need for ‘bundles’ of mutually reinforcing & supporting regulations (carrot & sticks)
  – Successes to date are limited to individual case studies e.g. plastic bag tax
  – Internationally agreed evaluative frameworks for monitoring SCP are absent


• Review National Governance: Ireland
  – Need to strengthen and co-ordinate institutional capacities and policies e.g. National SCP Action Plan
  – Weakly developed consumer and green public procurement policy
  – Dynamism in sub-national governing frameworks
  – Under-developed collaboration in sustainable consumption discussions


Key findings:

- **Average level of environmental awareness:**
  - Over half of respondents stated that they were well-informed about environmental impacts of products they used (59%, n=883).
  - Ireland is in line with many European countries: e.g. a recent *Eurobarometer Study of European Citizens* (2009) found 55% of respondents were well-informed about environmental impacts of products.

- **High levels of reported environmental concern and self-efficacy:**
  - 86% of respondents (N=1,289) stated that they were either ‘very concerned’ or ‘somewhat concerned’ about environmental issues.
  - 82% believed that their own personal behaviour could make a difference to the environment.

- **Increased recognition of personal responsibility:**
  - Over half of the respondents (58%) reported that they needed ‘to behave in a more environmentally-friendly way’.

- **Persistent value-action gap:** e.g. high levels of water conservation awareness but relatively low levels of water conservation behaviour:
  - 80% of respondents (n=1,198) stated that they should conserve water.
  - 40% of respondents reported not paying attention to the amount of water they used.
WP2: Lifestyle Survey

Key findings:

• Persistent barriers to action: e.g. high levels of car dependency
  – 71% of people reported driving to work, school or college.
  – 47% of these commutes were distances ‘less than 5 miles’.
  – Reasons stated for not using public transport: ‘too restrictive’ (42%); ‘too unreliable’ (11%); ‘too expensive’ (7%).

• Need for continued, multifaceted and mutually supportive government action:
  – ‘Use more energy from renewable sources’ 38%.
  – ‘Improve technology to make appliances more energy-efficient’ 19%.
  – ‘Provide more education & information on energy-efficiency’ 19%.
  – ‘Create more taxes and levies’ 5%.

Flannery, W. Fahy, F and Lavelle, MJ. Expressed attitudes and reported behaviours towards water usage on the Island of Ireland, Environment, Policy and governance (submitted, 2013).
Lifestyle Survey factsheets (9) – 250 stakeholders; AGTI website; CONSENSUS website; Dept. Education; NESC Reports.

Further research:

• Individual actions are part of social practices; systematic in character with no silver bullet
• Need to attend to causes of unsustainable lifestyles rather than just symptoms
• Need for more nuanced, segmentation & lifestage analysis of data
WP3: Transport, mobility & the consumption of distance

Key findings:

- Significant structural changes to mobility have yet to be realised.
- Re-conceptualising mobility as ‘consumption of distance’ highlights its resource implications and social and cultural significance.
- Mobility is a social practice; changing an individual’s travel behaviour is likely to affect others.
- Large organisations such as firms influence mobility patterns in society; workplace-based mobility management can create positive spill-over effects on the wider community.

Modal shift:

- Typology of commuting can be used to target particular practices:
  - Commuting in the city (car-based); Commuting from the rural hinterland (car-based); Trip chaining (car-based); Hybrid (car plus other modes); Alternative (walking, cycling).
- Practitioners of different commuting types encounter a unique combination of actual and perceived barriers to changing their mobility practices.
- Effective sustainable transport initiatives need to distinguish between commuting types.
- Large businesses are ideally placed to encourage a modal shift towards sustainable alternatives (walking, cycling, car-sharing, PT) among their workforce.


Teleworking:

- Teleworking policies in Ireland have been inconsistent and largely ineffective; national teleworking rates are below the European average in the EU27 (EIRO 2010).
- Promoted as a tool for suppressing work-related travel; however, its economic, social and environmental consequences may not always be positive:
  - Teleworking shifts certain costs of work-related resource consumption (e.g. space heating, water use) from employer to employee.
  - Savings in the ‘consumption of distance’ remain partial as long as other aspects of everyday life (e.g. school run, shopping) remain mobility-intensive.
  - Teleworking creates new working conditions that may (not) suit people’s social circumstances.
- Teleworking requires regulation to protect employer and employee; regulation should recognise consumption and environmental impact.
- Teleworking requires training for teleworkers and managers.

Further Research:

- Need for greater attention to the complexity of mobility biographies & lifestage analysis.

Co-designing scenarios for smart and sustainable living in 2050

WP4-6 Public Engagement

Consensus participatory backcasting process

- Visioning Workshop
- Scenario Elaboration
- Scenario Sustainability Evaluation

Visioning Phase

- Green
- Mainstream
- Dynamic

Citizen-Consumer workshops

Transition Phase

- Transition Workshop
- Transition Framework

Key:
- Stakeholder engagement
- Back-office
WP4-6 Transition Frameworks

**Consensus participatory backcasting process**

- Visioning Workshop → Scenario Elaboration → Scenario Sustainability Evaluation → Transition Workshop
- Green Mainstream Dynamic
- Citizen-Consumer workshops → Transition Framework

**Transition Framework**

Towards Future Practices of Sustainable Food Consumption

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**Short (2012 - 2020)**

- 1. Identify and map spaces for growing, cooking and eating
- 2. Research is conducted about flexible work models
- 3. Support community agriculture and local food markets
- 4. Local and national ‘champions’ promote sustainable food
- 5. Networking of sustainable food and food waste groups
- 6. Regulations restrict advertisements about unhealthy food
- 7. R&D into the benefits and challenges of vertical farming

**Medium (2020 - 2035)**

- 8. Planning policies support communal growing and shared facilities
- 9. Mechanisms to encourage flexible work models are piloted
- 10. ‘Food sharing’ as a mode of exchange is piloted
- 11. Expand role of local authorities to designate food spaces
- 12. Education on food growing and cooking becomes mandatory
- 13. Advertising restrictions on unhealthy food are evaluated
- 14. Vertical farms are tested in vacant properties

**Long (2035 - 2050)**

- 15. Infrastructure is provided for communal growing and eating
- 16. Flexible work models are mainstreamed
- 17. ‘Food sharing’ has become a societal norm
- 18. Food sustainability standards for buildings are mainstreamed
- 19. Communal food production and consumption is widespread
- 20. Food production and consumption in the home is developed
- 21. R&D for closed loop food production in the home is developed

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**Working Policy**

- 63: Facilities to grow food for personal consumption
- 64: Food production for personal consumption
- 65: Food production and consumption in the home is developed
- 66: R&D for closed loop food production in the home is developed

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WP 4: Energy Consumption

Context: Limited attention to behaviour change

- Consumption in two identically fitted homes can differ by a factor of two due to behavior and “rebound effects” are a key challenge.
- Home heating = 60% home energy end-use.
- ROI – 60% of our homes need investment to improve insulation.

Aim: Achieving warmth & comfort for all in the future
3 scenarios: emphasising axes of technology, regulatory and cultural change
WP 4: Energy Consumption

Key Findings:

- **Co-ordinating interventions: industry, policy & education:**
  - **Thermal awareness:** Greater control & responsiveness of indoor temperatures with advanced thermostats.
  - **Targeted heat:** Better awareness of bodily needs and a shift away from space heating. Direct heating options.
  - **Carbon management:** Heightened and active monitoring of energy use; consumption visibility and ICT enablers in public and private spheres. Attention to fuel needs of vulnerable populations.
  - **Adaptability:** Improved building fabric technologies and more flexible building designs with sustainability at the core.

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WP5: Water Consumption

Context: Inadequate focus on water demand
- Predict & provide models dominate
- 160 litres per day per person; 40% for personal washing.
- Water metering can yield savings of up to 15% but depends on level of citizen-consumer engagement, education and infrastructural supports.
- Home water use cut by 30-50% and at lower cost and more quickly than new supply projects through behaviour change plus low-flow taps & showers.

Aim: Achieving cleanliness & refreshment in the future
3 scenarios: emphasising axes of technology, regulatory and cultural change
WP5: Water Consumption

Key Findings:

- **Co-ordinating interventions: industry, policy & education**
  - **Connected**: Adjusting water use & planning water consumption activities depending on availability of water in aquifers and rainwater harvesting. ICT to assist.
  
  - **Adaptive**: Development and acceptance of adaptive skills versus standardised washing, e.g. splash / gel wash substitutes. Advanced diagnostics identifying when/where need to wash.
  
  - **Efficient**: Legislating for low-flow devices; direct feedback at point of use; water consumption targets & benchmarking.

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WP6: Food Consumption

Context: Overemphasis on production in isolation from consumption
- Importance of food vs. consequences of eating.
- Embodied land, carbon, water use: climate change, biodiversity loss.
- 20-30% GHG emissions from agriculture.
- 900 million undernourished (FAO, 2013); 1 billion obese (WHO, 2013); 30-50% food (1.2 - 2 billion tonnes) wasted.

Aim: Eating well within environmental limits
3 scenarios: emphasising axes of technology, regulatory and cultural change
WP6: Food Consumption

Key Findings:

- Coordinating interventions: industry, policy & education
  
  - Spaces for sustainable eating: Expanding opportunities for growing, cooking & eating together; ‘edible parks’; ‘school farms’; ‘work kitchens’; cookisto cooking & food sharing; explore new urban/community/vertical farm spaces.
  
  - Food awareness: Increasing availability & accessibility of affordable, healthy & sustainable food; responsive pricing & full disclosure of sustainability footprinting of foodstuffs.
  
  - Smart food: Integrated and interactive ICT enablers for smart purchasing, storage, preparation & waste prevention/management; closed loop systems.


Davies, A. R. (under review) “Co-creating sustainable eating futures: technology, ICT and citizen-consumer ambivalence”, Futures: The journal of policy, planning and futures studies
WP7: Synthesis, engagement & management

- All-island network for sustainable consumption research (SCRN)
- Member of international networks e.g. SCORAI; SPREAD; RESPONDER; Global Network on Sustainable Lifestyles.
- International workshop on sustainable consumption (May 2012):
  - Published proceedings and on-line lectures (>850 downloads)
- Publications:
  - International high-impact journals
  - Multidisciplinary audience: including, geography, sociology, consumer studies, cleaner production; environmental policy and planning, future studies; agricultural and food economics)
  - Edited volumes:
- International profile:
  - Fulbright; NESC; Climate Gathering 2013; British Council Advocate; Globe Forum shortlisted candidates
  - Formas: Swedish Research Council (Natural Resources), Mistra: Foundation for Swedish Strategic Environmental Research; ESRC: Programme evaluation Waste of the World
  - National and international invited keynote lectures
IMPACT

3 Academics

5 Researchers

7 Workpackages

100+ Key Stakeholders

1800+ SCRN members & followers on twitter

2000+ Citizen-consumer engagements

100,000+ Civic interactions

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Conclusions & Next Steps

› Importance of:
  › Context: time, space & place
  › Long-term planning; a roadmap for sustainable consumption
  › Co-ordination, collaboration & co-design

› Action
  › Segmenting for Sustainability: Lifestyle typologies & practice profiling
  › Living Labs: Implementing educational supports, regulatory simulations & technology prototypes in households. Monitoring and evaluating householder responses
  › Mobility Biographies: Key event and ‘turning point’ analysis
Thank you

Further details@ www.consensus.ie
## Outputs: Academic

<table>
<thead>
<tr>
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<th>Outputs Agreed (Jan 2009)</th>
<th>Outputs (to date)</th>
<th>Outputs (project end)</th>
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<tbody>
<tr>
<td>Peer reviewed journals</td>
<td>12</td>
<td>18 (+50%)</td>
<td>22 (+83%)</td>
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<tr>
<td>PhD thesis</td>
<td>4</td>
<td>4+1 (+25%)</td>
<td>+ New PhD entrant</td>
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<td>Conference presentations</td>
<td>12</td>
<td>82 (+820%)</td>
<td>85 (NZ)</td>
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<td>International conference</td>
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<td>Undergraduate courses</td>
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<td>International advisory panels &amp; review panels</td>
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## Outputs: Policy

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<td><strong>National:</strong></td>
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<td>Good practice guidelines</td>
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<td>Lifestyle survey: Dept. Of Education; Dept. Of Environment;</td>
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<td>Transition frameworks</td>
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<td>Backcasting guidelines</td>
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<td>Submissions to national policy: transport, water, climate change &amp; sustainable development</td>
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<td>NESC: advising council on environmental governance; green economy; sustainable development; climate change; wind energy</td>
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<td><strong>Global:</strong></td>
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<td>Future Earth; SCORAI; Global Network on Sustainable Lifestyles</td>
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# Outputs: Engagements

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<th>Outputs (project end)</th>
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<tr>
<td>Website &amp; SCRN</td>
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<td>640 members; 1300 blog hits; 850 downloads; 1800 followers on twitter</td>
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<td>Print media: e.g. Galway Bay FM; Galway Advertiser; Irish Examiner; Irish Times.</td>
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<td>Multiple</td>
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<td>TV: Eco-eye</td>
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<td>Episode on Future Ireland (due Jan 2014)</td>
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<td>Civic: WaterWise</td>
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<td>60,000 visitors (Dublin, Edinburgh, New York, Ontario)</td>
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<td>Globe Forum Early Career Researchers Contest 2010</td>
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<td>4 shortlisted</td>
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<td>Climate Advocate on the British Council’s Challenge Europe programme</td>
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<td>Digital dissemination</td>
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