

Climate Changing Behaviours



Behaviours, ISM and the public sector
2015/16

About SSN

The Sustainable Scotland Network (SSN) supports public sector action on sustainable development. This includes support on climate change policy, public bodies climate change duties, climate change reporting and low carbon behaviours. The Scottish Government supports the SSN including through the provision of principal funding to Keep Scotland Beautiful. Keep Scotland Beautiful manages and develops the SSN and the SSN Steering Group guides the SSN agenda.

SSN support is available to all public sector organisations and membership is open to all professionals in the public sector working on sustainable development and climate change issues. To enquire about SSN membership, please contact the SSN team at Keep Scotland Beautiful on ssn@keepsotlandbeautiful.org.

This report was produced by Keep Scotland Beautiful as part of its work on managing and developing the SSN www.keepsotlandbeautiful.org/ssn.

Keep Scotland Beautiful is the charity that campaigns, acts and educates on a range of local, national and global environmental issues to change behaviour and improve the quality of people's lives and the places they care for. We are committed to making Scotland clean, green and more sustainable.

Acknowledgements: For kind permission to use ISM workshop outputs and for providing other contributions to this report:

The Highland Council, Stirling Council, University of Edinburgh, SEPA (Scottish Environment Protection Agency), SNH (Scottish Natural Heritage), YoungScot, NUS (National Union of Students), Institute of Occupational Medicine, South Lanarkshire Council and South Lanarkshire Cycling Partnership.

Supported by the
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Overview

ISM (Individual, Social, Material) was developed as part of the Scottish Government's Climate Change Behaviours Research Programme to help inform the development of policies to support Scotland's transformation to a low carbon society and meet greenhouse gas emission reduction targets set by the Climate Change (Scotland) Act, 2009. To be successful, many of the policies and programmes, covering a diverse range of sectors such as energy, transport, built environment and land-use, have to take account of behavioural influences. Drawing on a range of theory, practice and evidence, ISM provides a framework for analysing, developing and evaluating interventions, whether as part of strategic plans or specific projects.



Keep Scotland Beautiful has been raising awareness and promoting uptake of ISM for behaviour change interventions for over two years. The SSN Low Carbon Behaviours programme was initiated in April 2014 with Scottish Government funding to provide support to the public sector, via the SSN, in applying ISM.

The "Stimulating Change" report¹ published in May 2015, presented progress and findings from the first year of the programme.

This further report presents transferable learning outcomes synthesised from collaboration and engagement with public sector organisations using ISM between April 2015 and March 2016 for a range of issues and challenges, including beyond the low carbon agenda. It is hoped that this document proves to be a useful resource for anyone who is searching for a simple but flexible approach to motivating and managing change towards more sustainable behaviours and practices within their organisation, networks, communities or partnerships.

If you would like advice or support on using ISM please contact June Graham, the SSN Low Carbon Behaviours Officer at Keep Scotland Beautiful:

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¹<http://www.keepscotlandbeautiful.org/sustainability-climate-change/sustainable-scotland-network/low-carbon-behaviours/resources/>

The ISM framework

ISM is...

A simple framework to inform behaviour change interventions and broader approaches to change management.

It can be used...

In a workshop, within a team, for a project, by a partnership, an organisation, or an individual.

In order to...

- Analyse a problem or challenge
- Design or evaluate a plan, project or programme
- Consider broader organisational change or improve partnership working

ISM is a synthesis of the latest behavioural science and evidence, based on key disciplines of psychology, behavioural economics and sociology.

Key benefit

ISM encourages broader scoping and deeper analysis of complex challenges within multi-stakeholder forums to deliver a more integrated and collaborative suite of interventions. This is in contrast with traditional, single discipline approaches to behaviour change, which focus only on the individual or on the material context.

Key principle

In order to achieve substantive and sustainable behaviour change, interventions should take account of influencing factors across multiple contexts: I (individual), S (social) and M (material).

Key concept

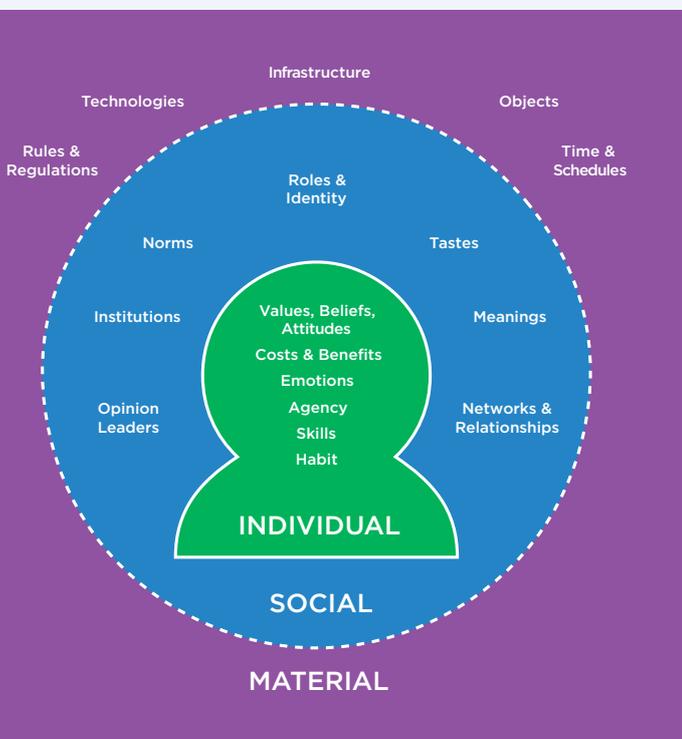
The ISM framework presents the three contexts of Individual, Social and Material factors conceptually in a simple graphic.

The **head** at the centre contains the factors which influence us at an **individual** level.

The **circle** surrounding the head includes **social** factors that influence our behaviours and decisions due to interactions with others.

The external **square** denotes **material** factors in our environment which shape and constrain our behaviour.

The dotted line between S and M indicates the interactions and dependencies that operate between factors within the different contexts.



General information on Keep Scotland Beautiful/SSN support and resources for using ISM is available at www.keepsotlandbeautiful.org/lcb

ISM factors

Brief descriptions with examples for each of the factors within the three ISM contexts are provided below².

Individual context

Values, Beliefs, Attitudes

Our basic motivational factors. Human cultures share a common family of **Values**, broadly: self-enhancing **Values** (authority, power, security, etc); and self-transcendent **Values** (equality, broadmindedness, social justice, etc).

Beliefs are largely learned from our prevailing culture and social **Norms**. **Beliefs** and **Values** determine our **Attitudes** which influence our intentions that shape our actions.

Example: Messages and activities of others, including **Institutions**, such as family, government and the media, influence individuals' **Values, Beliefs** and **Attitudes**. (see www.valuesandframes.org for more information)

Costs and Benefits: Basic method of decision-making. We weigh perceived benefits of acting against perceived **Costs**, including non-monetary **Costs** such as **Time**.

Example: Is walking to work worth the health **Benefits** and/or **Cost** savings versus the extra **Time**?

Emotions: Our survival "auto-pilot", critical to decision-making, helps us learn and gain insight. Fear, anger, sadness, disgust, surprise, and happiness are universally recognised facial expressions of **Emotion**.

Example: See article on how brain damage affected one man's ability to make rational decisions.³

Habit: Automatic and frequent or familiar activity that requires no/little conscious thought and usually occurs at the same time or place.

Example: Commuting, showering and other routines and common practices.



Agency: Confidence, free-will, empowerment, ability to act without needing permission from others.

Example: Improving comfort levels in personal workspace by introducing plants for natural screening without having to seek approval from line managers or facility managers.

Skills: "Know how" (procedural knowledge) and "know what" (factual knowledge). Knowledge alone does not fully determine behaviour but modifies our **Attitudes** and **Values**.

Example: Knowing how to sort recyclates does not mean we will do so. Knowing what happens to our waste and the impacts might influence our **Attitude** towards recycling.

²More detail is provided in **A technical guide to the individual, social and material (ISM) approach to influencing behaviours**, A. Darnton and D. Evans, June 2013, published by the Scottish Government. <http://www.gov.scot/Publications/2013/06/8606/0>

³"The Science Behind How Emotions Lead to Smarter Decisions" Article by Janet Choi, Chief Creative Officer, iDoneThis, September 29, 2014 <http://blog.idonethis.com/emotions-work/> which refers to neurological patient in "Descartes' Error: Emotion, Reason and the Human Brain", Antonio Damasio, 1994.

ISM factors

Social context

Norms

Our perception of how people (especially 'significant' others) view our behaviour; norms strongly influence our intentions, decisions and actions.

Example: Travelling by air with friends and family members who think of flying as the obvious choice when there are lower carbon alternatives.

Institutions

Influence how we interact within groups engaging in particular activities. We are part of **Institutions** from cradle to grave. Can be formal, such as legal system or informal, such as family life.

Example: An employer setting a hierarchy or framework around business travel needs and expectations - telephone and video-conferencing, active or public transport, private car etc.

Networks and Relationships

Our connections with others which we draw upon to identify and carry out activities ('social capital'). How ideas, innovations and behaviours can spread, for example local food networks.

Example: Car-sharing with colleagues or neighbours, creating a food-growers co-operative.

Opinion Leaders

Individuals who have a strong influence over others, for instance in shaping social **Norms**.

Example: Celebrity chefs promoting more sustainable means of food production and consumption.

Roles and Identity

Based on the **Role** we are fulfilling at a particular time we adopt different repertoires of behaviours and **Attitudes**, i.e. **Roles** are socially constructed identities while our identity is related to our innate sense of self.

Example: We cycle daily through different roles, such as parent, spouse, employee, sibling, friend, which cloak our core identity, for example being an environmentally conscious person.



Meanings

Cultural frameworks which give meaning to daily life, includes ideas, images, metaphors and associations; used widely by the media and marketing industry.

Example: During the 20th century smoking was often used to convey mystery, glamour and sophistication - particularly in cinema - contrast with modern meanings of smoking being unhealthy and anti-social.

Tastes

Demonstrate our particular preferences, styles and consumption practices, signal our belonging to particular social groups, based on shared understandings of appropriate and desirable conduct. Social and cultural phenomena concerning taste are closely linked to **Relationships** and dynamics between people.

Examples: Cultural tastes, such as music, fashion, sport, food, and art.

ISM factors

Material context

Infrastructure

Physical structures (or lack of) which can override Motivational drive.

Example: Lack of safe cycle/footpaths on busy roads, absence of public transport services, energy intensive buildings with poor thermal stability.

Technologies

Often thought to bypass behaviour, but human interactions with **Technology** influence its effectiveness and change or enable new practices.

Example: Smartphones and social media's influence the creation of new communication **Norms** and practices, such as the rising popularity of dating apps.

Objects

The things we use or need, a lack of which prevents a behaviour or action from happening. **Objects** can 'act back' influencing how much time we spend on activities.

Example: The **Time** needed to maintain/repair a bike might discourage use; the profusion of bins for different recyclates can become confusing and make recycling more **Time**-consuming.

Rules and Regulations

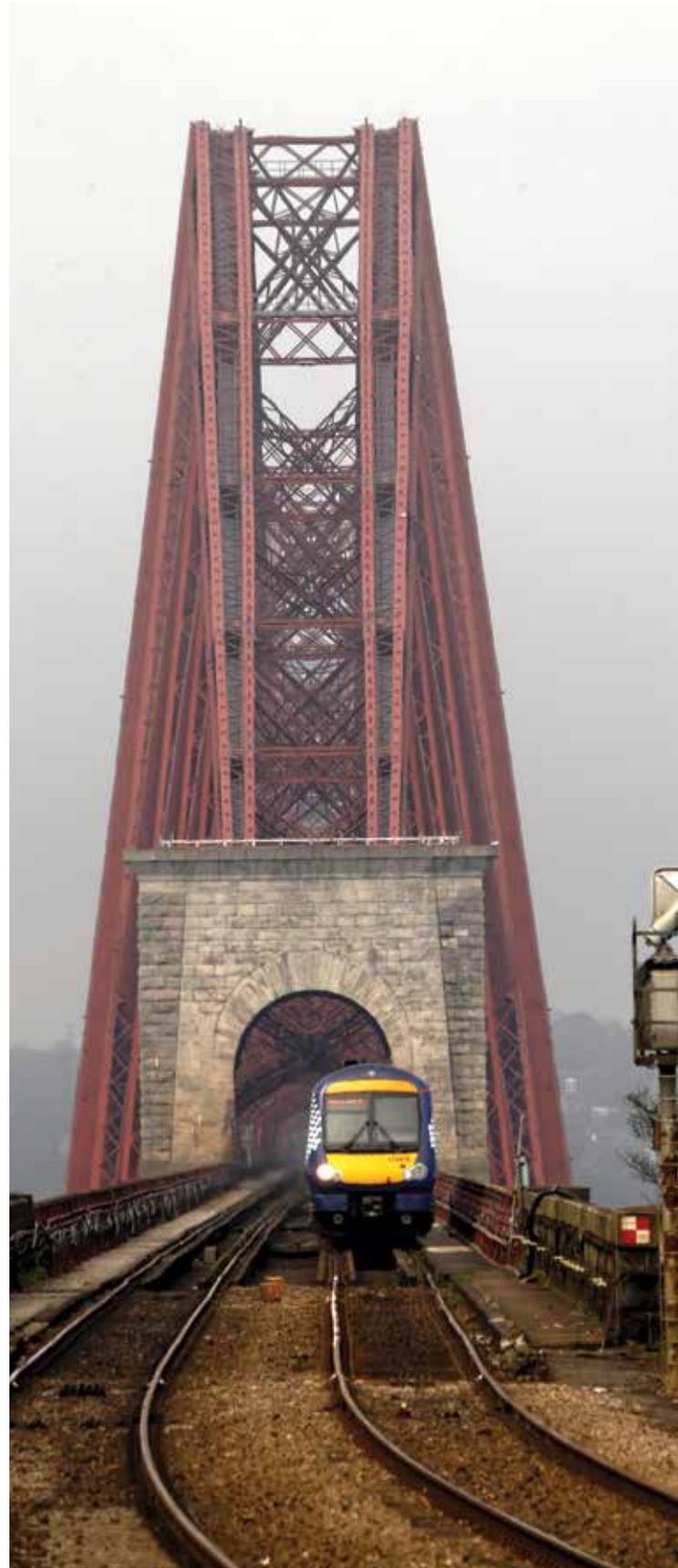
Formally prescribe or prohibit certain behaviours if set by an **Institution** such as governments but can also be an implicit factor in determining appropriate conduct and **Norms** in daily life.

Example: Formal requirements on wearing of personal protective equipment required by health and safety at work legislation contrasted with less formal but implicit dress codes for office workers.

Time and Schedules

Time is a finite and scarce resource that we have to allocate across competing demands.

Example: Introducing new workplace (**Institutions**) schedules for flexitime or remote-working can facilitate changes to staff commuting **Habits**.



The bigger picture - ISM helping develop a

How does ISM support Scotland’s transformation to a low carbon society? ISM is being promoted by the Scottish Government as a means to help inform the development of climate change policy across relevant sectors.

Climate Change (S

Part 3 Reporting Duties of Ministers to the Scottish Parliament

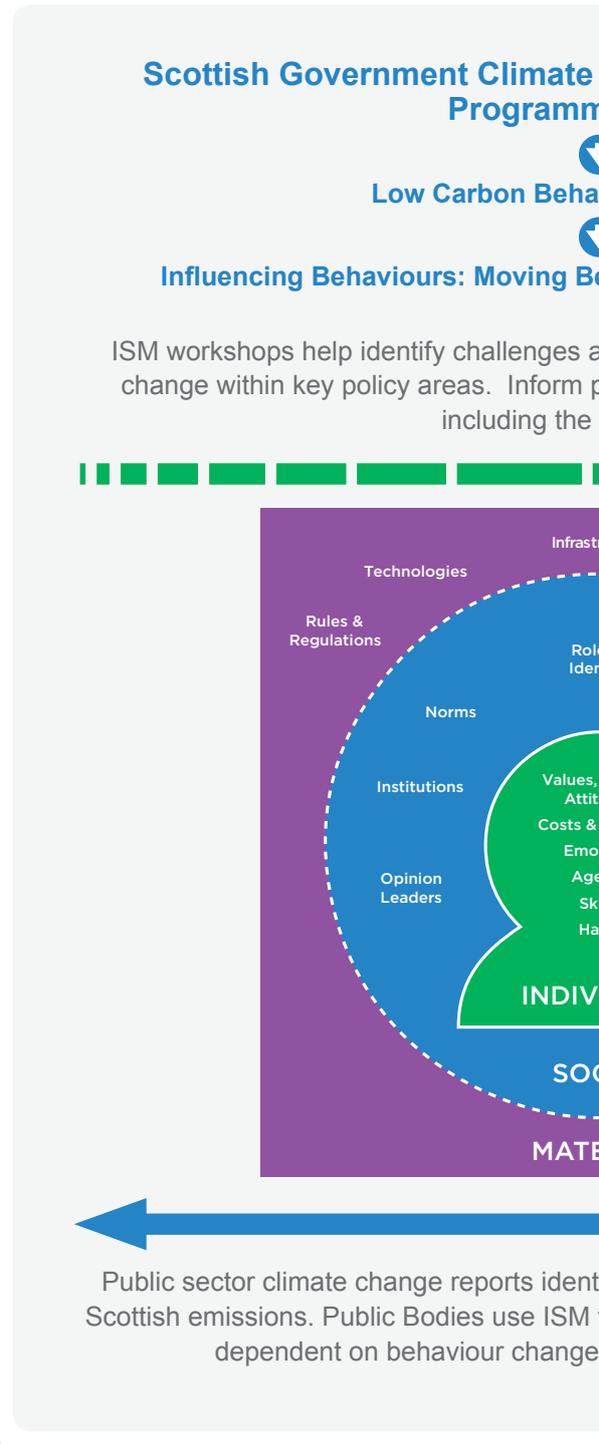
- Periodically set framework of annual emission reduction targets.
- Report annually on progress against annual, interim and 2050 targets.
- Periodically report on policies and proposals to meet framework targets and contribute to interim and 2050 targets.

2011 **Low Carbon Scotland - Meeting the Emissions Reduction Targets 2010-2022**
 Structured around key sectors of energy supply, homes and communities, business and the public sector, transport, rural land use and waste.

2013 **Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027.**
 The Second Report on Proposals and Policies Understanding and influencing behaviour critical to meeting targets.

 ISM highlighted as key approach for building “stronger policies and programmes to meet the challenge of changing the way we live, work and travel”.

2017 **Climate Change Plan**
 The third report on policies and proposals, which will set out how the climate change targets out to 2032 will be met. ISM used to inform and support policy development.



and deliver Scottish climate change policy

Public sector bodies are encouraged to use ISM in the design and delivery of plans, projects and other activities which can contribute to meeting Scotland's emission reduction targets.

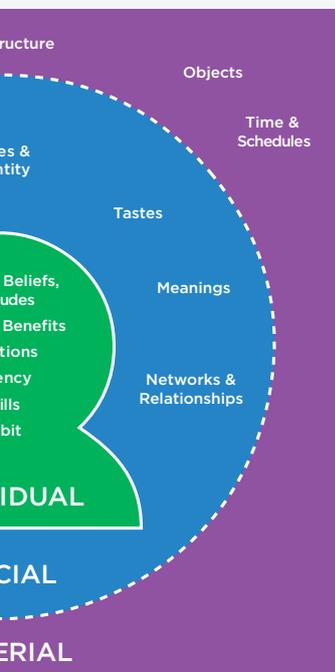
Scotland) Act 2009

Change Behaviours Research 2010-13

Behaviours Framework

Beyond the Individual – the ISM Tool

and options for achieving transformational policy development for delivery by others in the public sector.



Identify annual savings contributing to reducing emissions to help design projects, plans and activities, as part of partnership initiatives.

Part 4 Climate Change Duties of Public Bodies

Exercise their functions:

- To help achieve targets set by the Act
- To help deliver the Scottish Climate Change Adaptation Programme laid under the Act
- In the most sustainable way

2011 **Public Bodies Climate Change Duties: Putting Them Into Practice.** Guidance on context, scope of duties and key principles.

2013 **Major Players** listed as public bodies having high influence or impact on climate change due to size of estate, staff, budget, or having an audit or regulatory function.

2016 **Annual reports** to be submitted by all Major Players detailing compliance with the climate change duties (Section 44 Order under Act, November 2015).

Required reporting: List of projects to reduce corporate emissions including behaviour change aspects and use of ISM for programme/project development.

Recommended reporting: Other plans, actions and notable activities including partnerships and broader functions that influence emissions beyond organisational direct control. Includes information on behaviour change aspects and the use of ISM to plan, implement or evaluate progress.

Examples of ideas and actions from ISM workshops

Running an ISM workshop helps tackle barriers specific to an organisation or location. However, certain barriers are commonly identified during workshops irrespective of the context. Some of the ideas suggested by workshop participants to address common barriers form what is effectively a generic suite of actions which can be adopted by other public sector organisations. Two examples are provided here from workshops held on cycling and energy efficiency.



Example 1. Cycling as a preferred commuting choice⁴

Promote as part of employer initiatives for example, cycle to work/agile working/healthy workplace schemes. Enlist Human Resources support to arrange worktime cycle training sessions, develop incentives for active travel and use of public transport.

Costs and Benefits, Meanings, Institutions, Rules and Regulations, Time and Schedules

Capture cycle commuting stories for newsletters, staff magazines, social media etc.

Develop a Bike Buddy scheme to improve confidence, learn safe cycle routes.

Values, Beliefs and Attitudes, Habit, Norms, Emotions, Agency, Skills, Networks and Relationships, Roles and Identities

Develop website for workplace/cycling partnership to signpost resources, for example videos on bike repair and maintenance, safe routes, clubs, cycling events, bike shops and supplies etc.

Skills, Networks and Relationships, Norms, Tastes, Objects, Technology

Invite key bodies and partners to meetings for example, Cycling Scotland to talk about funding, support, resources; Abellio to influence plans for commuter hubs; the Head of Planning to discuss challenges re cycling infrastructure provision, new development priorities and constraints.

Networks and Relationships, Opinion Leaders

Collaborate with local health and leisure partners to highlight and optimise mutual benefits, for example cycling as a route to physical and mental wellbeing.

Costs and Benefits, Institutions, Meanings, Tastes, Networks and Relationships

Clarify funding options and criteria, for example from Paths for All to support behaviour change projects and synergies with projects to improve local air quality.

Networks and Relationships, Infrastructure, Habit, Meanings, Time and Schedules, Rules and Regulations

⁴Based largely on an ISM workshop held with members of the South Lanarkshire Cycling Partnership and attended by representatives of South Lanarkshire Council, including planning, leisure, road transport and environmental health departments.

Example 2. Energy efficiency behaviours in the workplace



Ensure more overt recruitment and recognition of role and efforts of energy champions, floor or building reps. Senior management express appreciation and value of role more visibly across the organisation and recognition of staff efforts and impacts.

Values, Beliefs and Attitudes, Roles and Identity, Opinion Leaders, Institutions

Provide guides stating minimum standards, for example printing policy, default printer settings, heating, cooling and lighting controls for the floor/building. Clarify extent of ability to self-regulate versus central control.

Skills, Agency, Technologies, Objects, Rules and Regulations

Clarify and confirm organisational responsibilities, for example procedures for reporting a fault and turnaround times for response or resolution.

Agency, Institutions, Networks and Relationships, Time and Schedules

Include energy efficiency in staff induction, training, periodic reviews, team meetings, for example akin to importance of health and safety at work.

Values, Beliefs and Attitudes, Skills, Habit, Institutions, Meanings, Rules and Regulations

Ensure staff know and understand organisational expectations regarding energy efficient behaviours.

Provide examples of acceptable/unacceptable behaviours.

Skills, Institutions, Values, Beliefs and Attitudes, Norms

Spotlight energy champion/ reps personal stories in staff communications, magazines etc. - how they came to take on the role, what it means, what they do, what they find challenging and rewarding.

Emotions, Values, Beliefs and Attitudes, Costs and Benefits, Norms, Roles and Identity

Encourage rotation of energy champion role amongst staff – help normalise and encourage shared responsibility to ensure not seen as specific to certain individuals.

Agency, Norms, Roles and Identity, Time and Schedules

Place meters in visible areas, kitchens, staff rooms etc. Produce visuals/infographics to illustrate consumption trends and translate actual and potential energy savings into meaningful and relevant parameters, for example jobs, services, assets or infrastructure.

Skills, Costs and Benefits, Meanings, Tastes, Objects

Centralise out-of-hours community lets and meetings especially where location is not critical. Identify specific floor area or hot desks for after-hours work.

Networks and Relationships, Infrastructure, Time and Schedules

User insights

We asked some early adopters and enthusiasts to share their insights on using ISM.

ISM is a great way of creating and **jumpstarting a working group** which needs to address a specific challenge, bringing different points of view and priorities to an issue. Often some of the root causes of barriers are common irrespective of specific agendas such as health and transport.

“ The ability to **frame and explore difficult and complex issues** dispassionately and systemically can help introduce aspects of a problem that would not normally be considered or even acknowledged.

ISM can really help evolve a systemic view of complex issues but it needs to be **built in early** in the process as it can throw up issues which may be seen as disruptive. This will not be well-received if a plan has already been formulated and there is an urgency to deliver on time. ”

Clive Mitchell, Programme Office Manager, Strategic Development, SNH

“ One of my favourite things about an ISM workshop is that it **levels the playing field**. You have a group of people from different backgrounds and at different pay grades in the room, but **everyone’s opinion is valid**. It allows a level of **honesty** that cannot be achieved in a normal meeting or 1-to-1 situation. ”

Keith Masson, Policy Coordinator - Climate Change, The Highland Council



“ ISM has been the perfect framework for exploring the refresh of the Eco-Schools Scotland programme. We have used it as a planning tool and as a way to assess how we communicate with our schools. There is huge potential for ISM to be used to frame whole school discussions on planning an approach to Learning for Sustainability through the Eco-Schools Green Flag Award and exploring solutions to reducing energy consumption in the school estate, for example. ”

Alastair Davidson, Education and Learning Coordinator, Keep Scotland Beautiful



Recruiting the right people to attend an ISM workshop is crucial, including those with the power to progress actions that arise during the workshop. You need to achieve their buy-in and ensure that they understand why they are being asked to attend.

“ We have used ISM informally in the development of our behaviour change **initiatives to understand our stakeholders**, and as material for occasional guest lectures...relating to sustainability and behaviour change. We integrate ISM into some of the background theories because we recognise it as an academically developed behaviour change tool. ”

Caro Overy, Sustainability Engagement Manager, University of Edinburgh

The emphasis on personal ability (**Agency**) to deliver change is not always reflected in organisational structures (**Institution, Rules and Regulations**). ISM offers benefits for **performance management review** and other human resource management activities by helping identify, understand and address some of the institutional barriers which can adversely affect our ability as individuals to realise the necessary change.

ISM could help ease transition to **new reporting systems**, for example to inform the development and roll-out of IT systems for finance and staff expenses which can often seem over-complicated, time-consuming and frustrating when first introduced.

“ I think we improved internal networking within South Lanarkshire Council and colleagues were able to signpost a fellow colleague to a funding opportunity to support cycling – which we have just heard has been successful! ”

Bronah Byrne, Team Leader, Food and Environmental Services South Lanarkshire Council

ISM: Beyond Low Carbon

The origins of ISM lie in sustainable practices and behaviours but it is applicable to many other issues and complex challenges. Examples of ISM being used to help address other complex behavioural issues or to support change more generally are presented below.



Coordinating partnership working

SEPA used ISM to frame discussions on barriers to joint working as part of an EU LIFE+ project on Smarter Regulation of Waste in Europe⁵. There are big gaps in understanding how illegal waste markets behave and which present major challenges in tackling this criminal behaviour. Opportunities for innovation depend on improved coordination and collaboration across partner organisations, including the Scottish Environmental Crime Task Force, Police Scotland, Europol, environment agencies, Office of the Traffic Commissioner, HM Revenue and Customs and the Health and Safety Executive.



Improving engagement

Keep Scotland Beautiful used ISM to identify potential barriers and actions to ensure schools understand and register for the refreshed Eco-Schools programme⁹. This includes ensuring greater engagement with energy, facilities and education staff within local authorities. ISM will also feature as part of the digital learning tools resource for schools to explore local issues and develop action plans as part of the new programme.



Analysis and evaluation

The Institute of Occupational Medicine used ISM to structure findings from two evidence reviews on air pollution and health impacts⁷. The idea for using ISM as an organising framework arose from a workshop on barriers to active travel held with the Scottish Urban Air Quality Steering Group.

⁵<http://www.lifsmartwaste.com>

⁶Download the full report at <http://www.youngscot.net/exploring-the-circular-economy/>

⁷<http://www.environment.scotland.gov.uk/air-quality/air-quality-and-health/>



Designing new systems

YoungScot, in partnership with Zero Waste Scotland and the Scottish Government, organised an Ideas Jam event for young people aged 16-25 to design a new circular economy system in action. ISM was introduced as part of the two day workshop to help participants explore interconnections between Individual, Social and Material factors that would enable circular economy models to work.

Knowledge and awareness, social norms, industry commitment to altering manufacturing processes and clear regulation and tax reform were some of the key factors identified in the final pitches made by groups on workable solutions⁸.



Developing an accreditation scheme

Using ISM to unpack alcohol-related behaviours amongst students is a mandatory qualifying criteria for the NUS's Alcohol Impact scheme⁹. Alcohol Impact is an accreditation initiative which works with students' unions to promote a responsible drinking culture on campuses across the UK.



Reducing roadside littering

Roadside littering from transport presents a substantial social, economic and environmental burden within Scotland; incurring extensive costs by local authorities, increasing the risk of road traffic accidents and exacerbating flood risk resulting in traffic congestion. An ISM workshop held by Keep Scotland Beautiful for the Local Environmental Quality Network Managers' Forum helped bring fresh thinking and interesting ideas on new ways of preventing roadside littering. The workshop findings informed a statement produced by the network on roadside litter¹⁰.

⁸Download the full report at <http://www.youngscot.net/exploring-the-circular-economy/>

⁹<http://www.keeptoscotlandbeautiful.org/sustainable-development-education/eco-schools/about-eco-schools/eco-schools-is-changing/>

¹⁰<http://www.keeptoscotlandbeautiful.org/media/840792/LEQ-Brief-Roadside-Litter-July-2015.pdf>

Keep Scotland Beautiful is the charity that enables action on sustainable development by working with organisations and communities to change behaviour to reduce carbon emissions and environmental impact. It's part of our work to make Scotland clean, green and more sustainable.



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