

THE SWEDISH ENERGY AGENCY

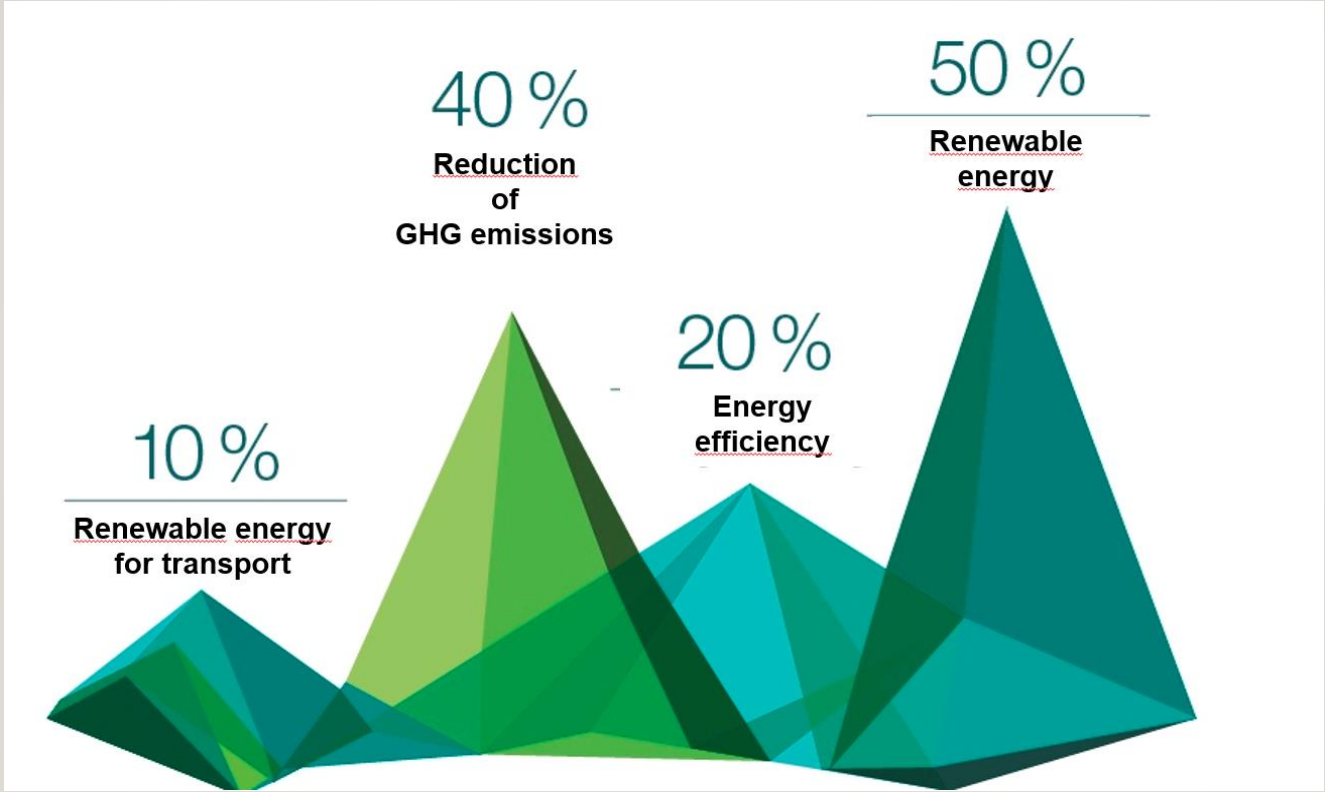
FUTURE OF ENERGY AND MOBILITY

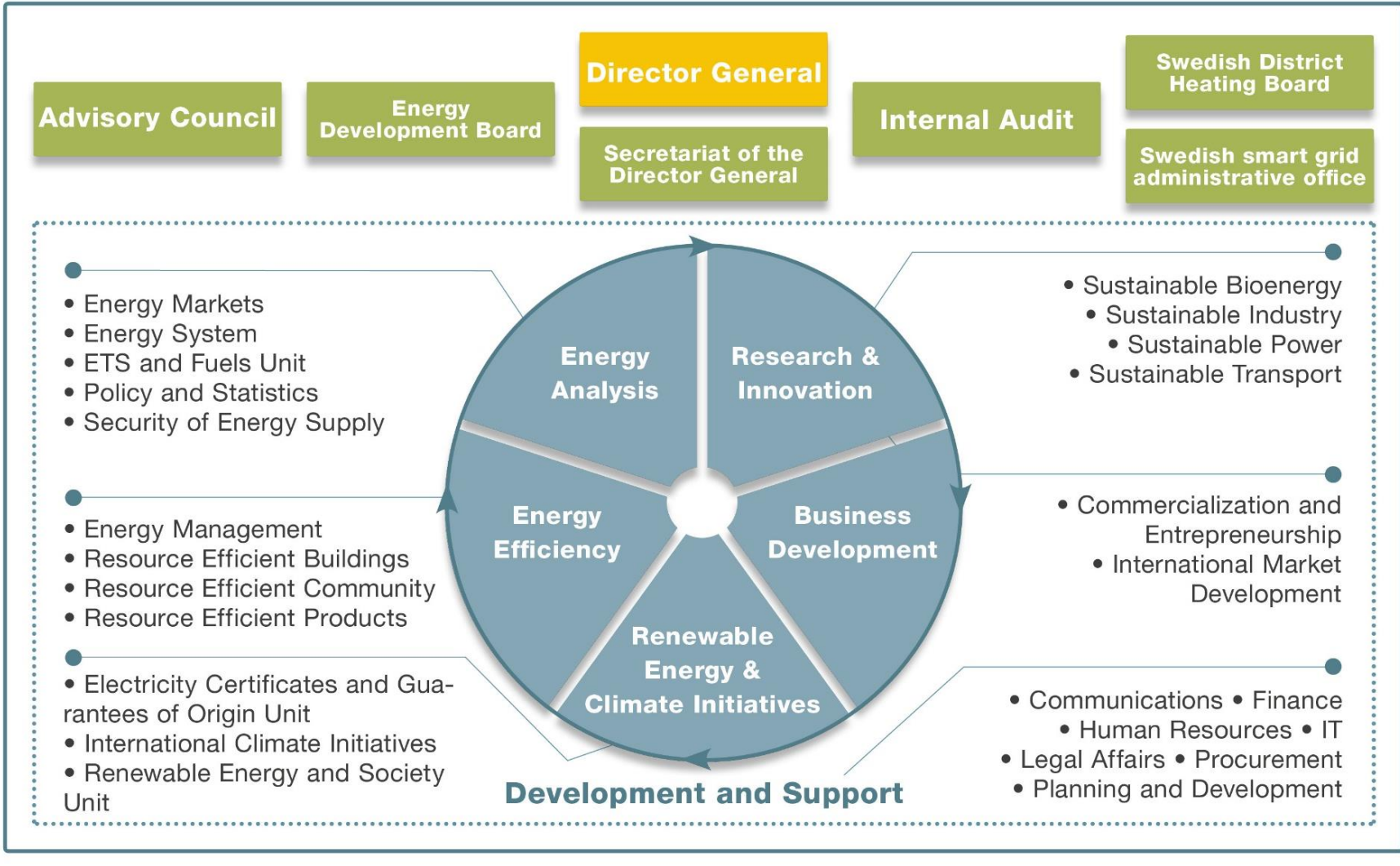
Melinda Midemalm
Project Leader
The Swedish Energy Agency

Sorts under Ministry of the Environment and Energy

National authority for energy policy issues

Around 400 employees





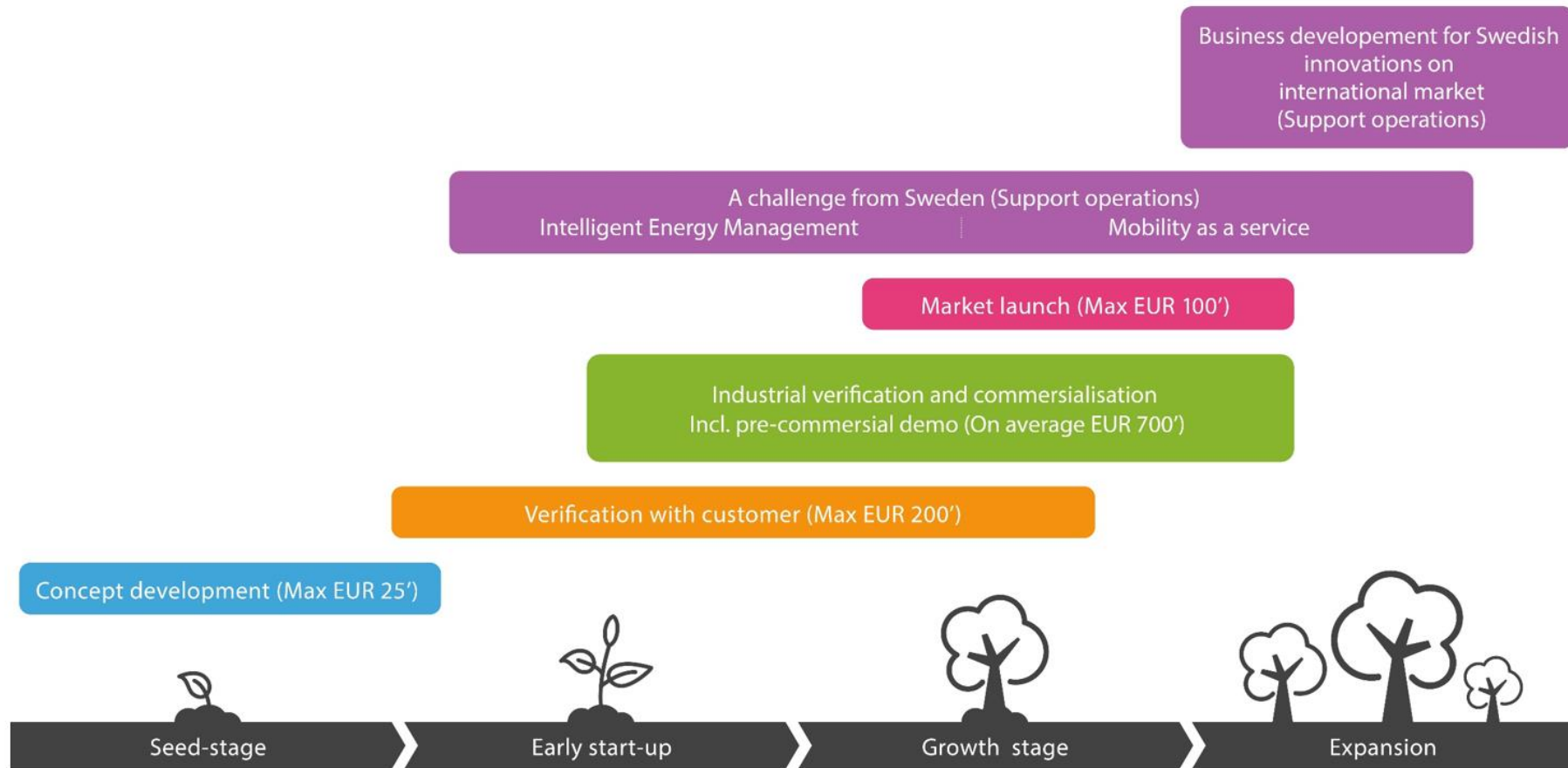
RESEARCH AND INNOVATION FUNDING

- From basic research to demonstration and implementation
- Annual budget approximately 160 million €
- Doubled through industrial co-funding
- Some 55 programmes and 900 projects running
- In-house priority settings and evaluation of proposals

1,6 billion SEK for
research, innovation & commercialisation

160 million SEK for
commercialisation

The Swedish Energy Agency's close-to-the-market support programs for innovations



A CHALLENGE FROM SWEDEN

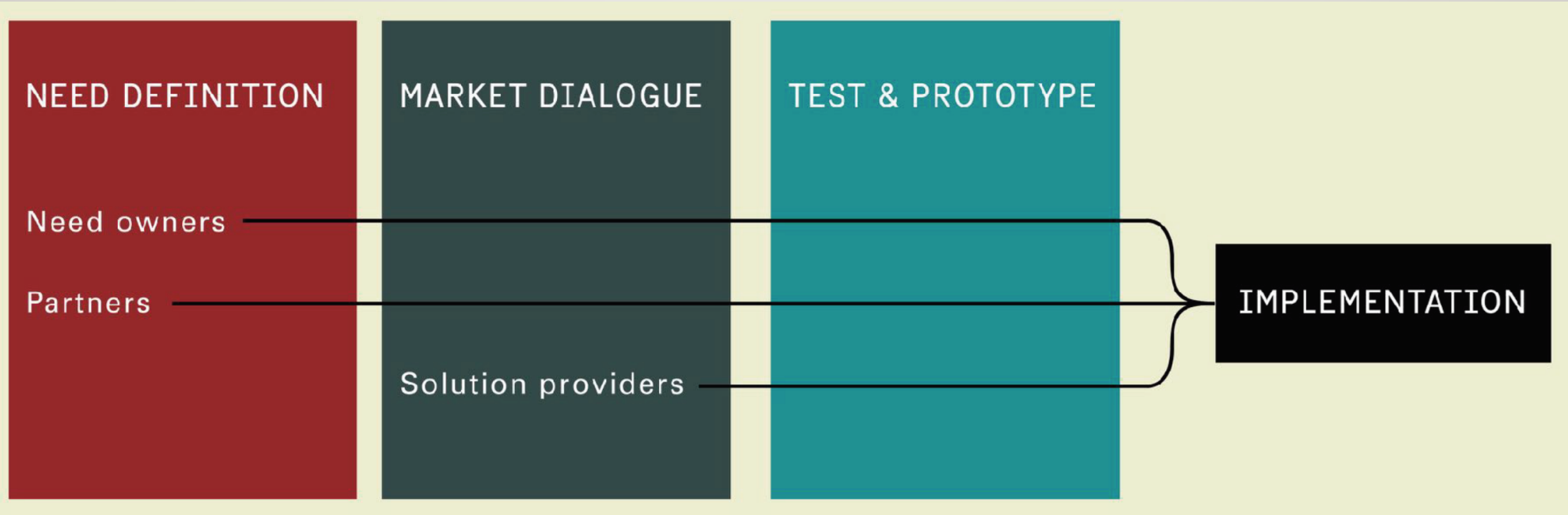
SEA in collaboration with Swedish Incubators and Science Parks (SISP)

A CHALLENGE FROM SWEDEN

SEA IN COLLABORATION WITH SWEDISH INCUBATORS AND SCIENCE PARKS (SISP)

INTELLIGENT ENERGY MANAGEMENT
(2016)

SUSTAINABLE MOBILITY AS A SERVICE
(2018)



| | Pre-commercialization phase | | | Commercial phase |
|---|---|---|---|---|
| | Need Definition | Market Dialogue | Test/Verification | Commercial Procurement |
| Need owners (public org.) | <ul style="list-style-type: none"> • Experience in formulating/phrasing need definitions | <ul style="list-style-type: none"> • Knowledge of possible collaborators • Facilitate relevant WS • Conceptualization • Letters of intent/contracts/IP • Relevant contacts | <ul style="list-style-type: none"> • Scarce resources • Pertinent experience in communication with suppliers • Pertinent experience in testing | <ul style="list-style-type: none"> • Ability to find the right solution • Established communication with suppliers |
| Partners (procurement units in public org.) | <ul style="list-style-type: none"> • Relevant innov. procurement exp. • Resilience to innov. procurement | <ul style="list-style-type: none"> • Letters of intent/contracts/IP • Relevant network connections | | |
| Suppliers | N/A | <ul style="list-style-type: none"> • Letters of intent /IP • Relevant process insight | <ul style="list-style-type: none"> • Scarce resources (time/money) • Comm. w need owners • Build new consortiums and networks | <ul style="list-style-type: none"> • Why did I/we not get the order? • Business model scale-up. |
| Science Parks | <ul style="list-style-type: none"> • Define/describe/lead processes • Trends and future scenarios • Offer innovation procurement exampl. • Involve state-of-the art | <ul style="list-style-type: none"> • <u>Contract assistance</u> • WS - methodology • Agile process leadership | <ul style="list-style-type: none"> • Allocating public funding • Testbed • Verification knowledge • Process leadership • Finding matching testsites • Finding the right partner | <ul style="list-style-type: none"> • Define criteria and partners for selection • Communication • Continuous building of companies • Spreading best practice via SISP |

A Human-Centred Approach

PROJECT TYPES

1

Foundation

Foundation projects address universal barriers to progress shared by all members, such as IP, innovative business models, shared apps, legal frameworks, and ticketing solutions.

2

Life

Life projects implement permanent new solutions that address real people's needs in real-life contexts, initially organized by major life transitions.

ACTIVATING PEOPLE

To give our implementations the best chance of success, we need to make the most of people's natural inclinations towards change.

We see four types of people:

Explorers want to see shifts that align with their values, and imagine new ways of living more easily than others. They want to be inspired.

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Followers wait for easy-to-adopt solutions that are self-evident and everywhere to be found.

We encourage members to focus first on activating **Explorers** and **Mapmakers** in order to build sustained adoption among real people. As our implementations become more robust and sophisticated, **Believers** will come next; **Followers** will come later.

Timeline

2018

Spark:

When your life changes, you're more able to change your life.

To begin, Life projects are organized around sparking new behaviours during the focused windows of opportunity that accompany major life transitions.

Timeline

2018

Spark:

When your life changes, you're more able to change your life.

- Focus on people who are likely to be most receptive to new services and offerings: Explorers and Mapmakers
- Define narrow, practical goals
- Activate letter of intent signatories ready to proceed, including regional project leaders and sector champions

Connect:

We all want to belong to something bigger than ourselves.

Over time, as projects develop and deepen, new Life projects will shift to helping larger groups of people change their behaviours together, generating stories and evidence of communal impact, shared social values, and practical benefits.

We'll design ways for larger groups of people to change their behaviours together, and to see their collective impact. And we'll activate role models across Swedish society to lead the way.

Connect:

We all want to belong to something bigger than ourselves.

- Focus on Explorers, Mapmakers, and Believers
- Identify and activate existing groups and communities, focusing on social emotions
- Invite and empower role models within those groups and communities

Deepen:

Later, to anchor new habits beyond life transitions, members will use a new set of Life projects to fine-tune solutions to individuals' and families' specific needs and preferences, across a wide range of use cases, situations, and geographies. This stage of development will allow solutions to address large populations independent of life stages.

Deepen:

- Give people a sense of authority and autonomy over possible changes.
- Help people create their own version of change, focused on what matters to them personally.
- Focus on Explorers, Mapmakers, and Believers; draw in Followers over time

THROUGHOUT

Sustain:

Everyone needs
a nudge.

We are all good at finding reasons not to change. As new systems and services take root, we will build ways to help people avoid common behavioural loopholes and make long-term commitments to their new mobility habits.

Here are three examples of tactics, or loopholes, people use—and some ways (or ‘nudges’) we may help people avoid them.

Sustain:

Everyone needs
a nudge.

Morality loopholes

- “Sweden’s already doing good things, so why do you I have to do this thing?” This loophole offsets a moral obligation with an appeal to an existing moral action.
- *Shift the conversation away from moral values and towards practical benefits. Instead of talking only about climate change, talk about the things that matter more directly to people’s everyday needs.*

Sustain:

Everyone needs
a nudge.

Flexibility loopholes

- “I’ll do it tomorrow, so I don’t need to worry about doing it today.” This loophole makes it easy to keep putting change off, especially if we ask people to make a general, open change such as not using their car for one day of the week.
- *Create patterns of change that focus on and celebrate shared windows of behaviour change, such as ‘Travel Together Tuesday’.*
- *Communicate positive behaviour change as a gain, not a loss: don’t call it ‘No Car Tuesday’.*

Sustain:

Everyone needs
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Exception loopholes

- “It’s my birthday, so it doesn’t really count.” This loophole ignores the truth that everything counts. And we can always find new exceptions to avoid acting on our best intentions. Not choosing to do something is as active a choice as choosing to do it.
- *Celebrate and reward adherence, and activate mutually supportive groups to achieve it.*

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Critically, we will approach behavioural ‘nudging’ with clear ethical principles and a commitment to transparency. Before we introduce a nudge, we will articulate our reasoning, share our methodology, and invite feedback.

Thank
you !