

# UPDATE TASK 24

## Closing the Loop -

**Behaviour Change in DSM: From Theory to Practice**



**Dr Sea Rotmann, Operating Agent**  
ExCo meeting, Graz Austria, Oct 16-17, 2014

# Participating countries



16 countries  
25 Tasks



## Task 24



# objectives in last 6 months

## **Subtask I - Helicopter Overview:**

- All information from the 'Monster' to be put on a wiki ([www.ieadsmtask24wiki.info](http://www.ieadsmtask24wiki.info))
- A storybook of the most outstanding examples and recommendations to be printed
- The energy experts' own energy stories edited into a short film and presented and analysed at Task 24 workshops in Wellington, Oxford and Graz
- More case studies from newly joined countries (Austria has now sent all its case studies, we are still waiting for three from Italy and Belgium and have received nothing from South Africa so far. Other countries, like Canada, Japan and the UK continue giving us cases as well)

## **Subtask II - Case studies:**

- Collection of detailed case studies and best practice in four overarching themes
- Includes (filmed) interviews in Austria, Italy, Sweden, the Netherlands, New Zealand, Switzerland
- Analysis of case studies so far collected (completed NO, NL, NZ, SE, CH)

## **Subtask III - Evaluation Tool:**

- Summary overview based on review of evaluation literature and Oxford Task 24 workshop (Report 1)
- Single and double loop learning in the 4 domains (Report 2)
- Methodology review on 'Beyond kWh' (Report 3)

## **Subtask IV**

- Country stories (Austria and Italy)
- Country-specific recommendations, to do's and not to do's (stakeholder analyses)


## **Subtask V - Expert Platform:**

- Expert platform continually growing and getting used
- New content including presentations, videos and reports uploaded
- Continue publicising and dissemination of Task 24, including at international conferences

## **Subtask 0 - Administration:**

- ExCo meeting and report-back Graz
- National expert workshops (IT, AT)

# the last 6 months: publications



Publications

- 2 IEA DSM **Spotlight Issues**
- **Energy Expert Stories** short film (youtube)
- Filmed presentations from **Storytelling workshop** in Wellington
- Analysis of Subtask I - **'the Monster' Wiki** (160pp report)
- The **Little Monster storybook** (booklet)
- **ESCo Facilitators report** for Task 16
- **Article** for EE-IP
- **Paper** for IEPPEC
- **Five ST2 country case study** reports (NL, NZ, NO, SE, CH)
- **2 Draft ST3 Evaluation** reports

# the last 6 months: invitations

## INVITATIONS

### Publications

- Technical Steering Committee **BEHAVE**
- Panel Leader **BEHAVE**
- Final expert panel **BEHAVE/IEPPEC**
- Expert panel **IEPPEC**
- **H2020** proposals (with Sheffield Hallam and EST)
- **Belgian** lecture
- **IEC** lecture series Australia
- **SCCER** Steering Committee Switzerland
- **ECEEE** summer study 2015 panel leader

# the last 6 months: workshops & conferences



Date	Place	# of Experts	Type of meeting	Government	Industry	Academic
March 17	Wellington, NZ	55	Workshop	25	15	15
Sept 5	Oxford, UK	18	Workshop	2	3	13
Feb & July	Wellington, NZ	5	Stakeholder update	3	2	

Date	Place	Participants	Type of meeting	Government	Industry	Academic
Oct 3	Milan, Italy	10	Workshop			
Oct 13 & 14	Graz, Austria	40	Workshop			
March 18	Wellington, NZ	>100	NERI Conference	>20	>20	~60
May 12	Brisbane, AUS	15	Task 24 presentation	13	2	
May 12	Brisbane, AUS	12	IEC Lecture		2	10
August 8	Washington, US	<100 (out of 10000)	APA conference			mostly
Sept 4	Oxford, UK	<300	BEHAVE conference			
Sept 11	Berlin, Germany	180	IEPPEC conference			
Oct 10	Brisbane, AUS	>20	Skype Lecture IEC		2	20



# deliverables - update

## D0

- **D0: Advisory committee of stakeholders** from ExCo, IEA, research, commercial, community, policy and end user sectors providing strategic guidance.

Invitations sent to following people:

**IEA DSM:** Rob KOOL, NL

**Research:** Skip LAITNER, US

**Industry:** Hans de KEULENAER, European Copper Institute, BE

**Consultancy:** Rod JANSSEN, Energy in Demand, FR

**Government:** Vanessa BENNET, Ministry of Innovation, NZ

**Technology Developer:** Juan Pablo Garcia, VERDIEM, Spain

**Social Media:** Dusan JAKOVJLEVIC, EEIP, BE

**NGO:** Nils BORG, ECEEE, SE

**Utility:** Scott NEUMAN, Opower, US

1st virtual meeting proposed October/November: to feedback on Wiki

# Subtasks

1– Helicopter view of models, frameworks, contexts, case studies and evaluation metrics



# The story of Task 24

## CLOSING the LOOP

### DAY 1

**Models of understanding**

- Energy efficiency**: 11-15% increase in energy efficiency
- Behavioral change**: All ways to the 15%
- Policy**: incentives, standards, information, education, awareness
- Market**: a productive market and a viable model
- Regulation**: encourage a pro and open use of markets
- Multi-dimensional of psychosocial behaviour**: All models are wrong but some of them are useful
- System perspective**: we need to understand the benefits as well as cost and feasibility

### Challenges of implementation

- Human perspective**: better than to think 2017
- System perspective**: take into account all actors, making analysis why defined boundaries can focus on benefits
- Workshops**: significant changes need to appeal to deep seated values, support for change is cooperative, be aware of what you're not negotiating on

### DAY 2

**Linkages + Synergies**

- Smart meters**: lack of clarity around MTC created confusion
- Smart meters**: 10,000 households
- Smart meters**: are the results meaningful and credible?
- Smart meters**: need to think for the future
- Smart meters**: ensure clarity been planning
- Smart meters**: need to think for the future
- Smart meters**: need to think for the future
- Smart meters**: need to think for the future

### World Cafe

**Some final thoughts**

- World Cafe**: we can't control how your story looks but don't let it control you
- World Cafe**: a simple visual would really help
- World Cafe**: can we create a great message story?
- World Cafe**: we need to learn our own lessons
- World Cafe**: we're good at building on it
- World Cafe**: we'll collaborate stories
- World Cafe**: we'll collaborate stories

### Thankyou

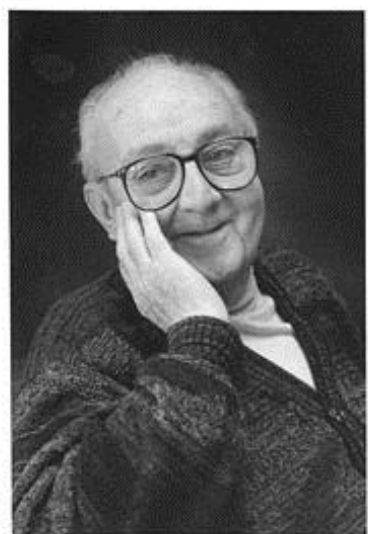
We need to keep taking across disciplines and start to tell a new story

Thanks everyone

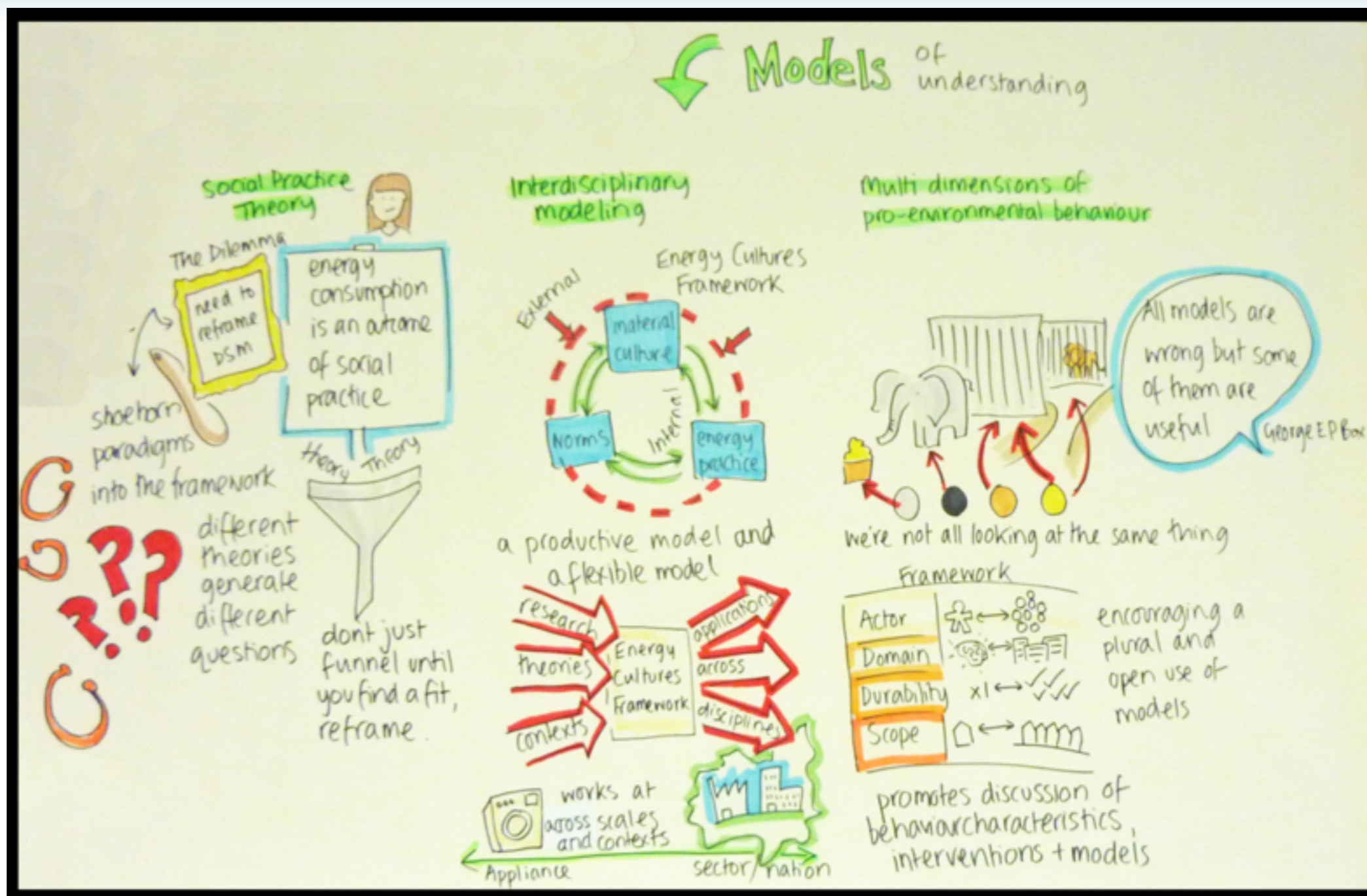
We have learnt A LOT !!

designed by Graeme Change

# Many hurdles to overcome

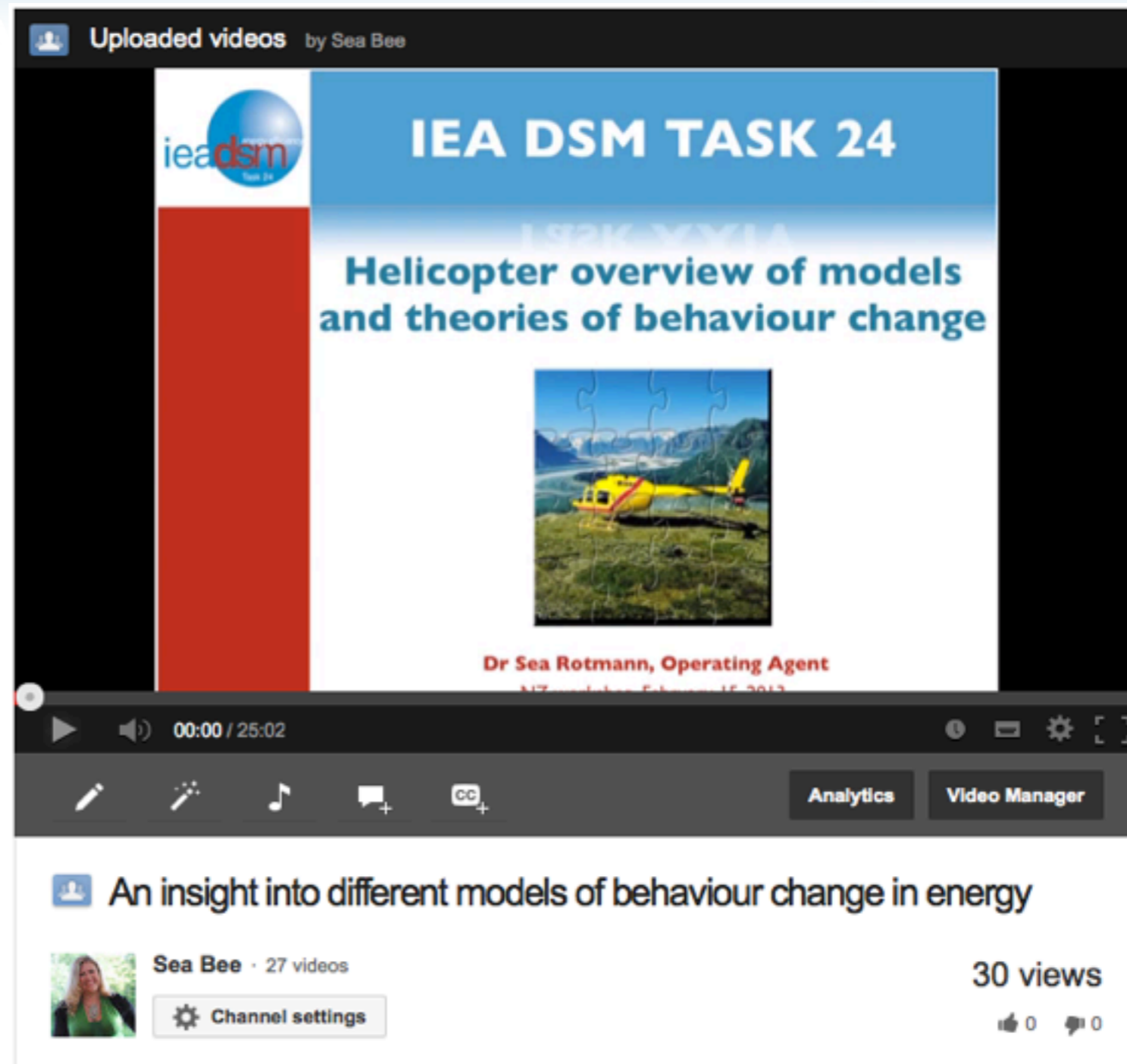
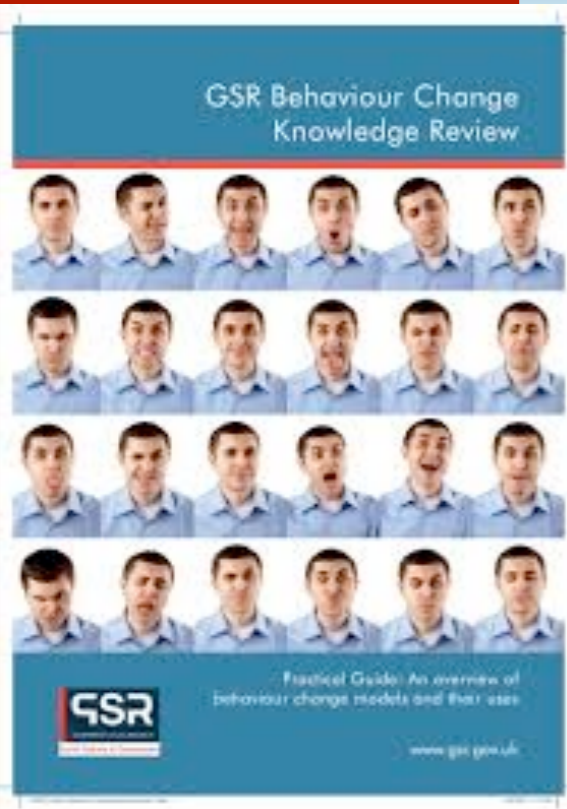


**“All models are wrong, but some of them are useful”**  
George E.P. Box (1979)



# subtask I - Overview of models, disciplines and frameworks

## ΨΣΩΓΕΜΟΙΚΣ?




Uploaded videos by Sea Bee

ieadsm

### IEA DSM TASK 24

ΨΣΩΓΕΜΟΙΚΣ?

#### Helicopter overview of models and theories of behaviour change



Dr Sea Rotmann, Operating Agent

17 October, February 15, 2013

00:00 / 25:02

Analytics Video Manager

An insight into different models of behaviour change in energy

Sea Bee · 27 videos

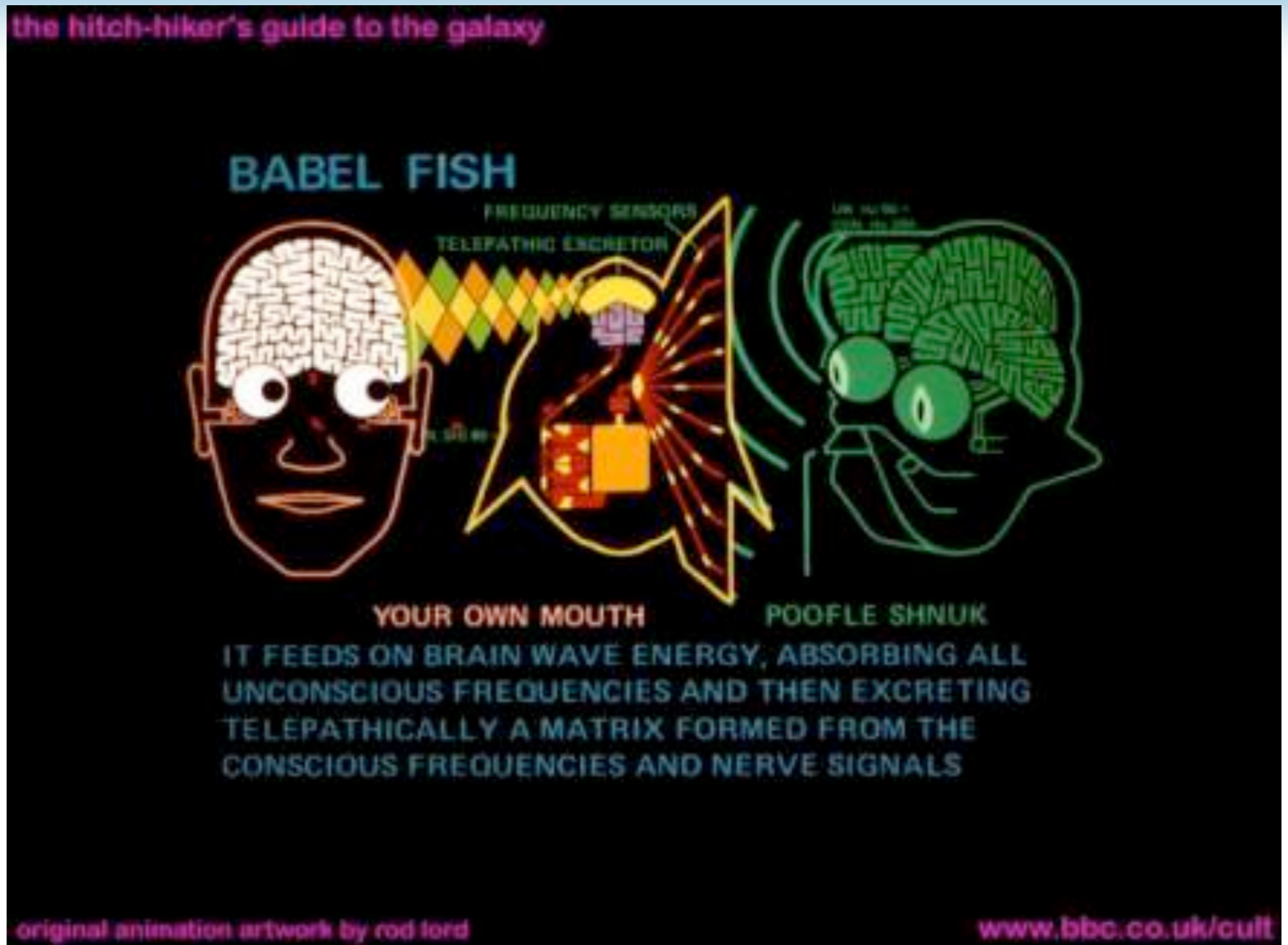
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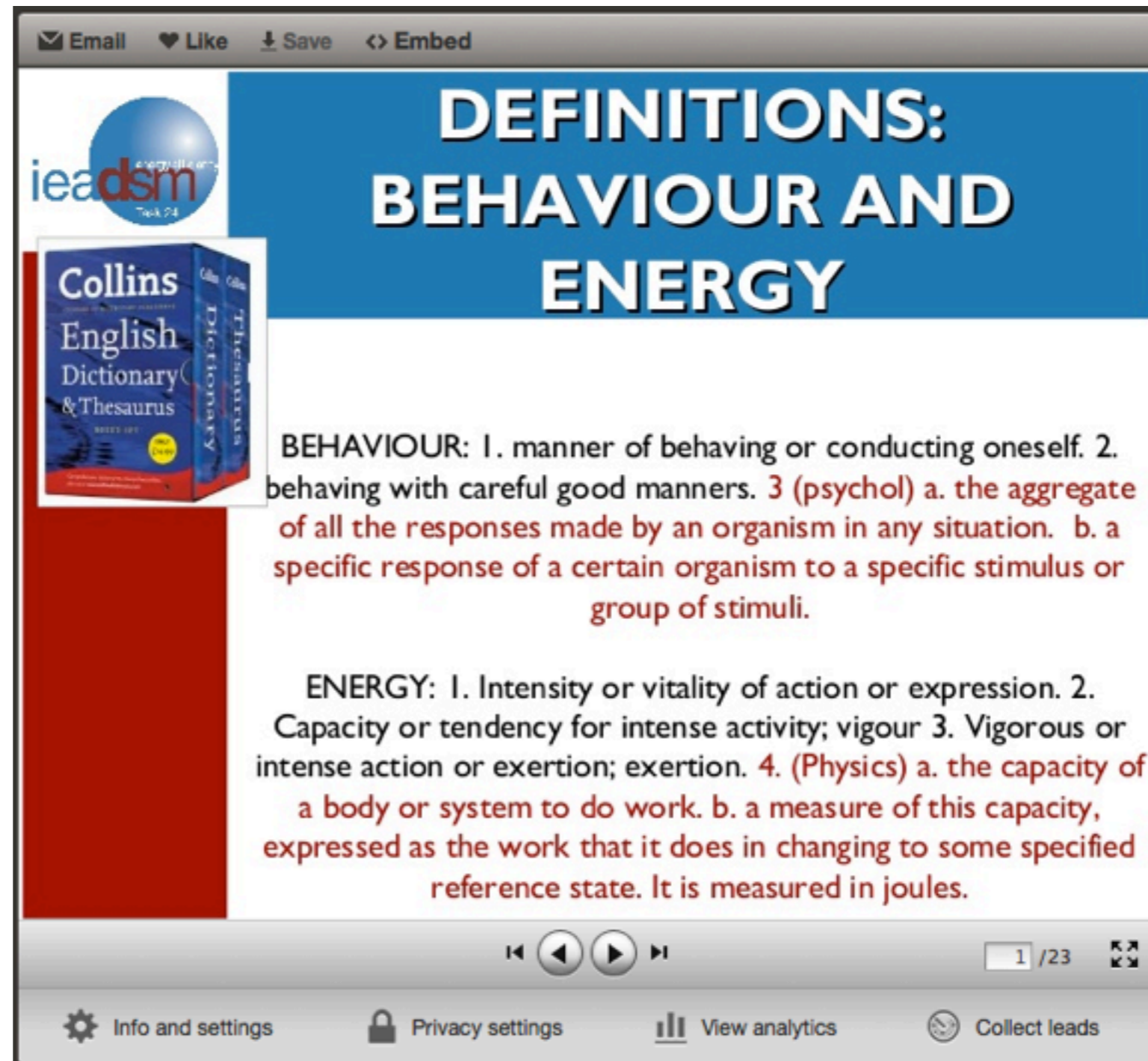
[https://www.youtube.com/watch?v=DOTkdA97Woo&feature=c4-overview&list=UU\\_p3PIWDpLyDBh8TwUBmVHQ](https://www.youtube.com/watch?v=DOTkdA97Woo&feature=c4-overview&list=UU_p3PIWDpLyDBh8TwUBmVHQ)

# Interdisciplinary silos



# subtask 1 - Overview of definitions

<http://www.slideshare.net/drsea/definitions-for-task-24>



The screenshot shows a presentation slide with a blue header and a white body. The header contains the title 'DEFINITIONS: BEHAVIOUR AND ENERGY' in large white letters. Below the header, there is a red vertical bar on the left side. To the right of the red bar, there are two paragraphs of text defining 'BEHAVIOUR' and 'ENERGY'. The slide also features a small image of a Collins English Dictionary & Thesaurus book cover. At the top of the slide, there are navigation icons for Email, Like, Save, and Embed. At the bottom, there are navigation icons for back, forward, and search, along with a progress indicator showing '1 / 23' and a 'Collect leads' button.

Email Like Save Embed

ieadsm energy efficiency Task 24

## DEFINITIONS: BEHAVIOUR AND ENERGY

**Collins English Dictionary & Thesaurus**

**BEHAVIOUR:** 1. manner of behaving or conducting oneself. 2. behaving with careful good manners. 3 (psychol) a. the aggregate of all the responses made by an organism in any situation. b. a specific response of a certain organism to a specific stimulus or group of stimuli.

**ENERGY:** 1. Intensity or vitality of action or expression. 2. Capacity or tendency for intense activity; vigour 3. Vigorous or intense action or exertion; exertion. 4. (Physics) a. the capacity of a body or system to do work. b. a measure of this capacity, expressed as the work that it does in changing to some specified reference state. It is measured in joules.

1 / 23

Info and settings Privacy settings View analytics Collect leads

# Eureka!

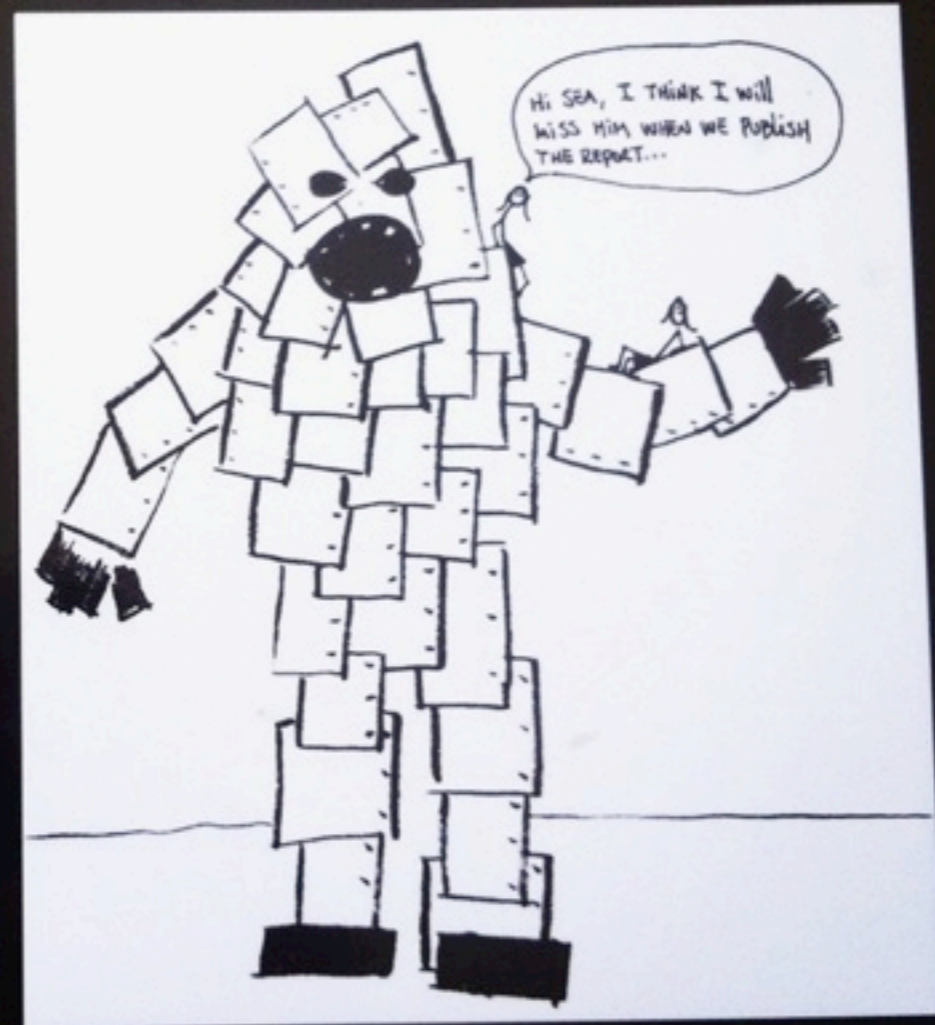
**World Cafe**

- easy stories are readily accepted
- we can re-write the story
- Economic growth is not evil
- dialogue is key
- YES
- You can't control how your story lands but don't be scared... tell it anyway
- Watch out for Zombie Facts!!
- Hero Stories
- Silver buckshot not a bullet
- Tell the Ninja Stories
- once upon a time... Tell good stories
- SPY Stories
- more infiltration across research + policy
- a simple visual model would help
- need to feel ownership...
- can we create a great energy story?
- ASK what people want to know
- we need to learn our own lessons
- can we create new social norms based on literature
- lets step in before the mistakes
- Mistakes
- we're good at building on
- tell collaborative stories
- we need to tell compelling generic stories as well as stories of what went wrong

# The Monster

## The Monster

Subtask 1 analysis of IEA DSM Task 24:  
*Closing the Loop: Behaviour Change in DSM - From  
Theory to Practice*



Dr Ruth Mourik (Duneworks)  
Dr Sea Rotmann (SEA)

Read the full monster here: <http://bit.ly/task24monster>



# The Monster Wiki

Firefox File Edit View History Bookmarks Tools Window Help

Subtask 1 - International Energy Agency DSM - Task 24 Wiki

Subtask 1 - International Energ... Twitter / Notifications Dr Kennedy Graham: Why green... Invite Your Contacts - IEA DSM... (1) Sea Bee - If anyone is still w...

www.leadsmtask24wiki.info/wiki/Subtask\_1

Most Visited Google Maps YouTube Save to Mendeley Wikipedia Greens News Business Kiwibank P.S.K. Storify this Bookmarks



Page [Discussion](#) [Read](#) [View source](#) [View history](#)

## Subtask 1

- Main page
- Recent changes
- Random page
- Help
- Tools
  - What links here
  - Related changes
  - Special pages
  - Printable version
  - Permanent link
  - Page information

**Contents** [\[hide\]](#)

- 1 Overview
  - 1.1 Table of Case Studies from different Countries and Domains
- 2 Background
- 3 Objectives
- 4 Deliverables
- 5 References

### Overview

**Table of Case Studies from different Countries and Domains**

Domain/Country Cases and used theories/models	Netherlands	New Zealand	Switzerland	Italy	Austria	Norway	Sweden	Belgium	South Africa	Other Countries
	Jouw Energie Moment Theories/Models used: Expectancy Value Theory Design with Intent Interpretation for sustainable behaviour	Responses to Time Varying Prices for Electricity Theories/Model used: Classical Economics and marketing	Smart Metering Zurich Pilot EWZ and EKZ Theories/Model used: Behavioural economics Social norming	Time of Use Tariff Theories/Models: Classical Economics	Die Energiejagd Theories/Models: Shared learning Social Norming Freezing/unfreezing	Demosteinkjer Theories/Models: Theory of Planned Behaviour	Clockwise Theories/Models: Constructivist Learning Theory Shared learning			CHARM (UK) Theories/Models: Social norming Practice theory
Smart Metering /	Power Matching City		Smart Metering EKT Dietikon Theories/Model:		€CO2 Management					In Demand (P) Theories: Nudge



# Subtask I - Main lessons

A helicopter overview of models of understanding behaviour is/not:

- A great way to provide a general understanding/overview
- Good representation of different models/disciplines
- Collection of international best practice (but snapshot)
- Good storytelling platform
- Creating a 'monster' that keeps on growing
  
- An in-depth review of all literature on the subject
- Adhering to a 'subjective' disciplinary or sectoral view
- Easy to read, hence the Wiki and ST8 decision-making tool

==> will continue to grow as a 'living monster' on the Wiki throughout the Task 24 extension (and ST8 tool)

# Subtasks

2-

In depth analysis in areas  
of greatest need  
(buildings, transport,  
SMEs, smart metering)

# subtask II - case studies



CS26 2fnd162



# Norway - SMEs

## Finnfjord

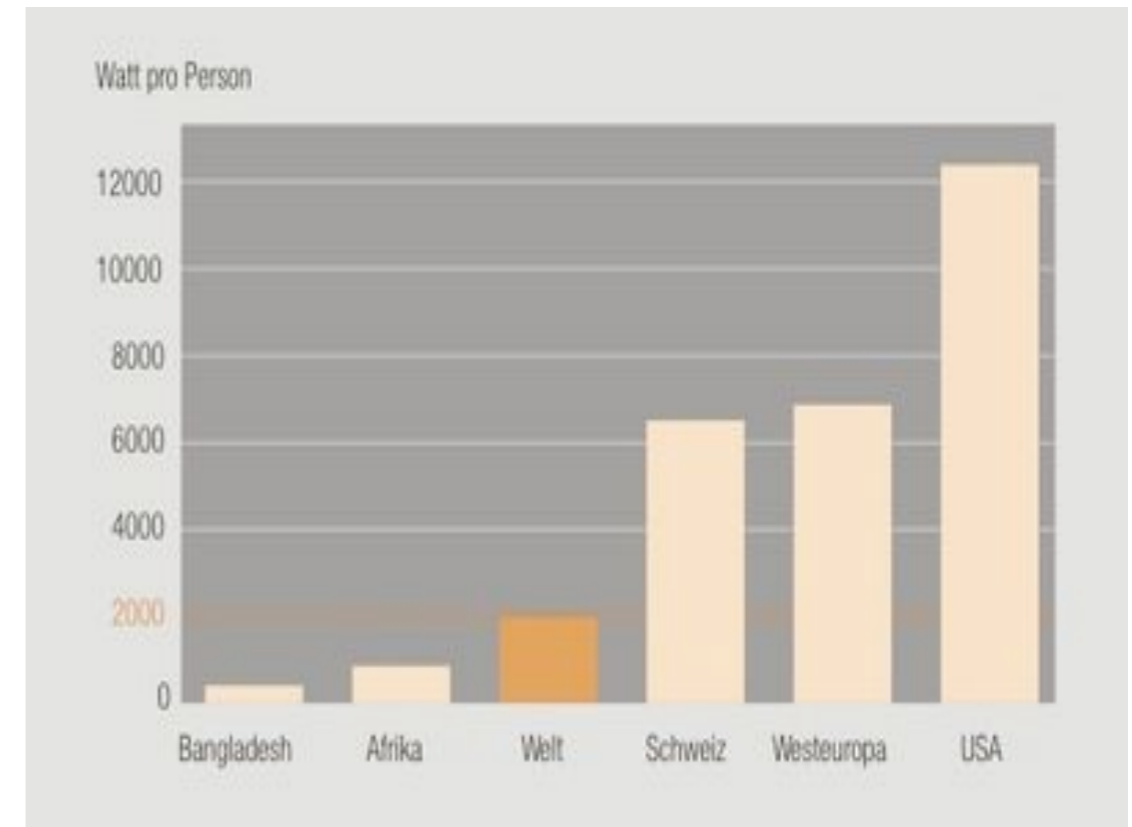
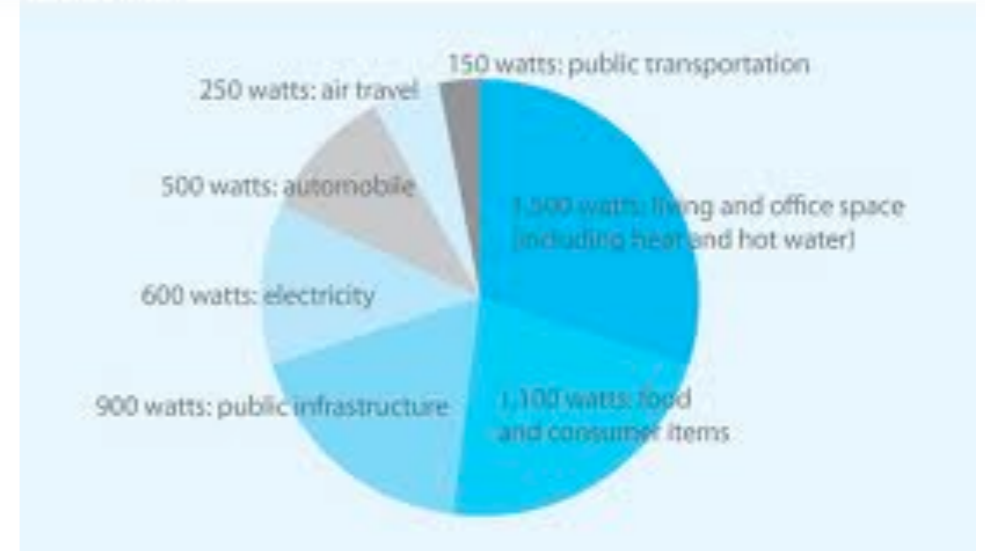


# Switzerland - Buildings

## 2000 Watt Society

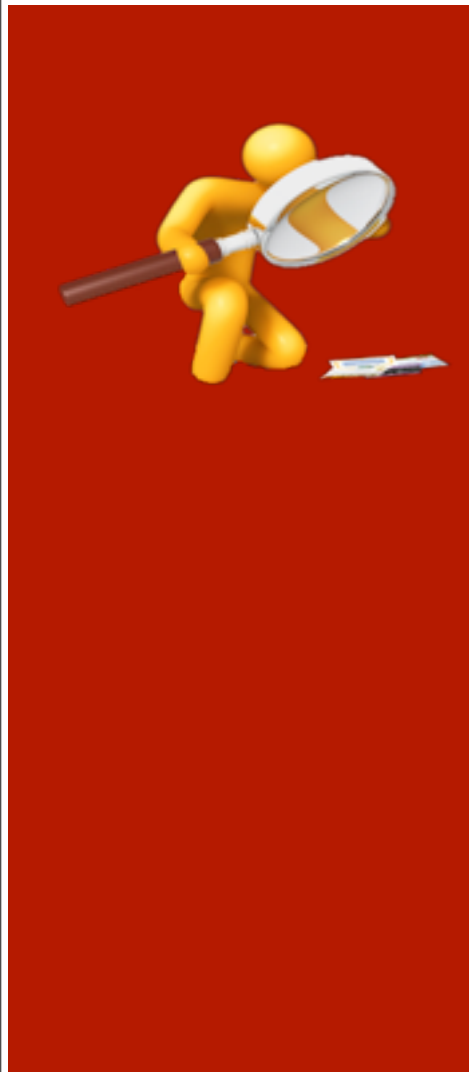


Breakdown of total watts currently used by the average Swiss (5,000 W)



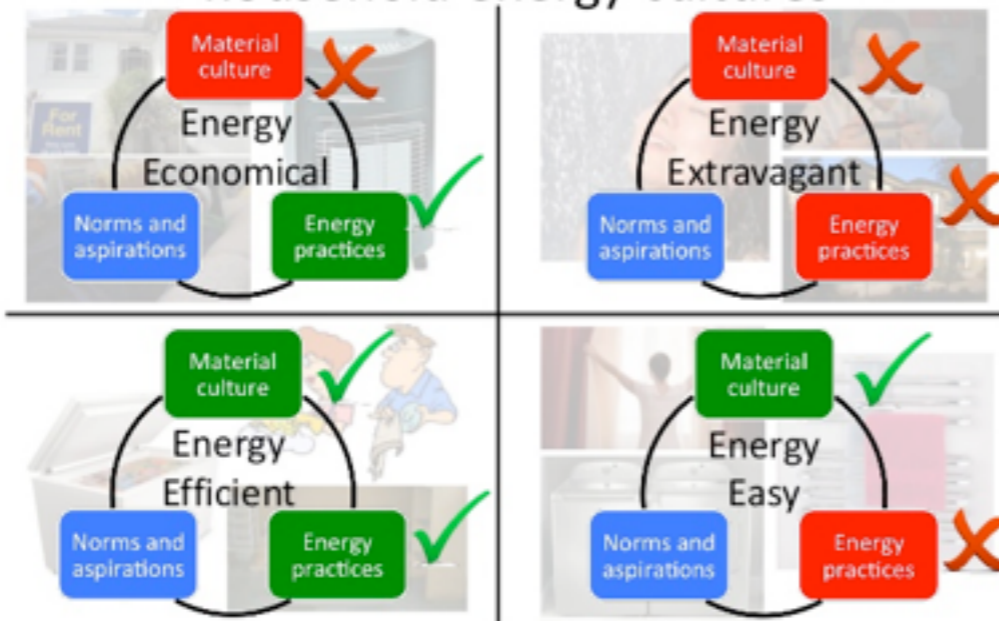
# NZ-Buildings/Smart Grid

## PowerCo Smart House Trial



GLCO 2W9L4 HON26 L191

### Distinctive clusters of household energy cultures



### STRATEGY FOR SMART HOMES: IMPLEMENT AND MEASURE

#### Studies Show...

Consumers respond to information - enabled with technology.  
They respond to price somewhat but respond to price *plus* technology most of all.

v 2013.09.17a

#### Evolving Consumer Preferences and Choices

- Value
- Social and Environment
- Comfort
- Resilience
- Lifestyle

#### Retailers and Aggregators

- TOU Pricing
- New Commercial Models

#### Enabling Technologies

- Smart Meters
- Heat Pumps
- Efficient Appliances
- Apps and Services
- PV
- Internet of Things (Smart Appliances)
- EVs Storage

#### EDB Pressures

- Higher Peaks, Lower Load Factors, Lower Economic Efficiency
- Threat to Volume
- Need for New Investments
- Increasing Costs
- Uncertain Reserves

#### EDB Network Strength

- Need not be volume consumed - kWh based
- Regulated - right incentive can deliver NZ Inc efficiency
- Across Network View - (can optimise)
- Enable infrastructure best shared (storage?)
- Long DSM history (hot water)

#### Opportunities for EDBs

- Information: pricing and technology services and solutions to lower peaks
- Information standards plus demo technology to lower new investments
- Enable new consumer choices without surprises / efficiently using networks
- Evolve new services and / or engagement models

Figure 4. From the PowerCo Smart House brochure



# PowerMatching City

# PowerMatching City

Engaged participants

Ruth Mourik



# Italy - Buildings/smart meters Energy at Home project



ΕΠΕΛ&Α ΣΕ ΗΟΜΕ project



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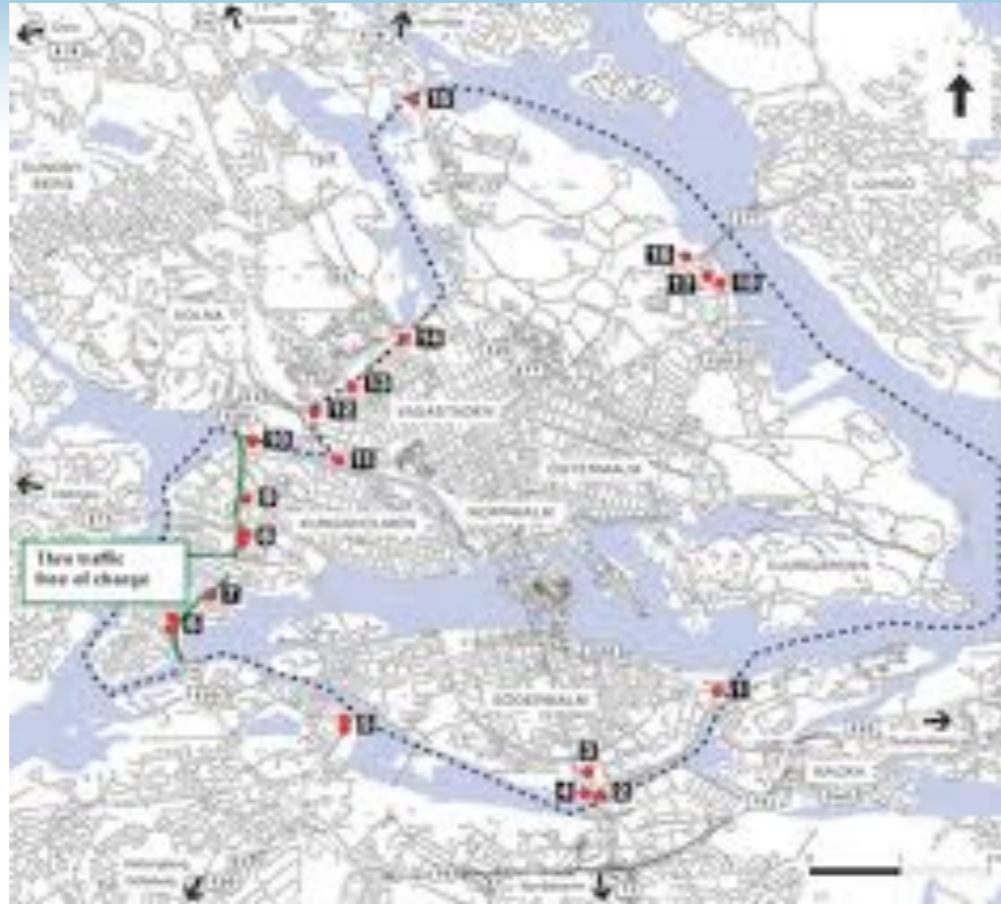
Control your world





# Sweden - Transport

## Stockholm congestion charges



Stockholm congestion charges



# Austria learnings - Die Energiejagd vs €CO2 Management

DIĞ ENERJİYELEŞİM VE €CO2 YÖNETİMİ



# Subtask II - Main lessons

An in-depth review of case studies is/not:

- A great way to drill deeper into most interesting cases
- Showing impact of country-specific contexts
- Providing some comparison between cases and countries
- A way of standardising the analysis across countries
- Important to collect different points of view
  
- In-depth as it focuses only on one issue per country
- A literature review, as it involves interviews of various s/h
- Available to countries that provided in-kind expertise

==> will continue to collect case studies for ST6 of the extension

# Subtasks

3-

Evaluation tool for  
stakeholders

# subtask III - evaluation



## QUESTION

- ✓ WHAT IS A SUCCESSFUL LONG-TERM BEHAVIOUR CHANGE OUTCOME TO YOU?



# Subtask III: Outputs



- Individual evaluation and monitoring metrics for each domain in the **Subtask I Monster/Wiki**, plus separate report
- An overview and some recommendations on monitoring and evaluation can be found in **Subtask III** report ‘**Did you behave as we designed you to?**’
- There will also be a methodological review based on ‘**Beyond kWh**’ which will feed into **Subtask IX**

# Subtask III - Main lessons

A behavioural evaluation 'tool' is/not:

- Something everyone wants, and no one has created yet
- Hugely important, as it's only way to show impact
- Regarded as the most difficult issue to evaluate
- Dependent on models and estimates
- Collection of different metrics beyond kWh
- Methodological review of behavioural interventions
  
- Possible in the scope of Task 24
- Easy at all, as different s/h have different needs/outcomes
- Finished yet, but created building blocks

==> will be developed as ST9 of Task 24 extension and become part of ST8 toolbox & hopefully ST I I real life

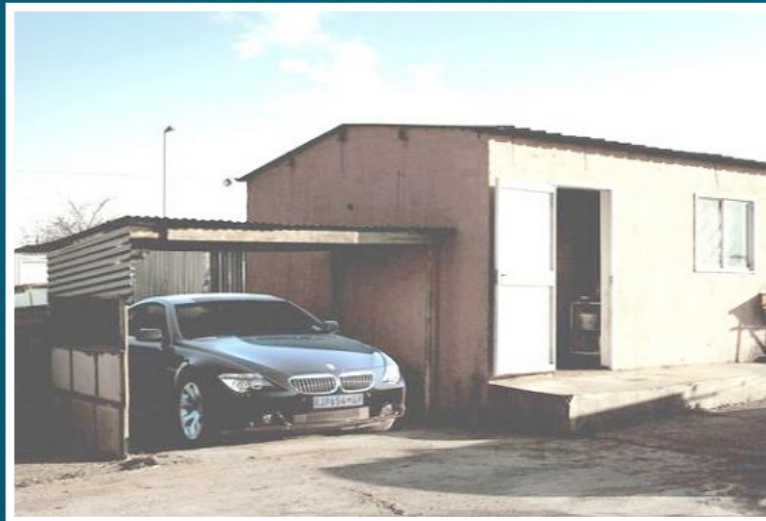
# Subtasks

4-

Country-specific  
recommendations, to  
do's and not to do's



# Country stories



**The Good, the Bad and the Ugly**  
– a true frontier story of DSM roll-out in South Africa !

BarryBredenkamp, ( SANEDI) and Dr Mathilda du Preez, (University of Pretoria)

# subtask IV - country-specific recommendations



## country-specific recommendations



## Subtask IV - Main lessons

A country-specific list of recommendations is/not:

- A main drawcard of Task 24
- A collection of country-specific contexts, based on stories
- Different for the different countries
- But has some similarities and overall, global conclusions
- Based on country experts' and national experts' knowledge
  
- Conclusive
- Entirely objective, miss some sector and disciplinary views
- Available to countries that are not financially participating

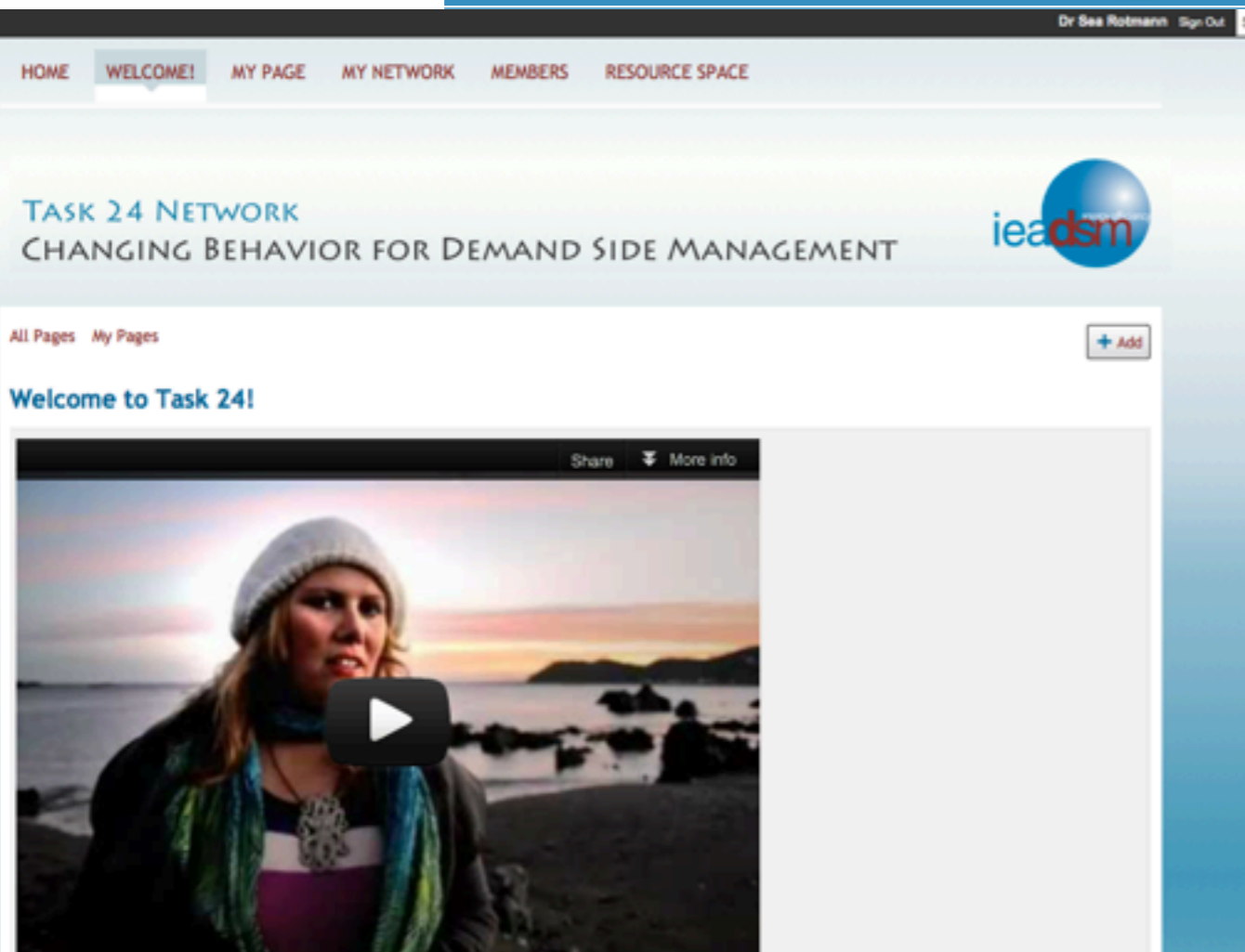
==> recommendations will form basis for Task 24 extension ST6 and 7

# Subtasks

5 – Social Media Expert  
platform



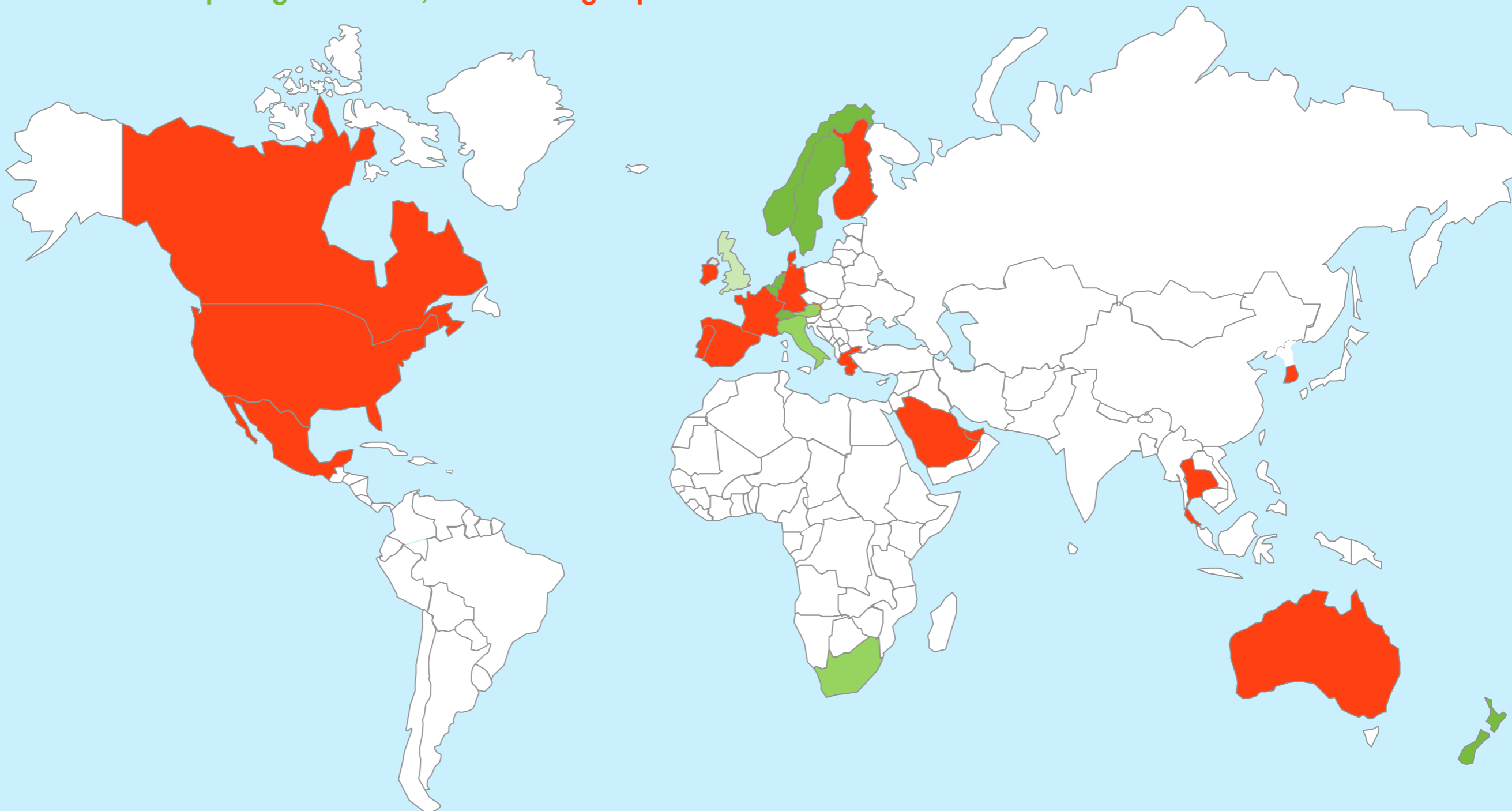
# Subtask V - expert platform



- 223 members
- 128 videos & presentations
- 75 photos
- 6 blogs
- 19 events
- 21 discussion fora
- 3 member groups

# World Map of

Participating countries, contributing experts



Expert platform currently has over 220 experts from 21 countries and 7 main sectors.



All Sessions  
100.00%

+ Add Segment

Overview

Sessions vs. Select a metric

Hourly Day Week Month

Sessions



Sessions

325



Users

144



Pageviews

1,508



Pages / Session

4.64



Avg. Session Duration

00:05:52



Bounce Rate

32.62%

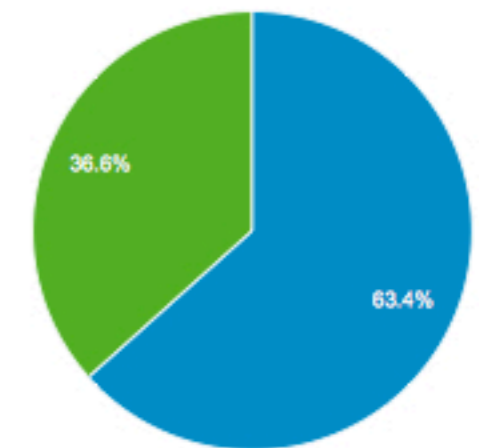


% New Sessions

36.62%



Returning Visitor New Visitor



# Subtask 5 - Main lessons

A social media platform is/not:

- A good place to 'collect' experts and info
- A good broadcasting tool
- A good way of measuring Task impact (GA)
  
- A silver bullet for making people talk
- A way of making busy experts use social media
- A way of easily managing files

==> created a Wiki to make case studies more easily accessible, will continue as ST5 during Task extension





# In-depth Task 24 recommendations

- Individual recommendations from the case study analysis from **Subtask I** can be found in the 'Monster' or the [Task 24 Wiki](#)
- More in-depth recommendations can be found in each individual country case study analysis from **Subtask II**
- Recommendations on monitoring and evaluation can be found in **Subtask III** report 'Did you behave as we designed you to?'
- Each country will receive a country-specific set of recommendations and [to do's/not to do's](#) (**Subtask IV**)
- Our BEHAVE presentation (Sept 2014) talked about the main learnings from using a Social Media Expert Platform (**STV**)

# objectives for the next 6 months

WONCAU?

## Subtask 1

Finalise the 'Monster' and wiki with remaining case studies and analysis

## Subtask 2

Finalise country reports from Austria, Belgium, Italy (South Africa?)

## Subtask 3

Finalise 'Beyond kWh' analysis of methodology review and evaluation report

## Subtask 4

Finalise country stories and country-specific feedback and stakeholder analyses

## Subtask 5

Continue expert platform for Task 24 extension

### Planned experts' meetings

Date	Place
October 24	London, UK
October 22	Sheffield, UK
March 2015	Capetown, SA

### Reports planned for the next six months

DSM University webinar; 3 more country-specific case study ST2 reports; Monster finalised; ST4 recommendations; 3 ST3 reports; Storytelling publication; ECEEE summer study publication; Spotlight article; at least one blog for IEA DSM

# revised budget



Description personmonths/ costs	Cost (Euro)	personmonths Sea Rotmann per subtask	personmonths Ruth Mourik per subtask	total costs Sea Rotmann	total costs Ruth Mourik	total sum
Subtask 0	4500	4	2	18000	9000	24750
Subtask 1	4500	7	5	31500	22500	49500
Subtask 2	4500	7	3	31500	13500	44000
Subtask 3	4500	7	3	31500	13500	40500
Subtask 4	4500	5	3	22500	13500	33750
Subtask 5	4500	6	2	27000	9000	27000
<b>Total personmonths/costs</b>		<b>36</b>	<b>18</b>	<b>€162000</b>	<b>€81000</b>	<b>€243000</b>
<b>Description costs</b>	<b>Costs</b>					
OAs travel costs	55000	costs travel Sea Rotmann and Ruth Mourik including extended stay in Europe of Sea Rotmann and frequent face to face meetings RM and SR (6 times travel SR to Europe from New Zealand)				
stakeholder analyses	5000	separate meetings and costs associated with stakeholder analyses				
website and data management	10000	including website, webinars, VC, social media, blogs/vlogs, database etcetera				
overheads and incidentals	7000					
<b>Total</b>	<b>€77000</b>					<b>€320000</b>

# the budget: current



Income	Cost
<p>Country participation:            NL €40,000 (finished)            SE €40,000 (finished)            NZ €40,000 (finished)            NO €40,000 (finished)            CH €40,000 (finished)            BE €40,000 (finished)            IT €40,000 (finished)            AT €20,000 (20K outstanding)            SA all outstanding</p> <p><b>€300,000</b></p>	<p>Person months            Sea Rotmann 34pm            Ruth Mourik 17pm</p> <p><b>€230,000</b></p>
<p><b>In-kind:</b>            UKERC Meeting Place            Oxford Workshop contribution            €40,000</p> <p>NZ Workshop contributions (x2)            NZ\$3600            NZ\$5000</p> <p>Energy Savers Dubai Workshop contribution            Approx €1000</p> <p>In-kind expertise from non-participating countries:            Over 20 weeks expert time</p>	<p>Travel and web development, video,            incidentals:</p> <p>Sea Rotmann €54000            Ruth Mourik €12000</p> <p><b>€66,000</b></p>

# timetable

Subtasks	2012	2013	2014
Subtask 0 - Admin	■	■	■
Subtask I - Helicopter Overview		■	■
Subtask II - Case Studies		■	■
Subtask III - Evaluation Template			■
Subtask IV - Recommendations			■
Subtask V - Expert Platform		■	■

- starting date according to work plan: February 2012
- official starting date according to ExCo (Espoo): July 2012
- Because we have 8 or more participating countries our task was extended at no extra cost until December 2014

# Storytelling methodology

Using storytelling as methodology is/not:

- A valid social science tool
- A great way to break down silos and jargon
- Something we all innately do, and do well
- Fun, engaging, social & importantly: memorable
- Universally understood

A way to reduce bias by removing complexity?

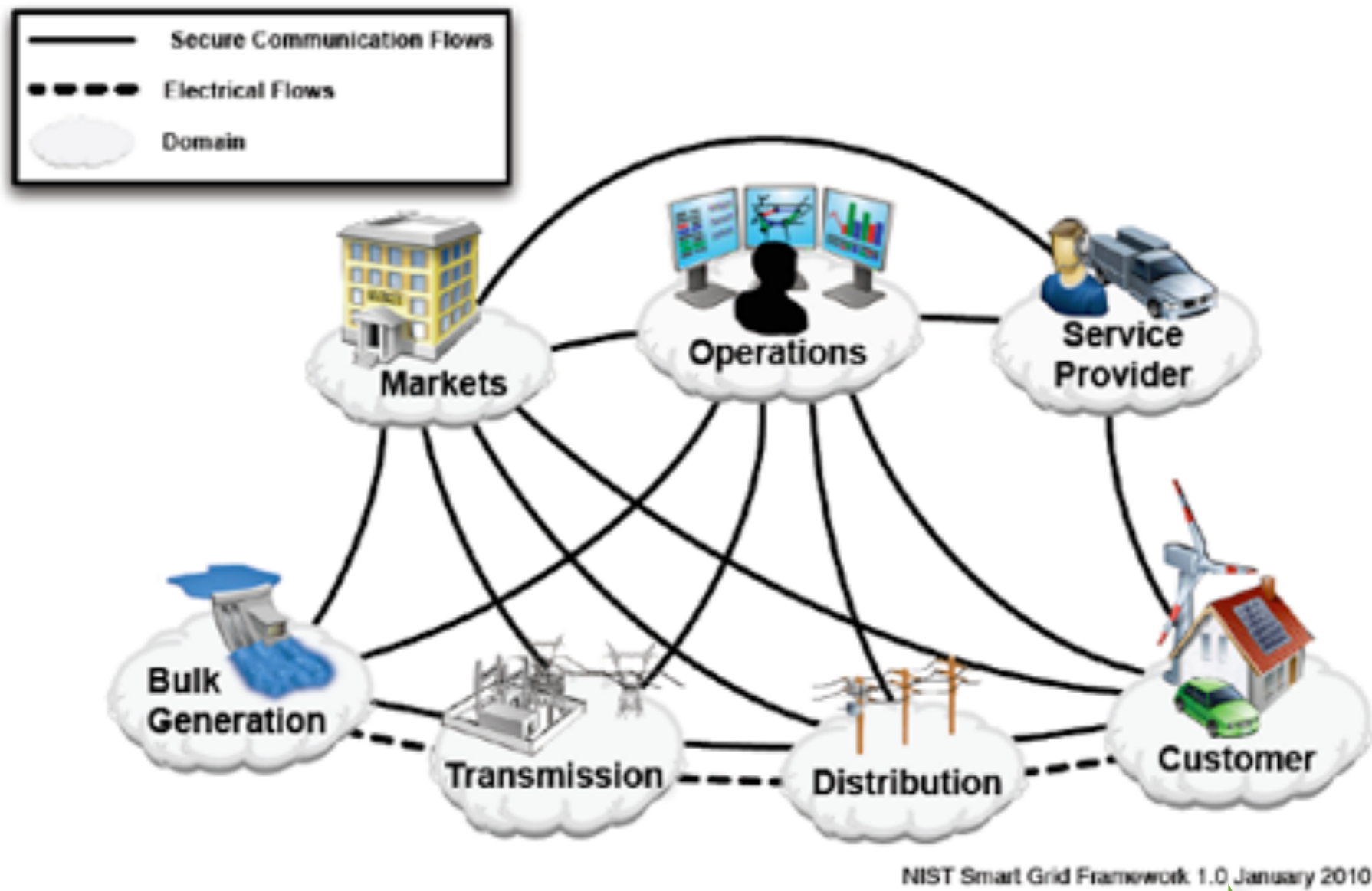
- A way of getting around 'proper' analysis

==> will continue to use narratives but also investigate ways of measuring impact of storytelling

# So...what's the story?

- There is **no silver bullet** anywhere but the potential remains huge
  - Homo economicus **doesn't exist** (in energy)
  - **Habits** are the most difficult thing to break
  - This means we have to get **even smarter & embrace complexity**
  - We are at **a crossroads**, and shouldn't turn back
  - We need to look at **whole-system, societal** change
  - This can't be done in isolation by one sector - **collaboration is key**
  - **Social media and networks** are really good (theoretically) for it
  - But: professionals are weary to use them, **face-to-face still key**
  - It's also hard to **find the right people** and **break down the silos**
  - Everyone has a **piece of the puzzle** but we haven't fit it together
  - We need a **shared learning and collaboration platform** that works
  - We also need a **shared language** based on narratives
- 
- It's all about **the people!**

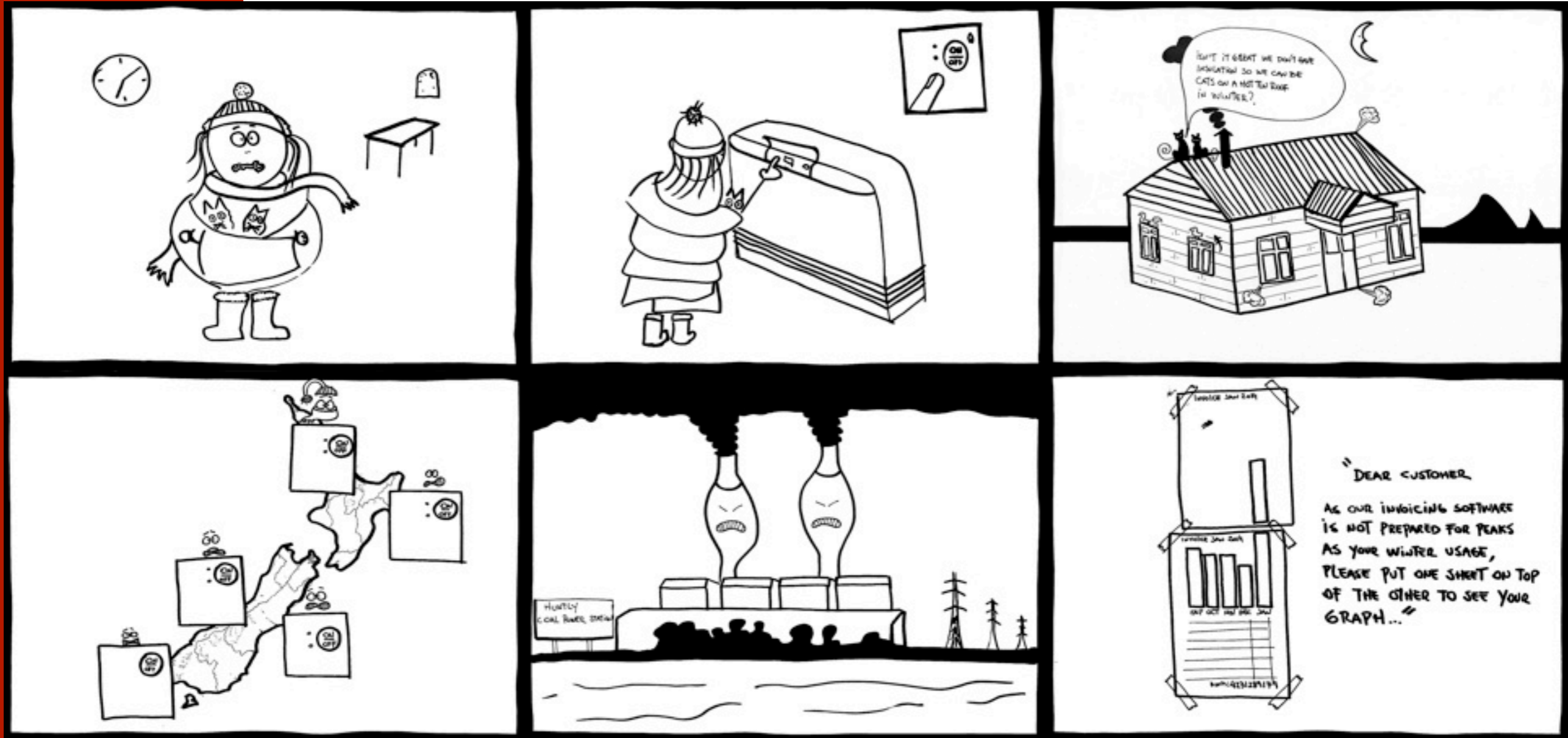
# The way we look at the Energy System



SUPPLY --> T&D --> TECHNOLOGY --> USER

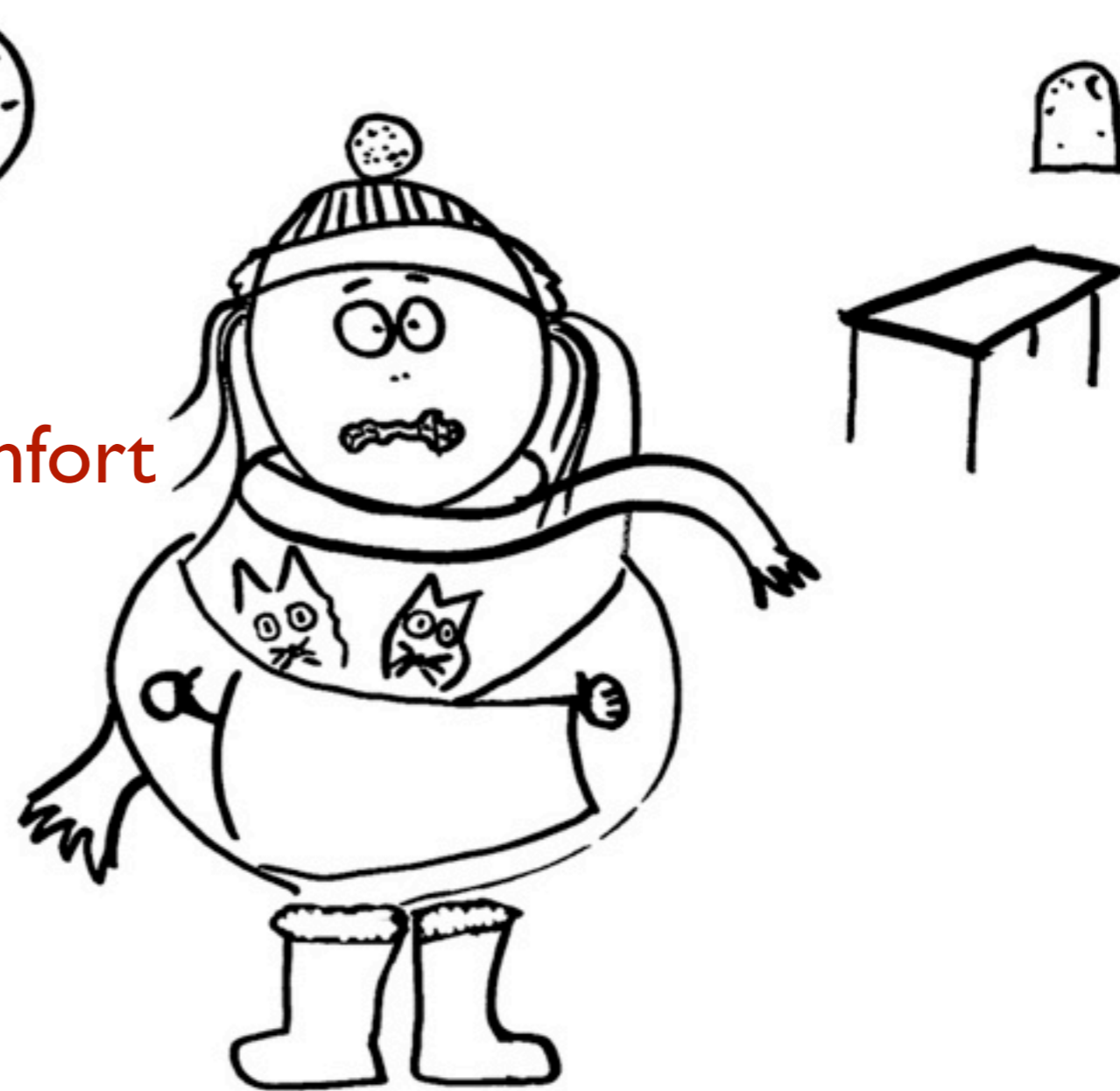


# Another way we could look at the Energy System



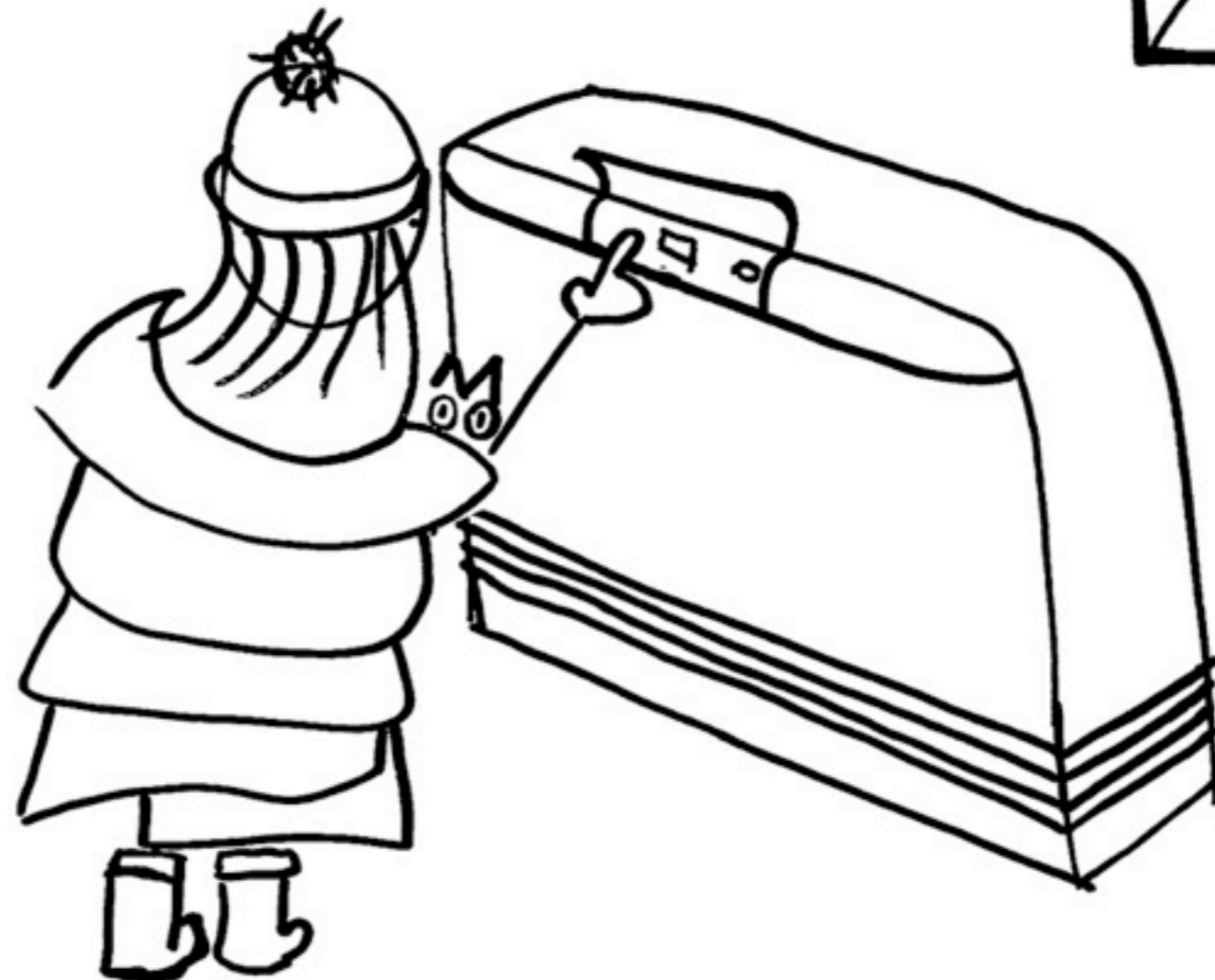
# The end user service need

Personal comfort



# The end user behavioural response

Technology



# The end user's wider



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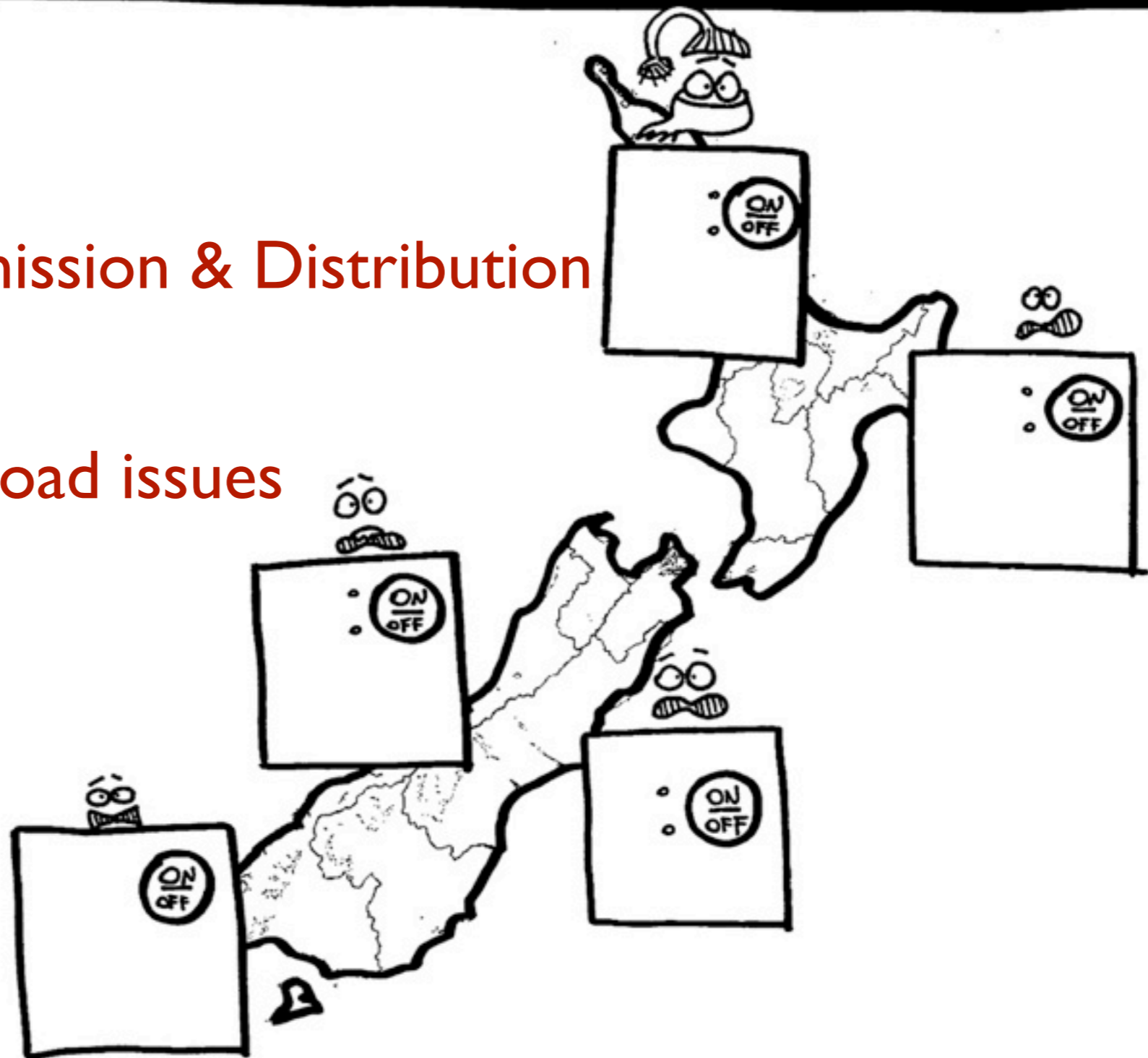
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# The national context

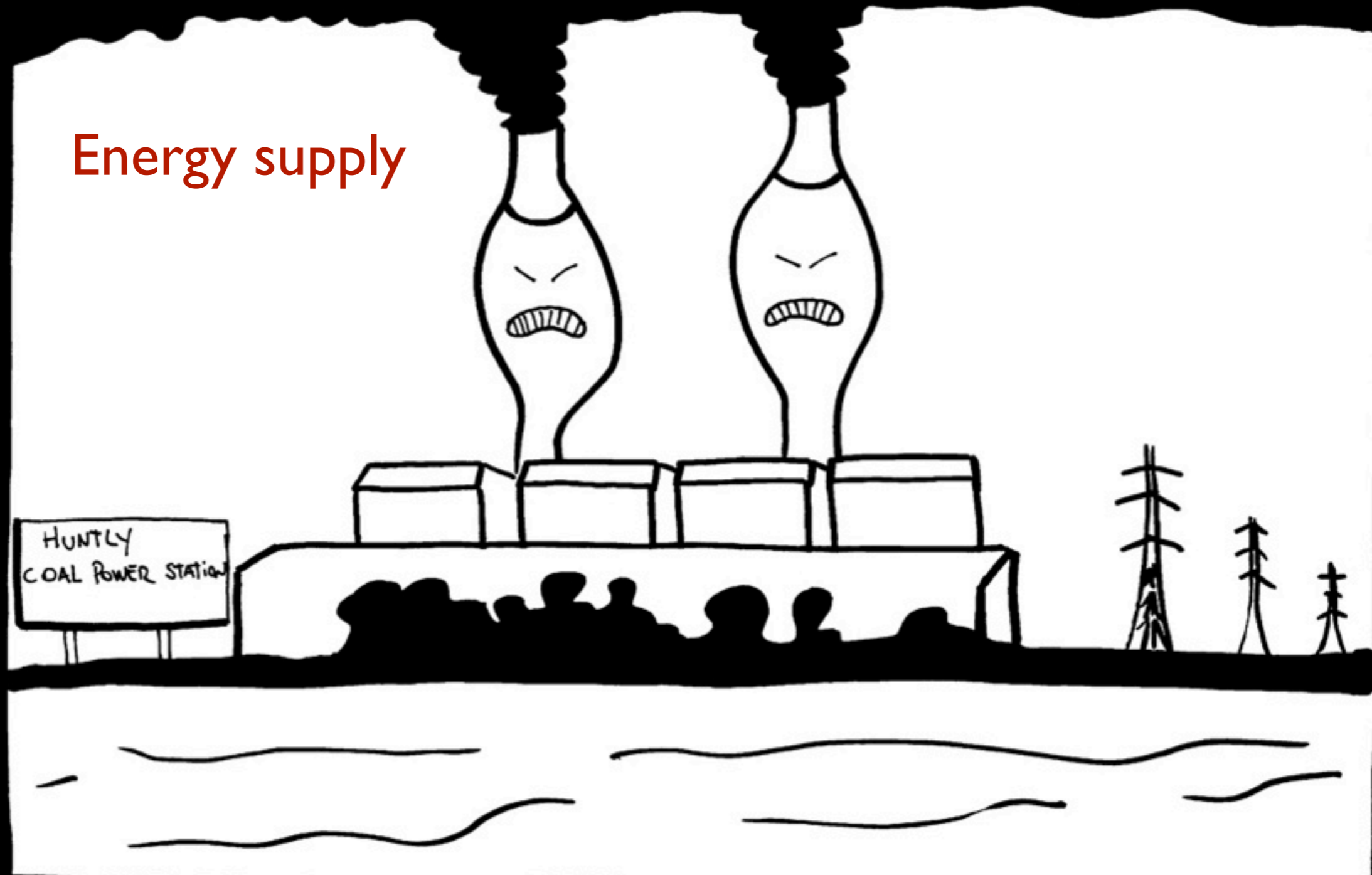
Transmission & Distribution

Peak load issues



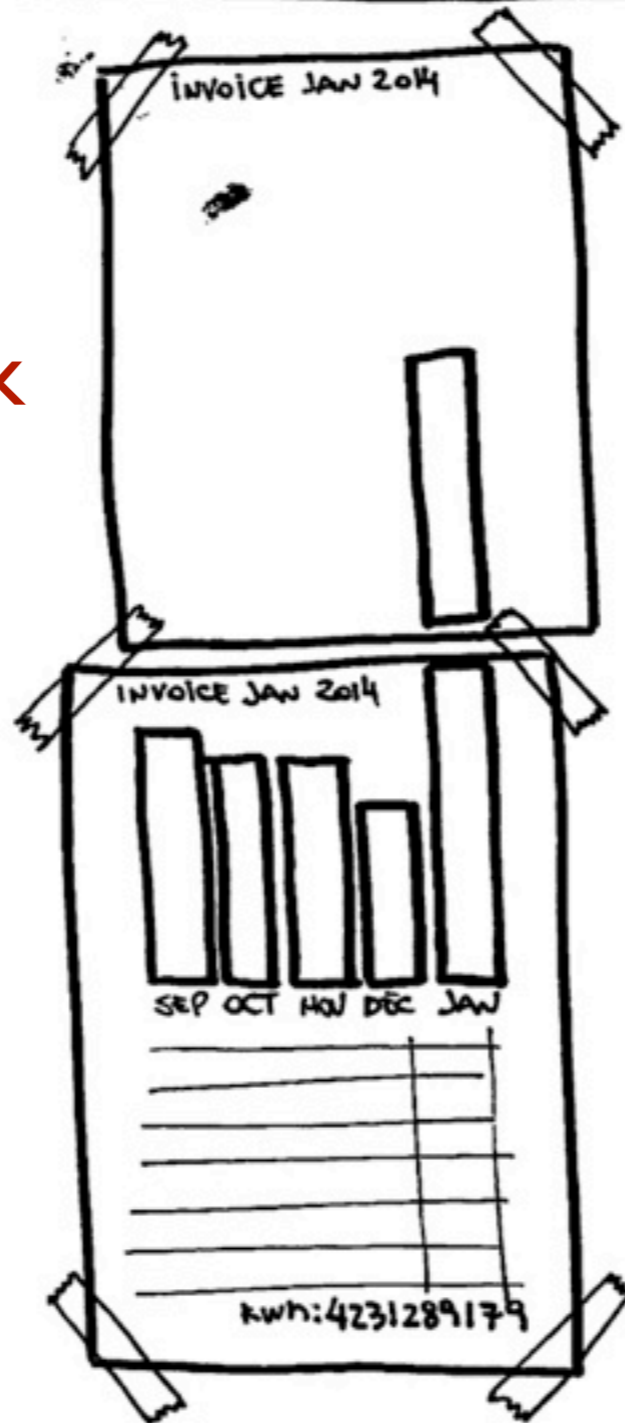
# The national response

Energy supply



# Why circular?

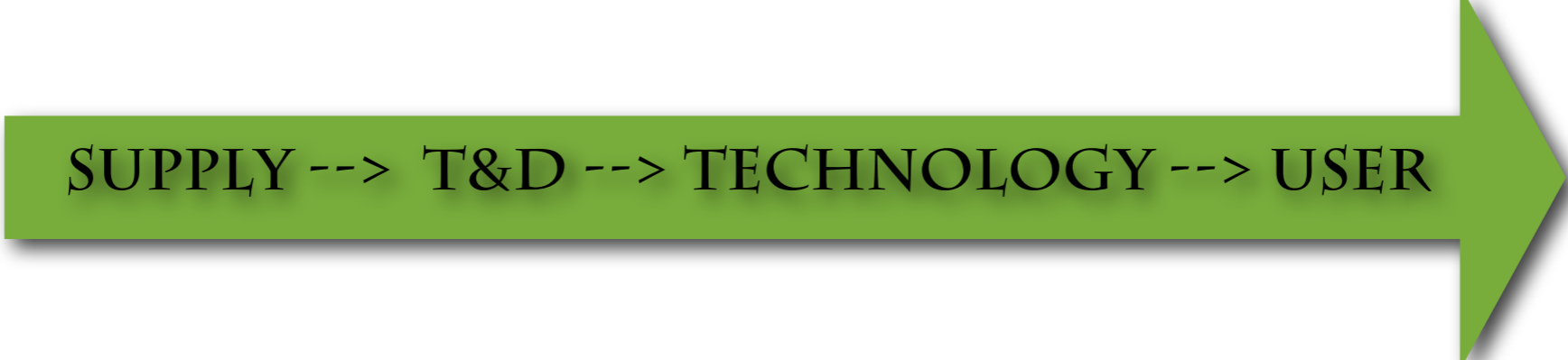
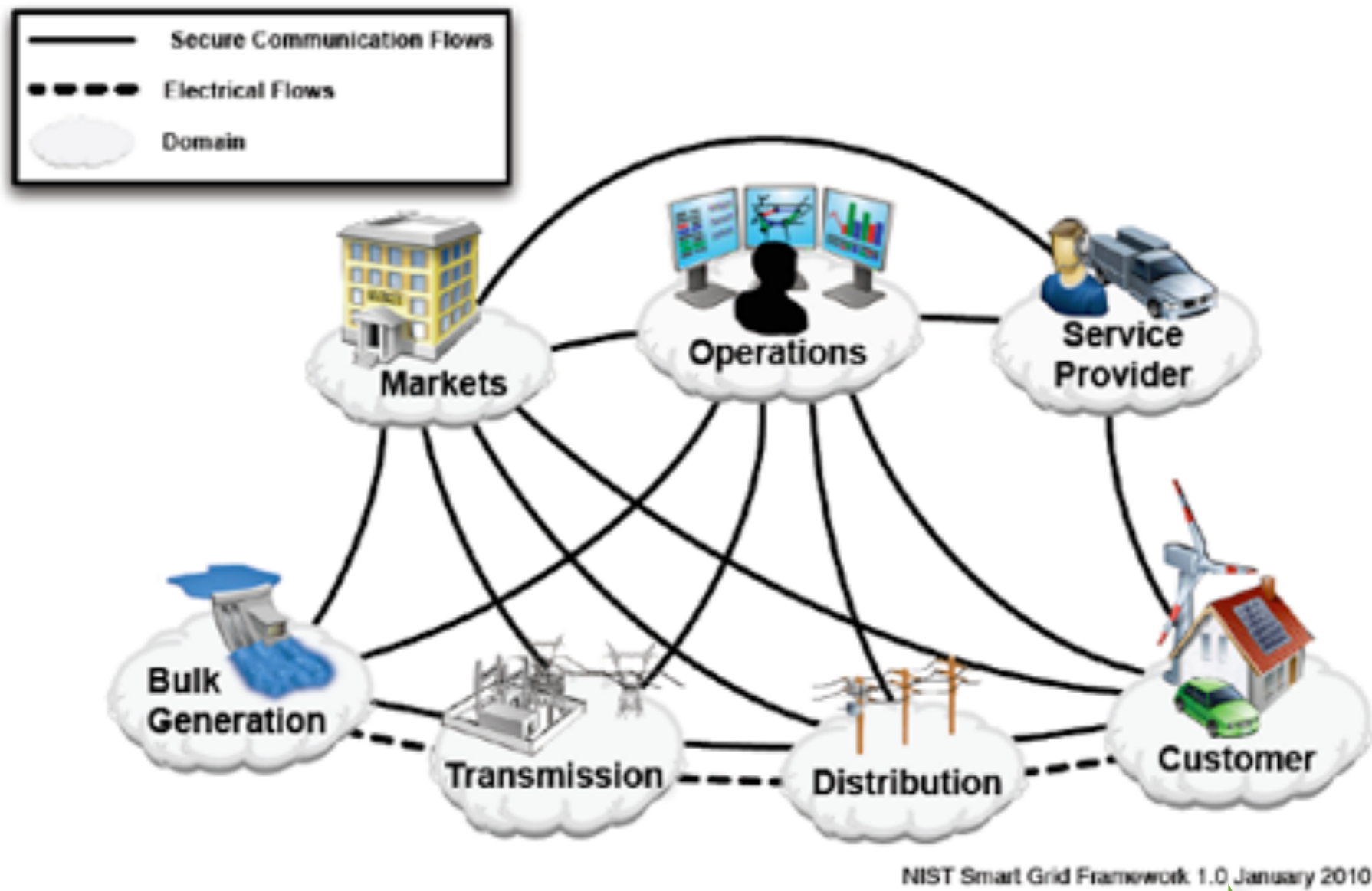
Feedback



"DEAR CUSTOMER

AS OUR INVOICING SOFTWARE IS NOT PREPARED FOR PEAKS AS YOUR WINTER USAGE, PLEASE PUT ONE SHEET ON TOP OF THE OTHER TO SEE YOUR GRAPH..."

# The way we look at the Energy System





# Task 24 poses that:

A better understanding of the *human* aspect of energy use, including **behavioural and societal drivers and barriers and external and internal contexts**, will greatly improve the uptake of energy efficiency and DSM policies and programmes. This is not at all to say that **technology, market and business models and energy supply** are not hugely important aspects of the Energy System. Instead, we pose that *the Energy System begins and ends with the human need for the services derived from energy (warmth, comfort, entertainment, mobility, hygiene, safety etc) and that behavioural interventions using technology, market and business models and changes to supply and delivery of energy are the all-important means to that end.*

# Who are the Behaviour Changers?

**Policymakers**



Decisionmaker  
GOVERNMENT  
Minister, Policy, Local

**Industry**



INDUSTRY  
Contractor,  
Supply, T&D,  
Technology  
innovators  
Provider

**Researchers**



RESEARCH  
Expert  
University,  
Consultancy

**The Third Sector**



Conscience

COMMUNITY  
NGOs etc

**Intermediaries**

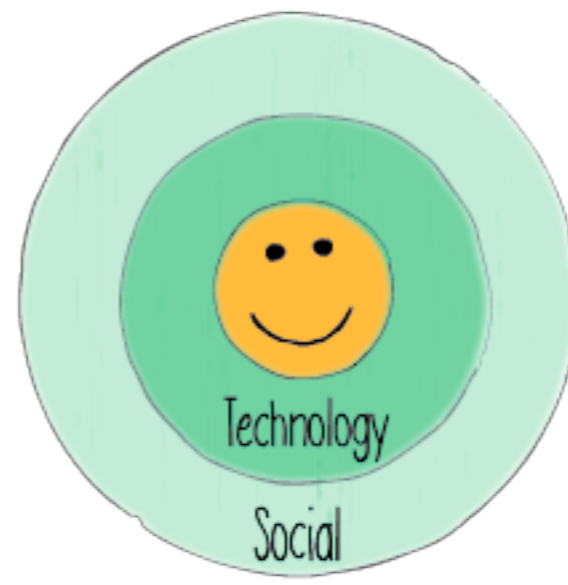


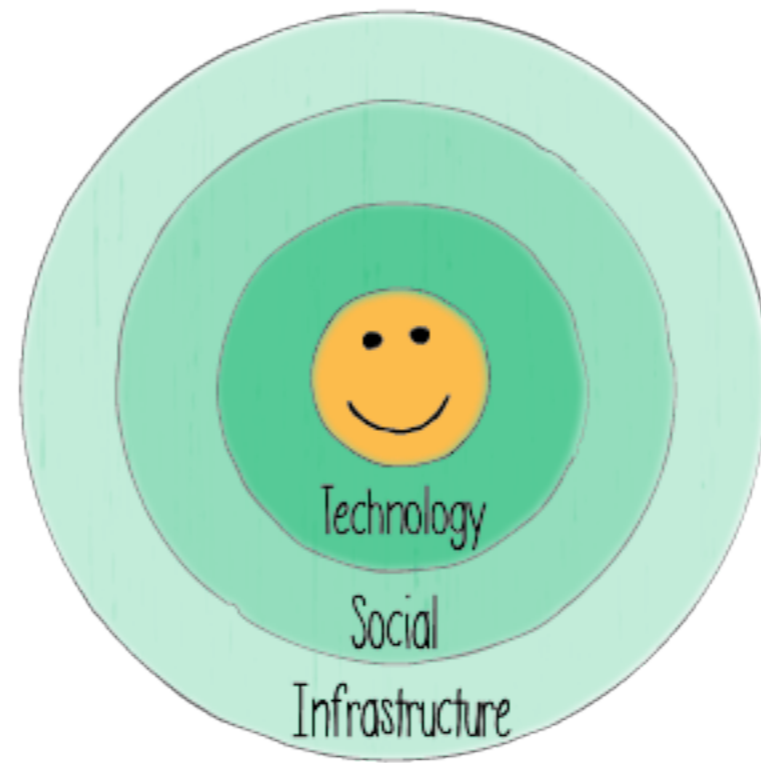
Intermediary

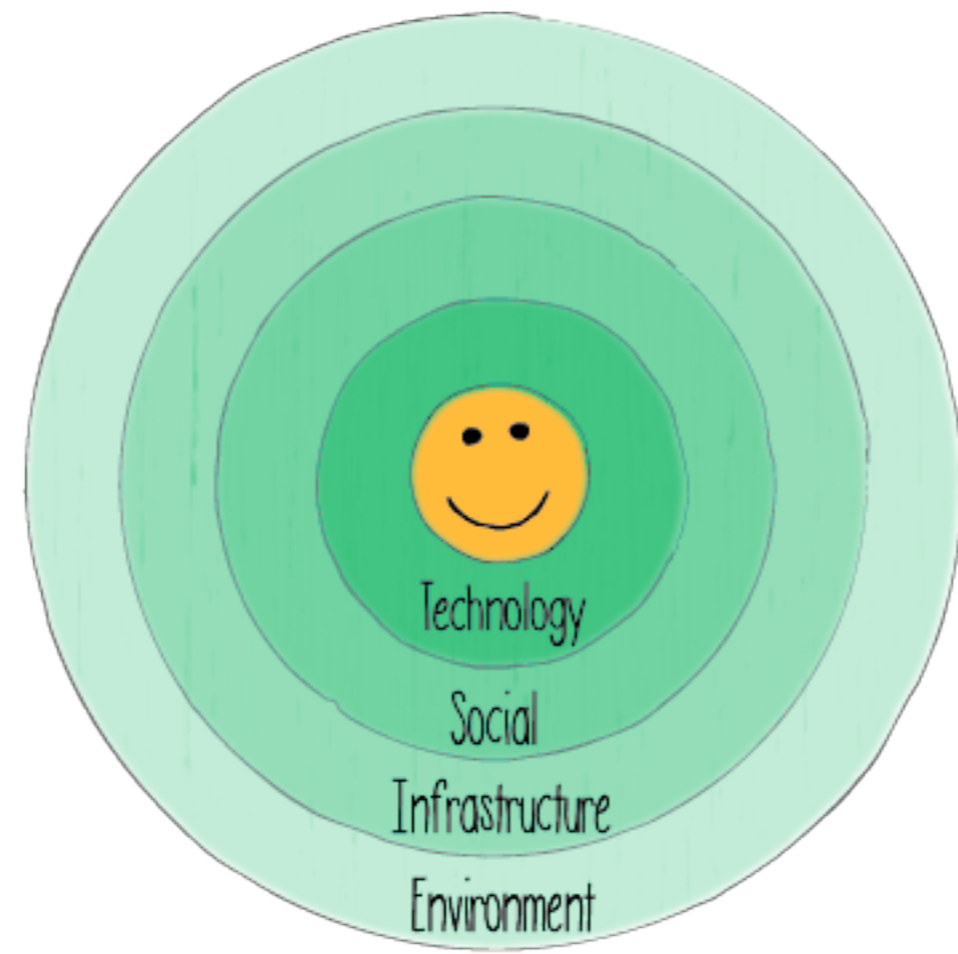
Real estate agents, landlords,  
appliance salesmen,  
tradespeople, mechanics, car  
dealers, driving licence  
instructors etc





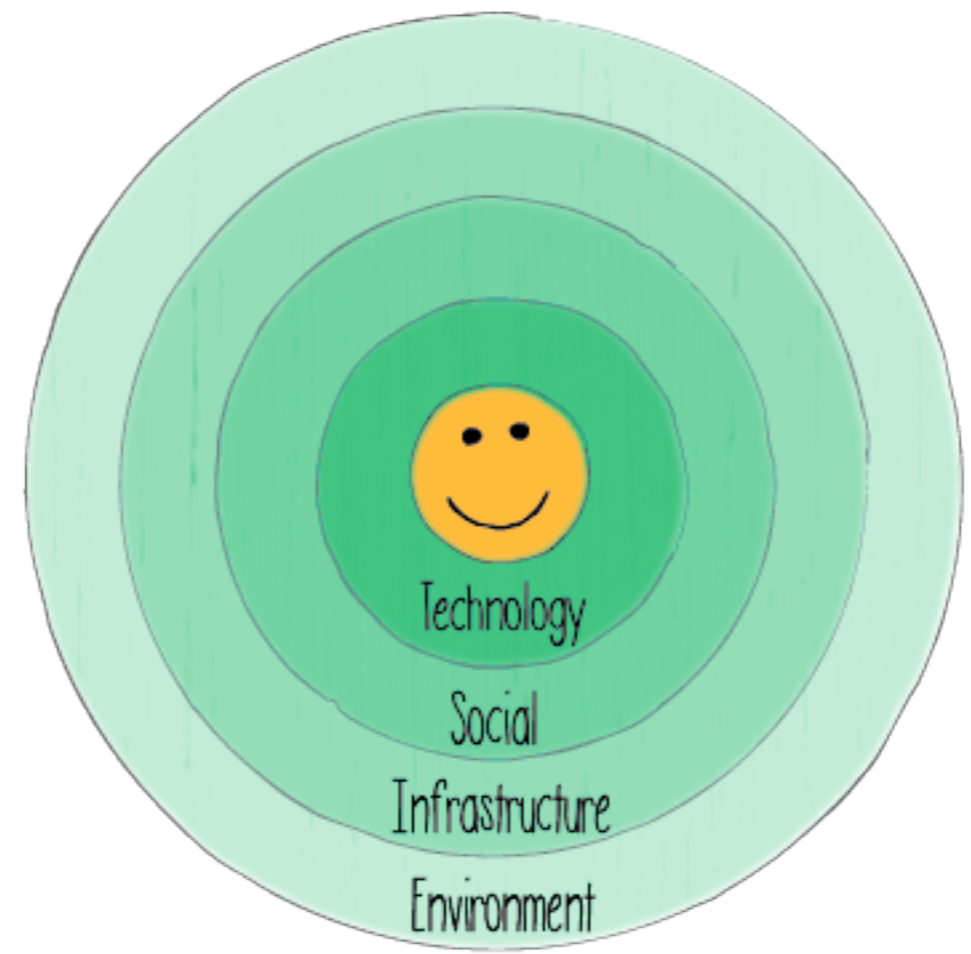




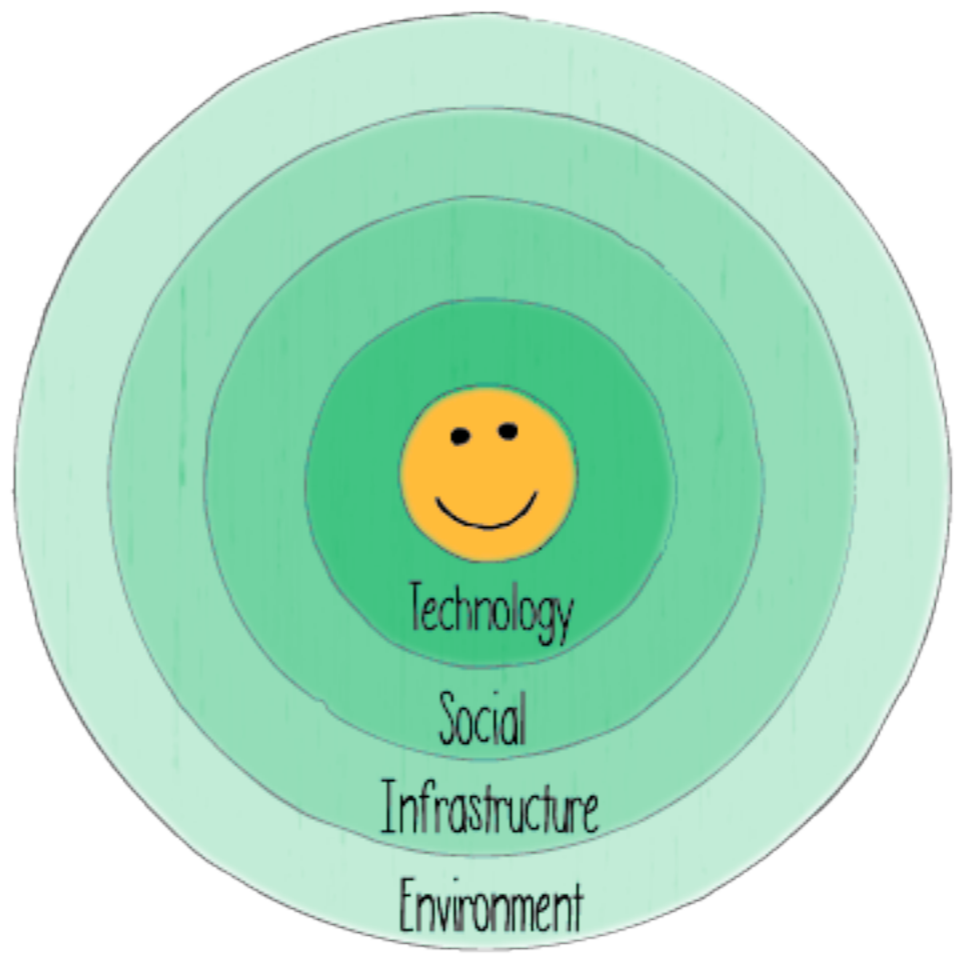


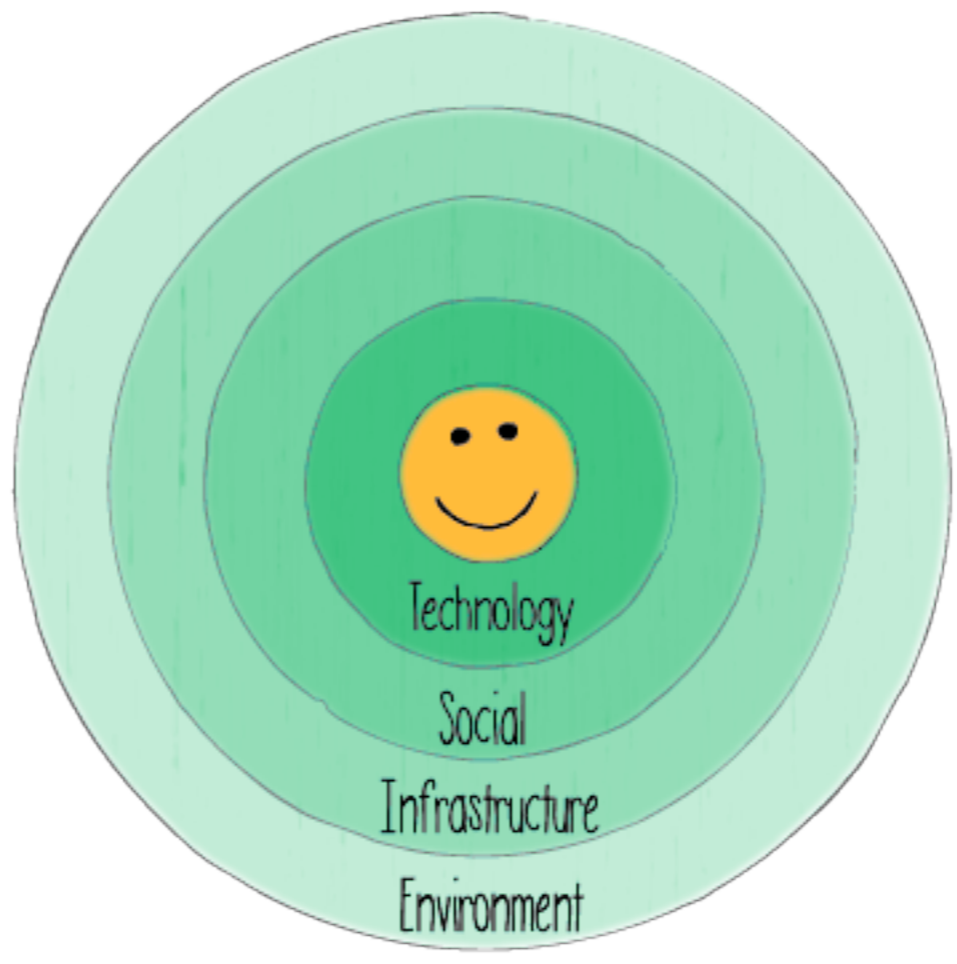


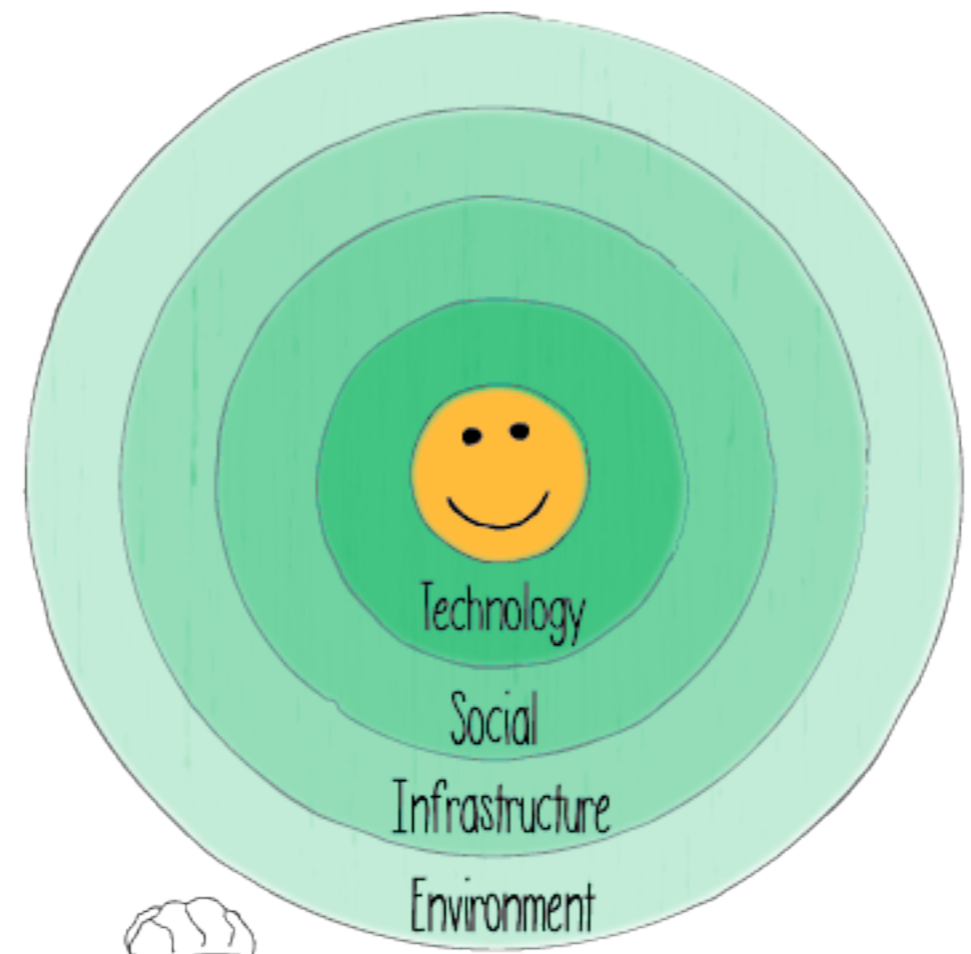
Decisionmaker  
GOVERNMENT  
Minister, Policy, Local

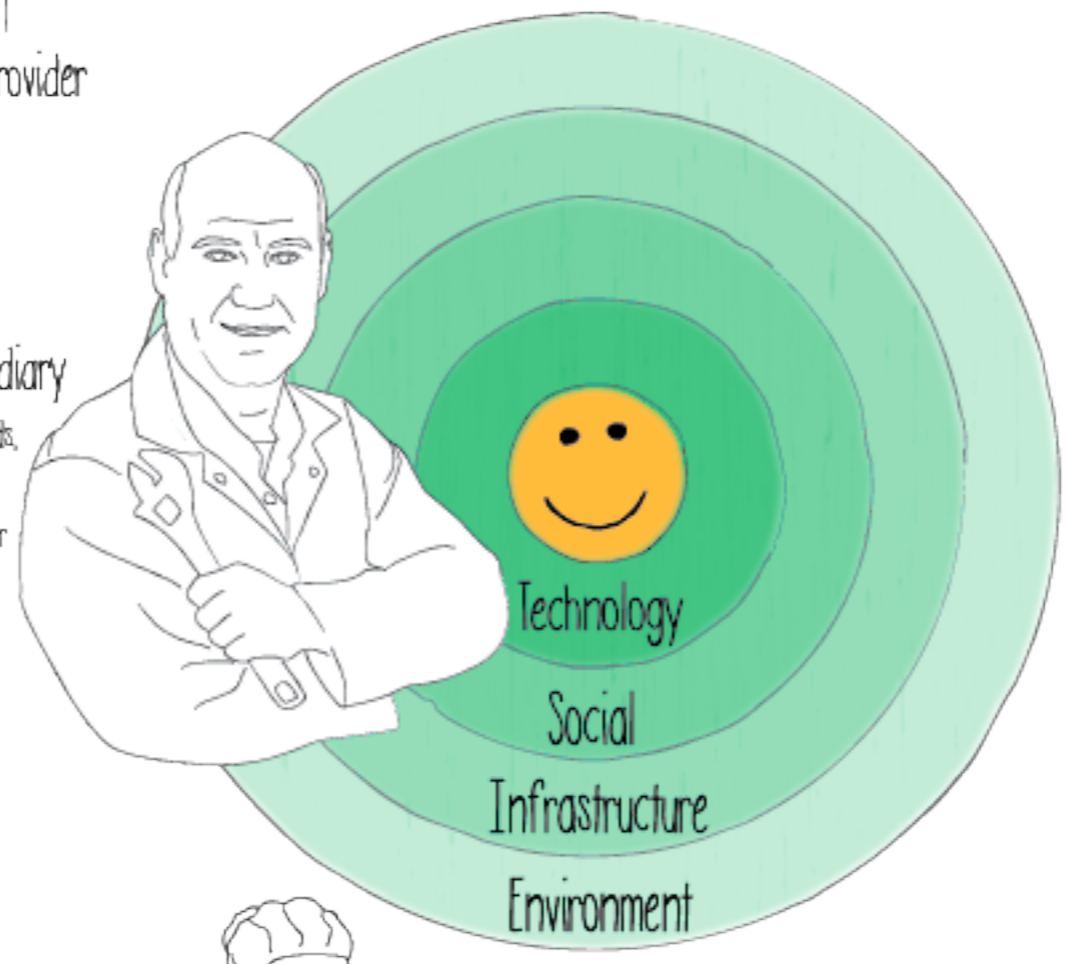


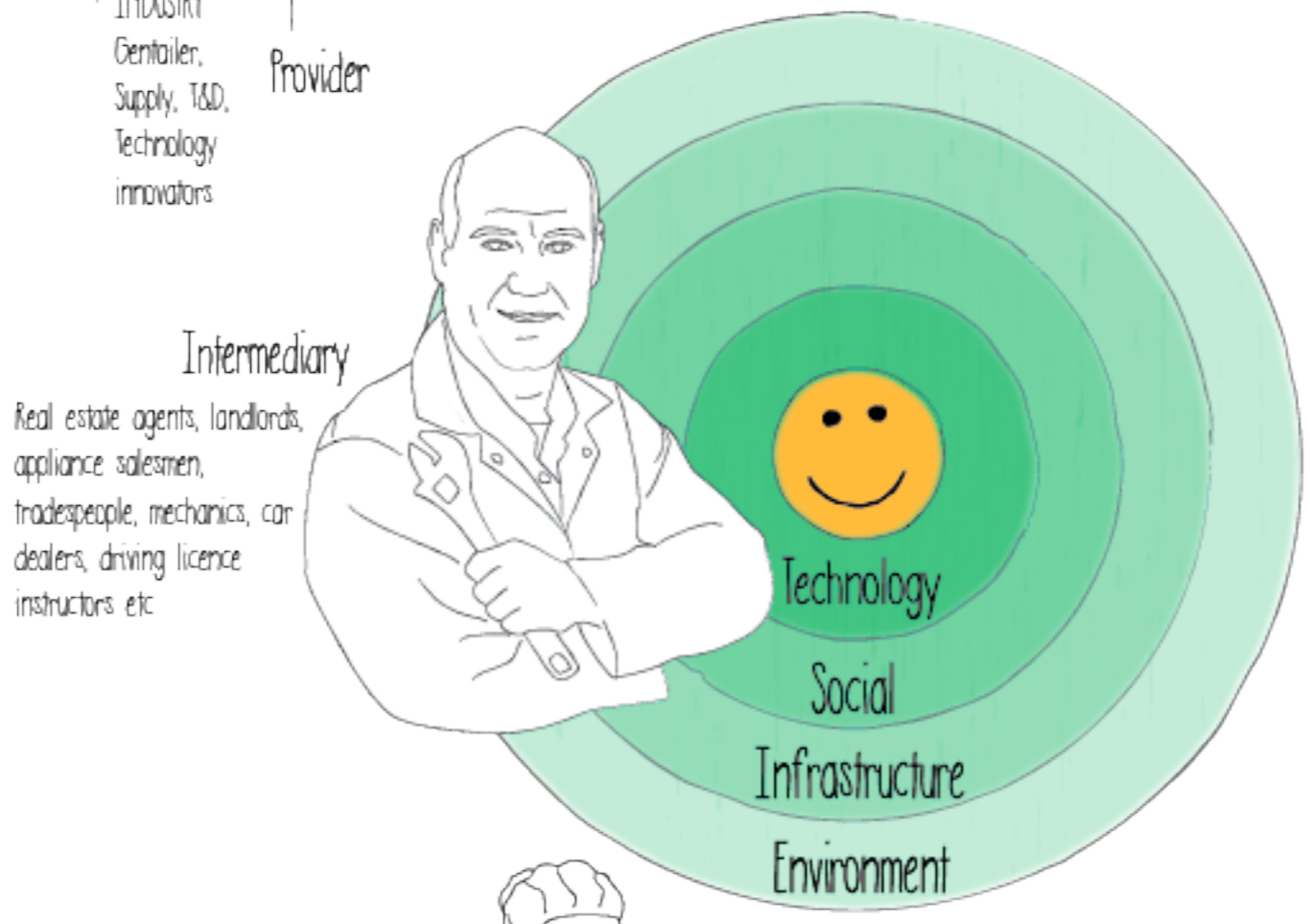
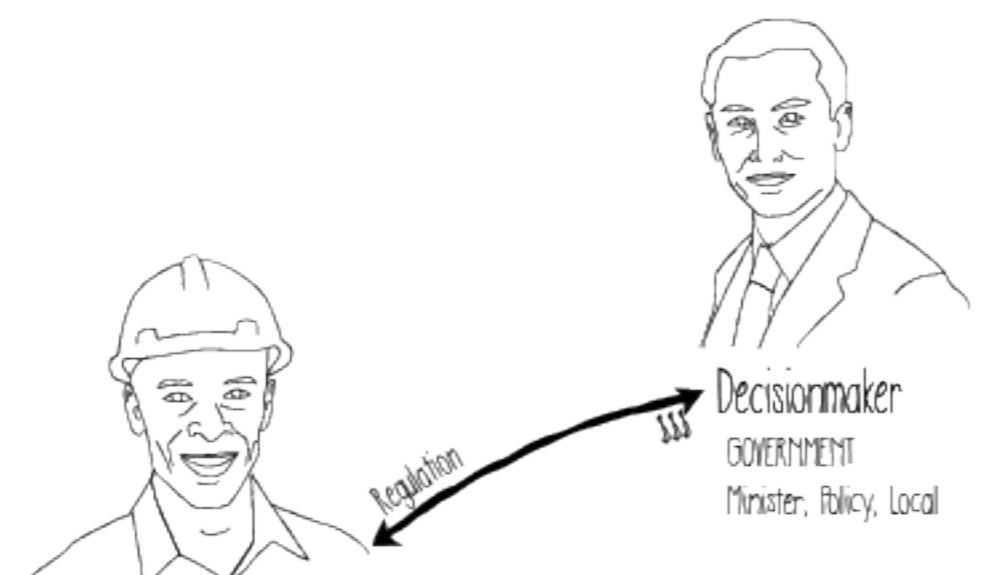


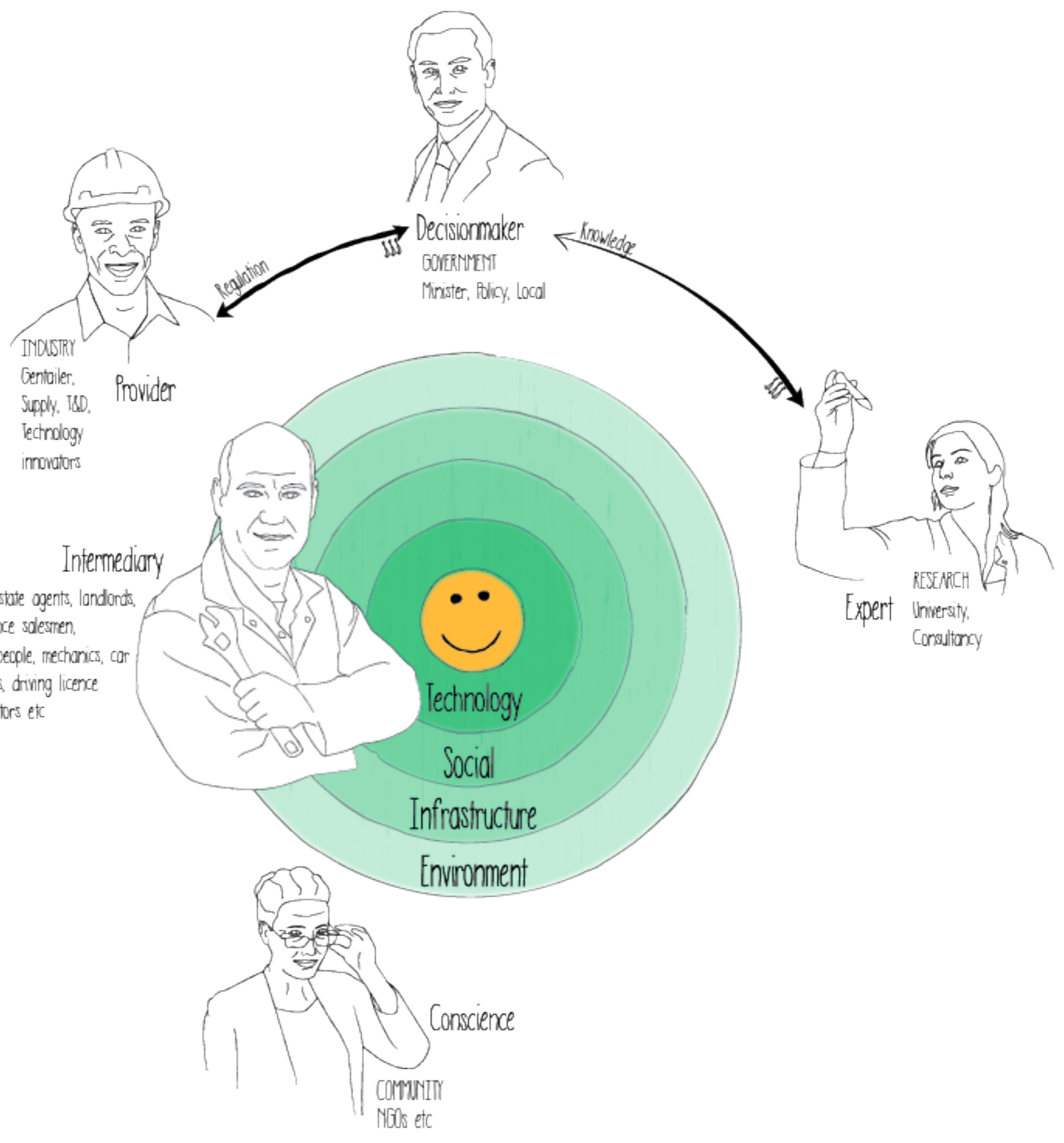


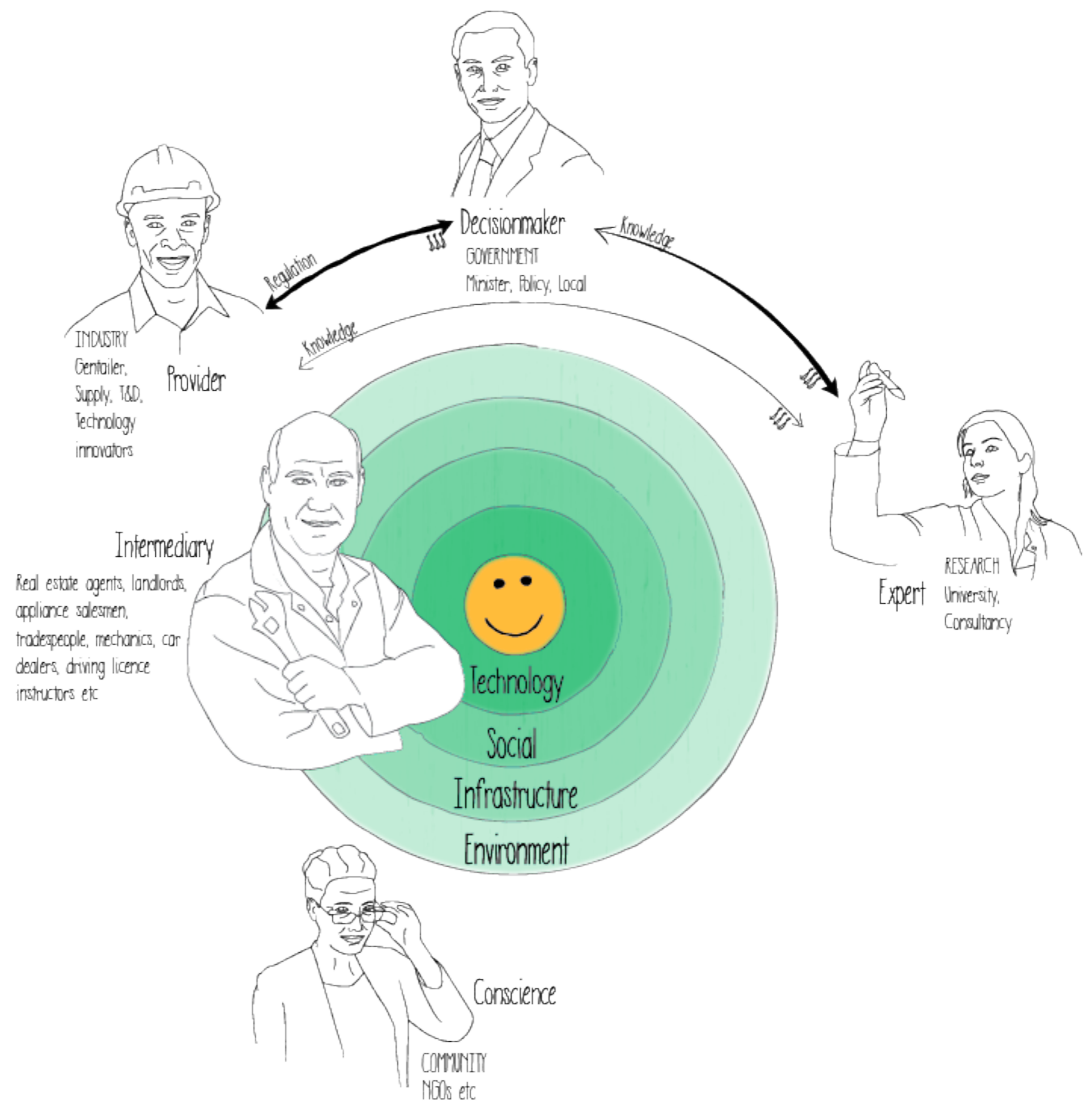


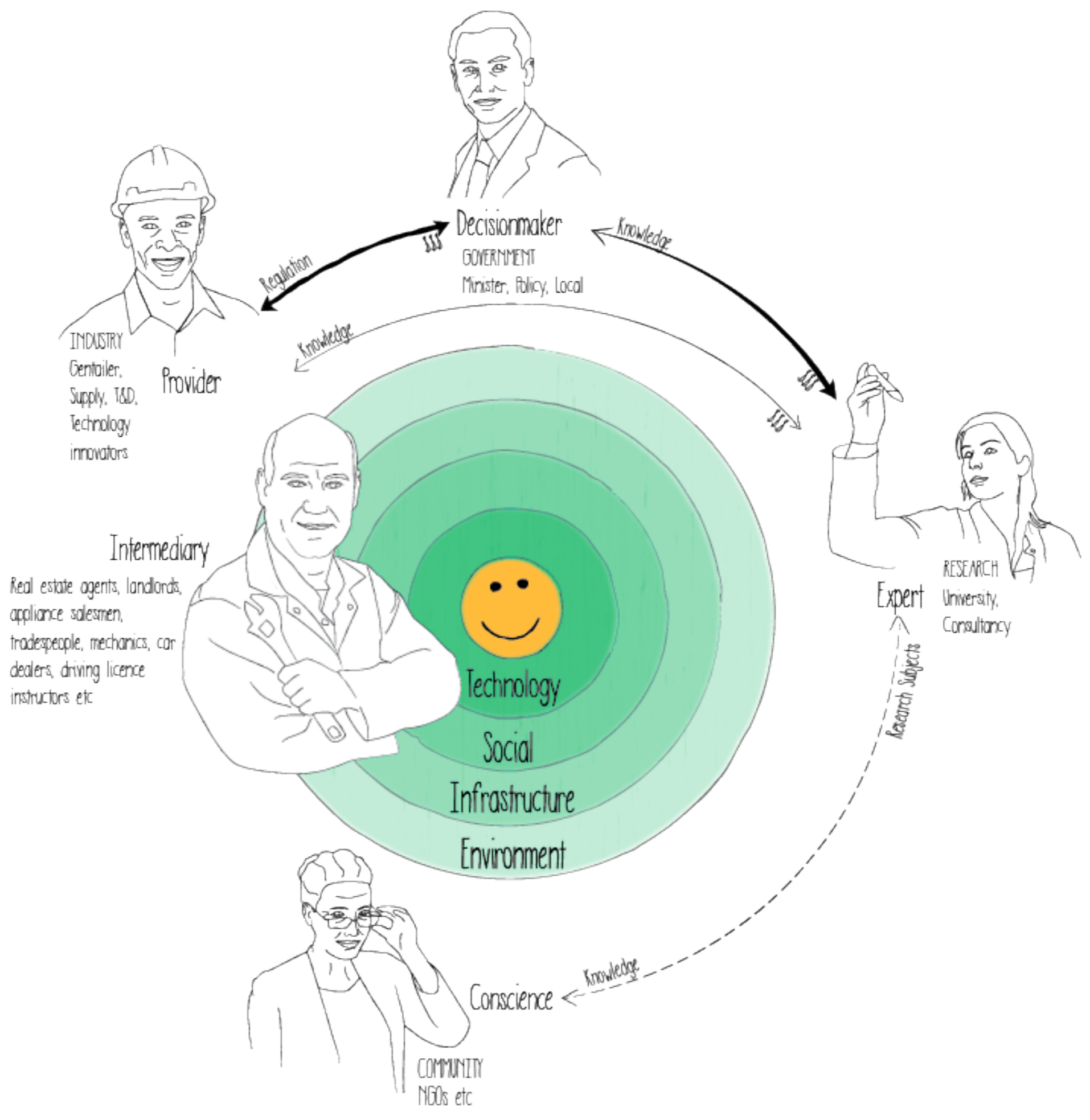




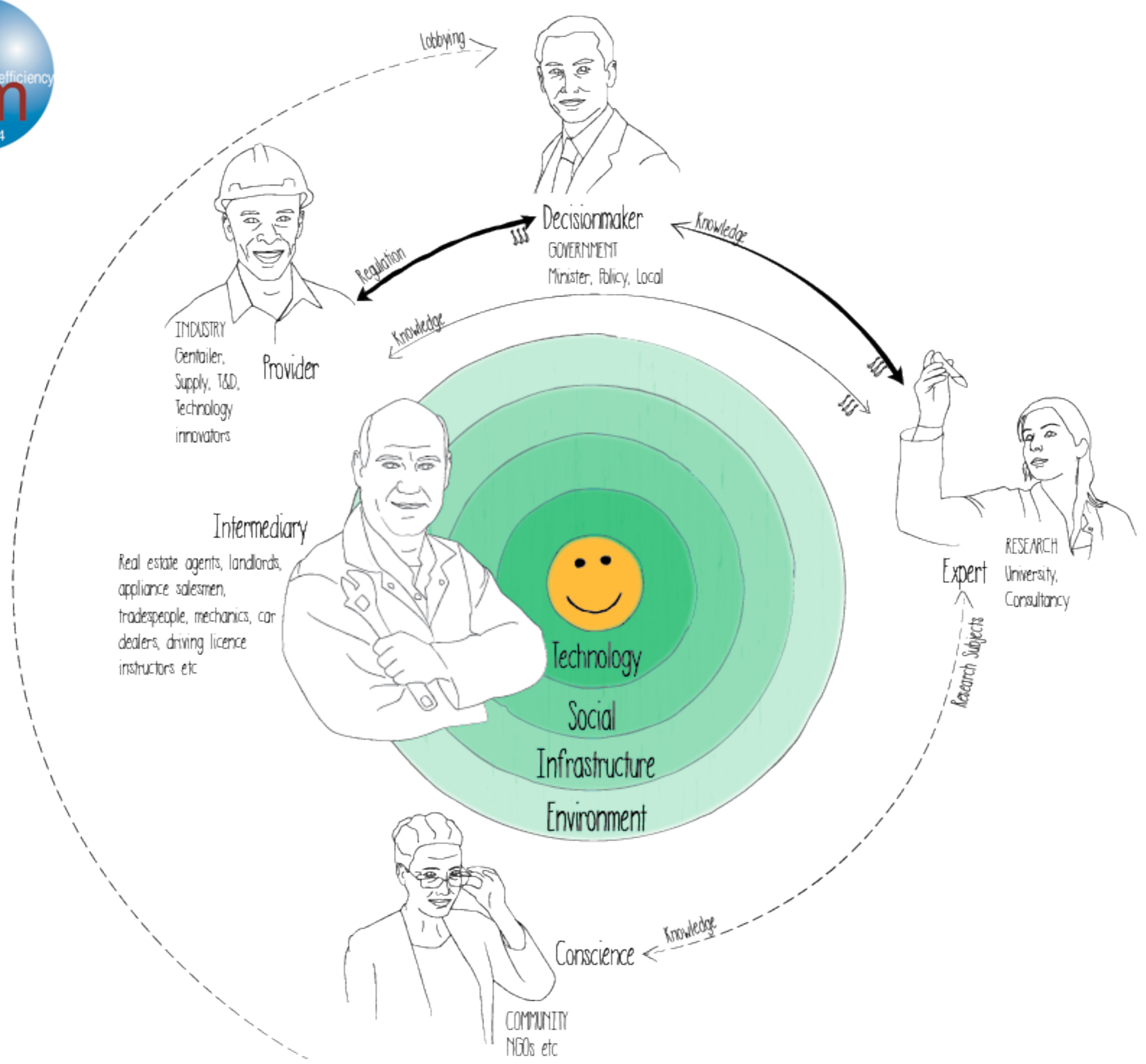


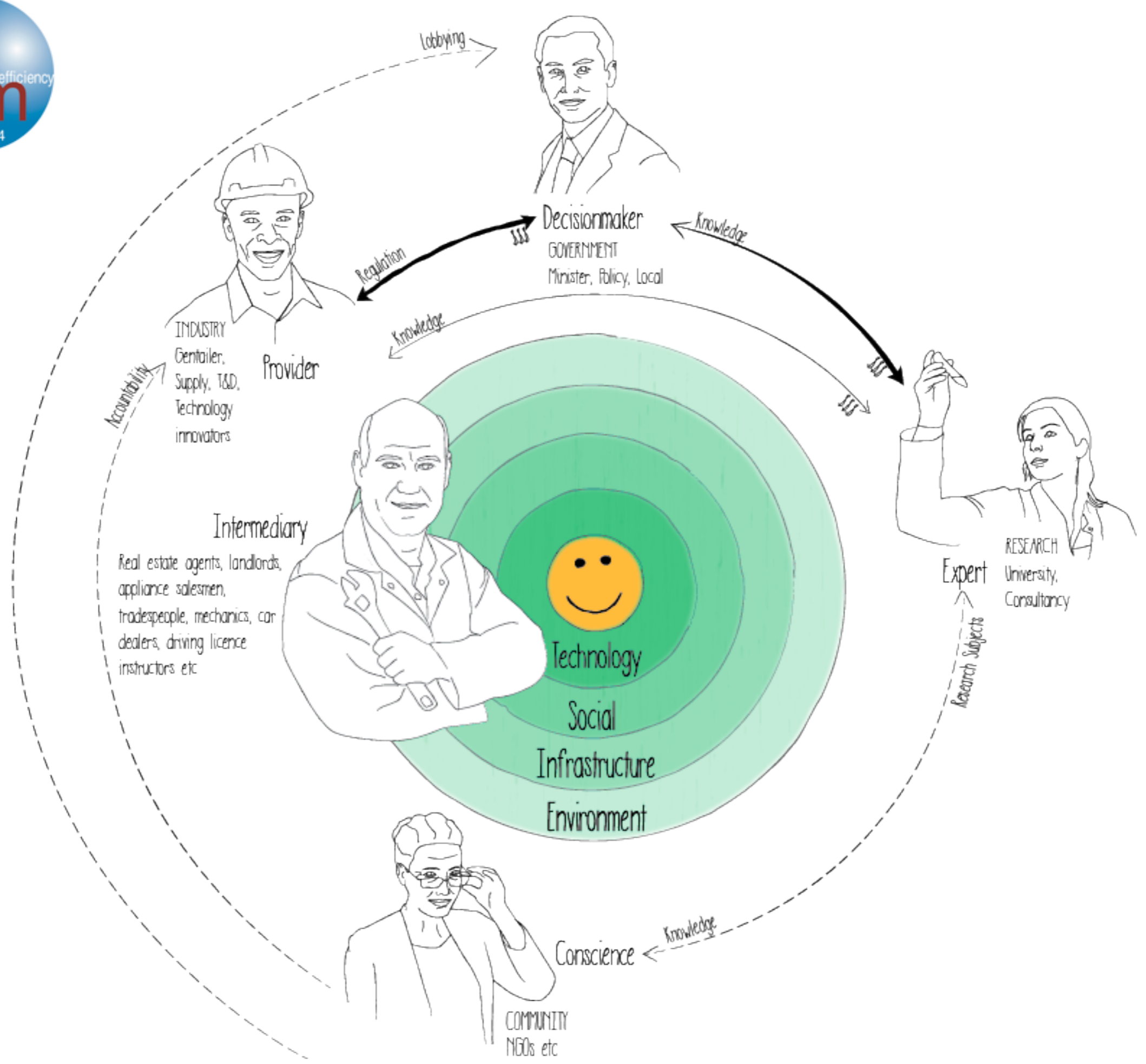


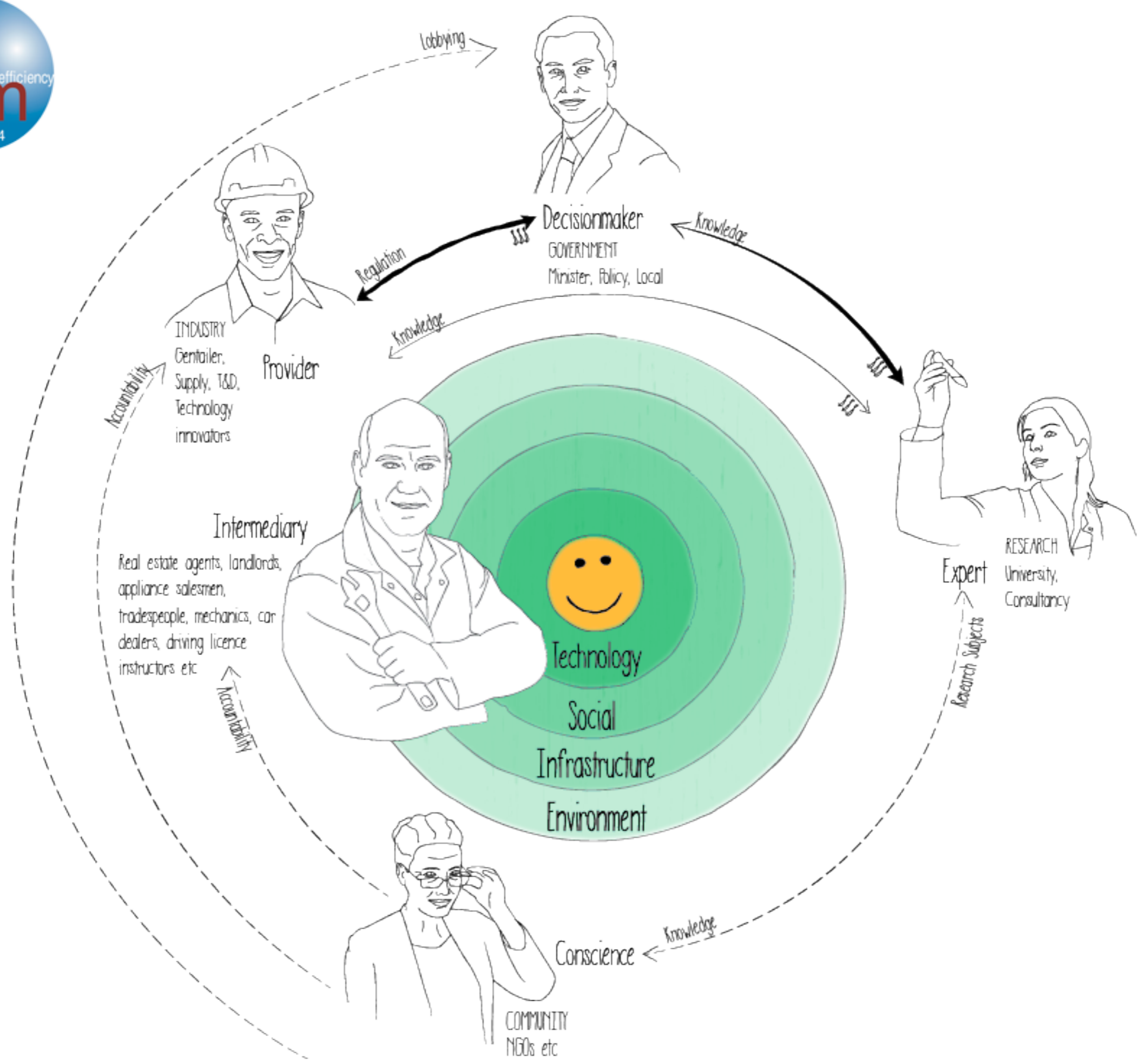


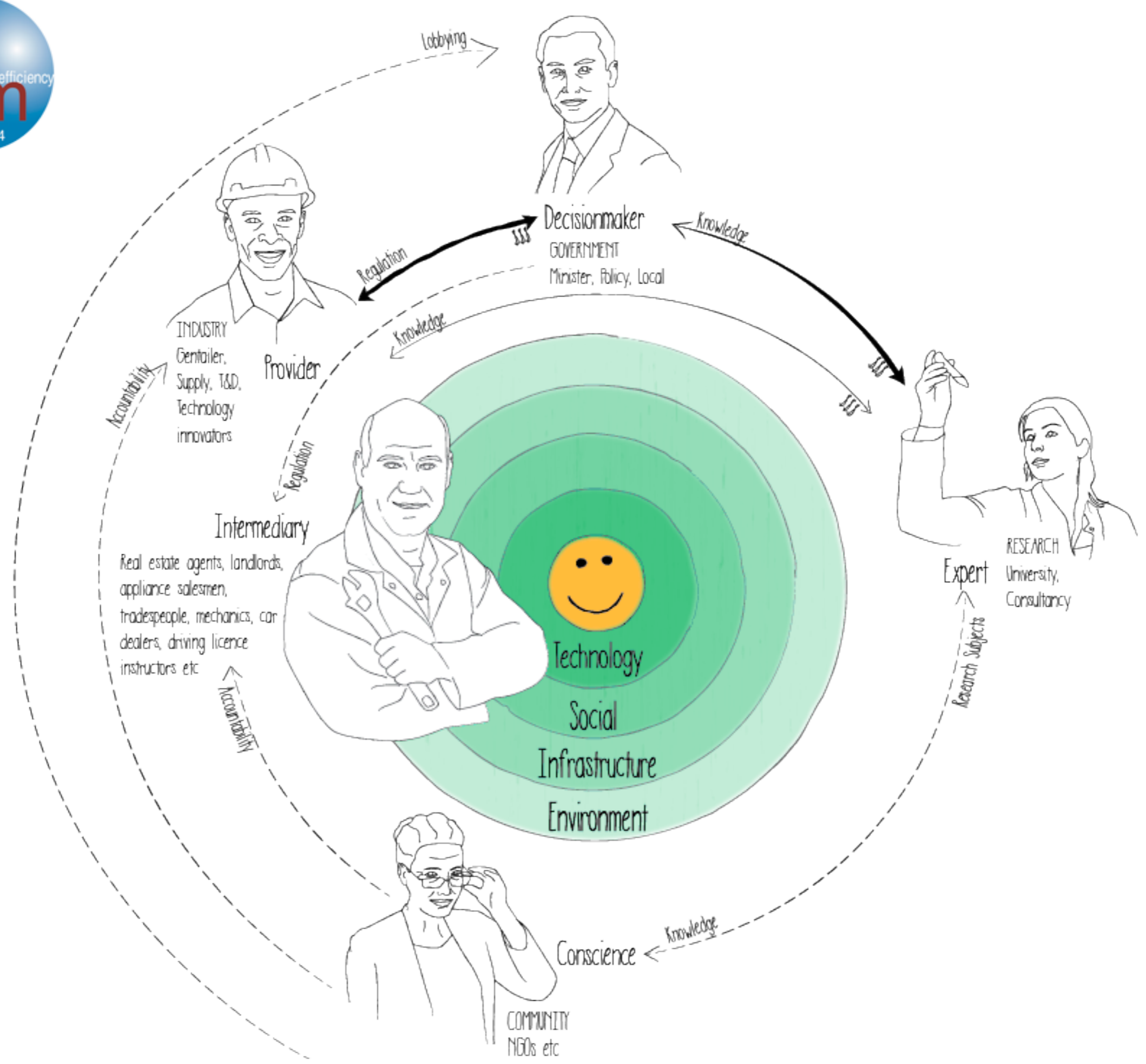


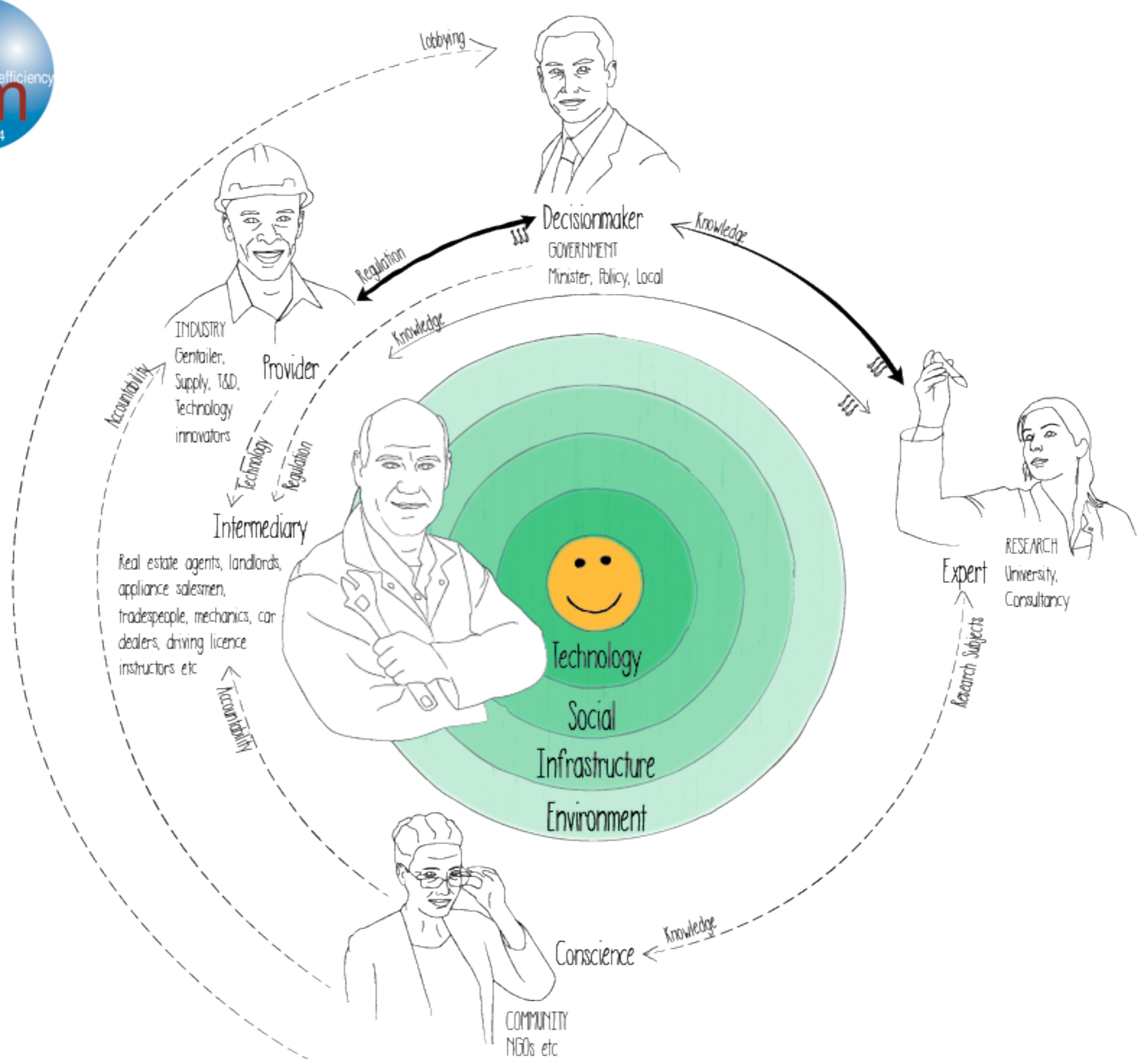


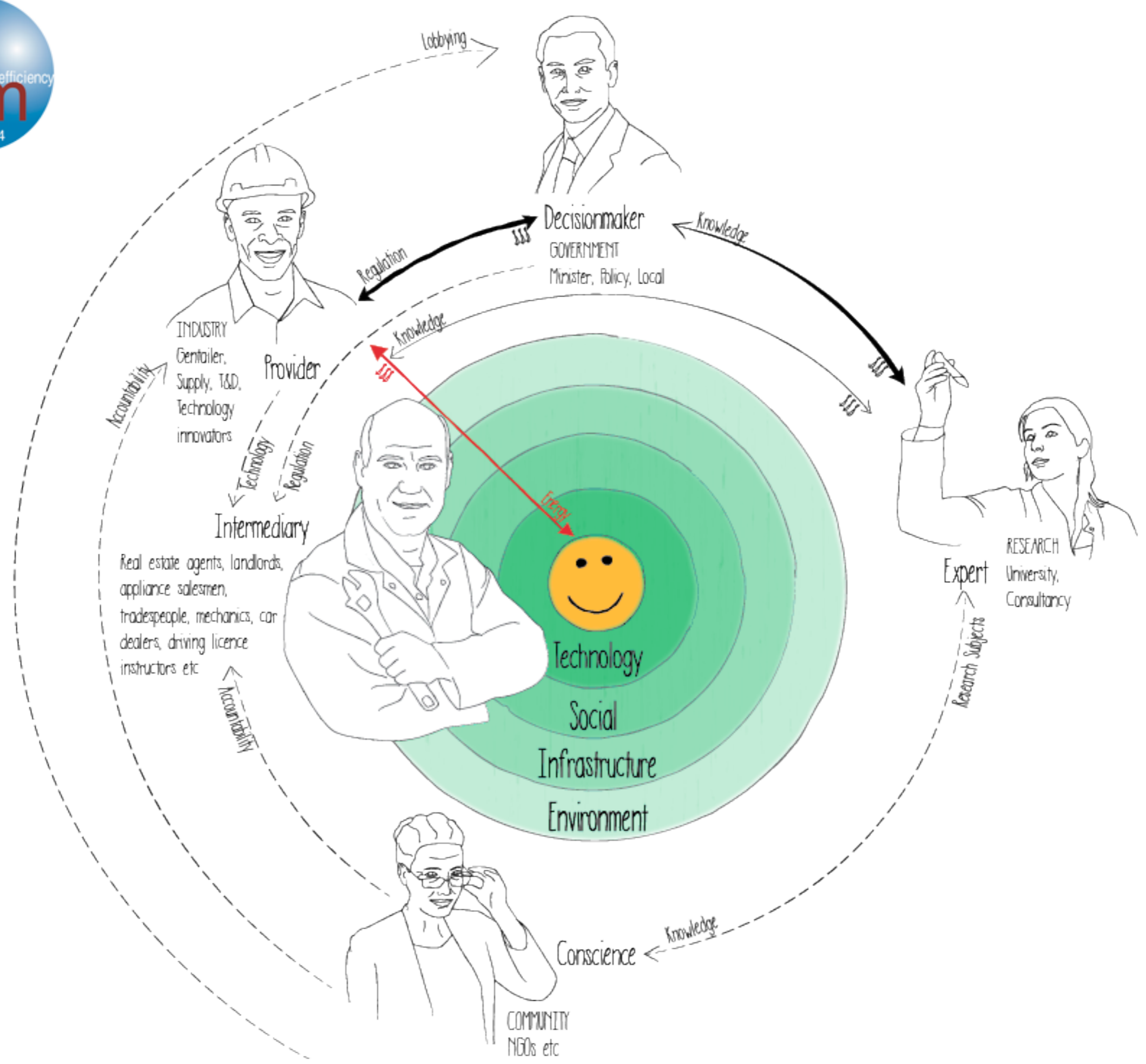


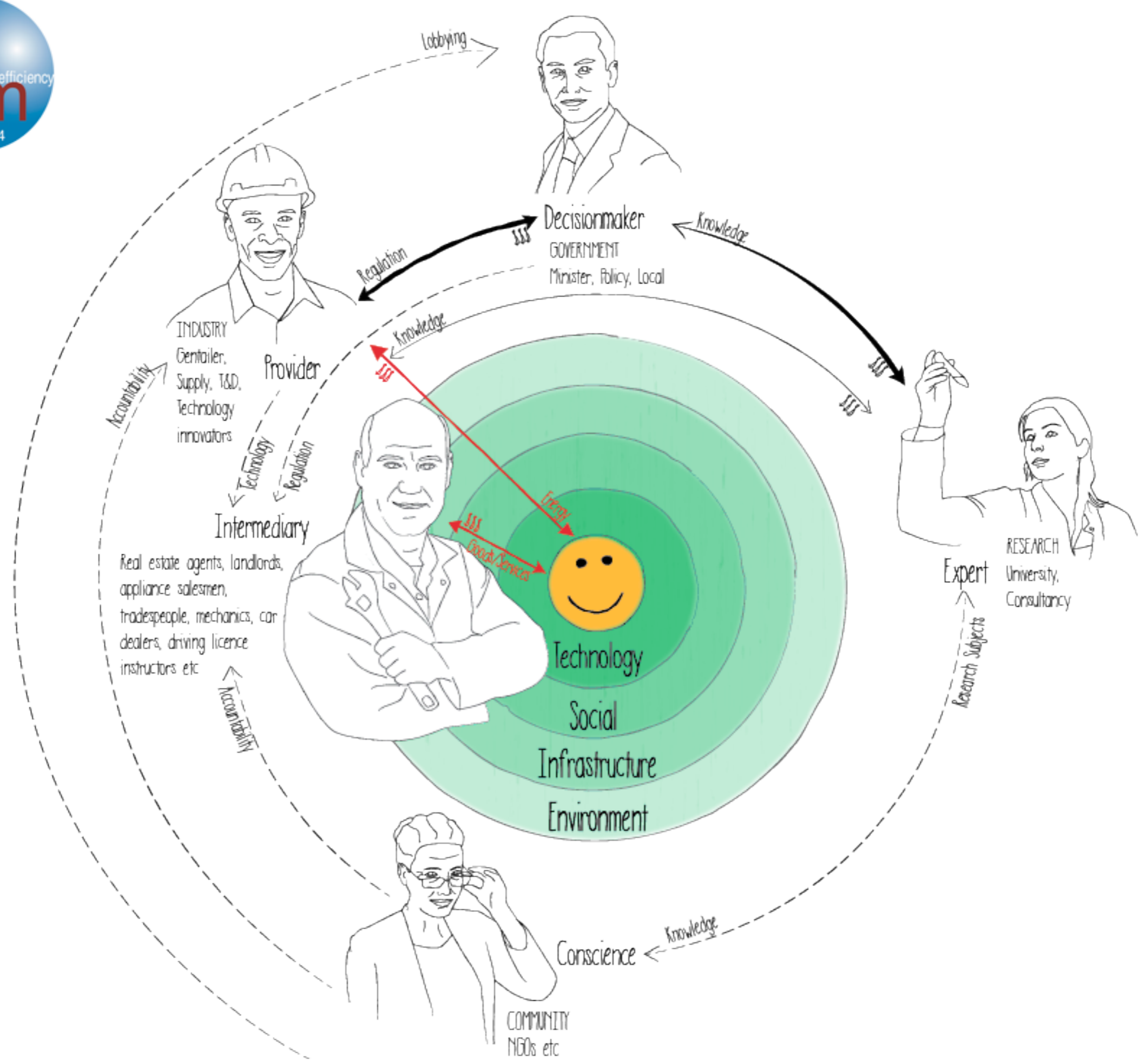


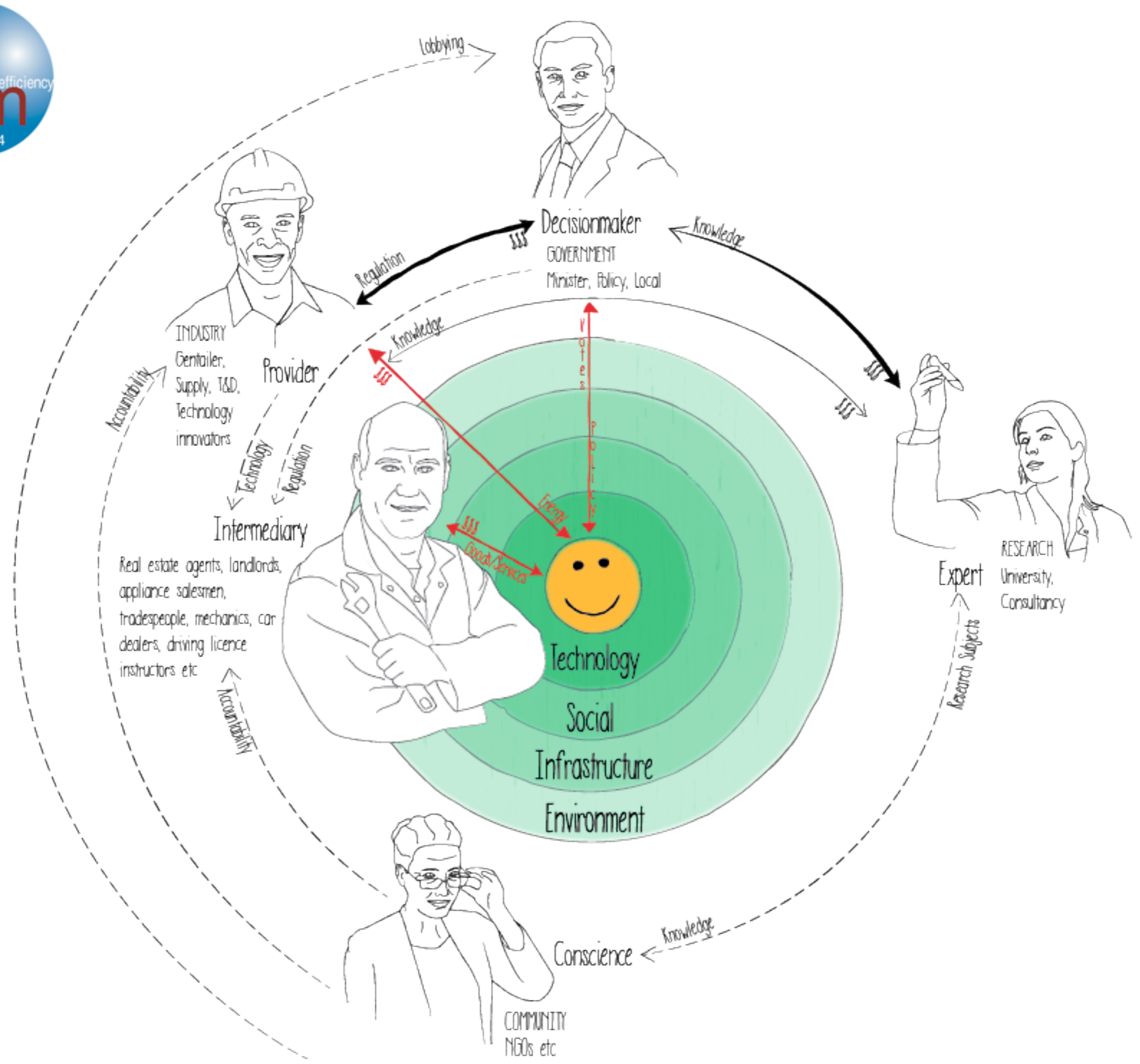




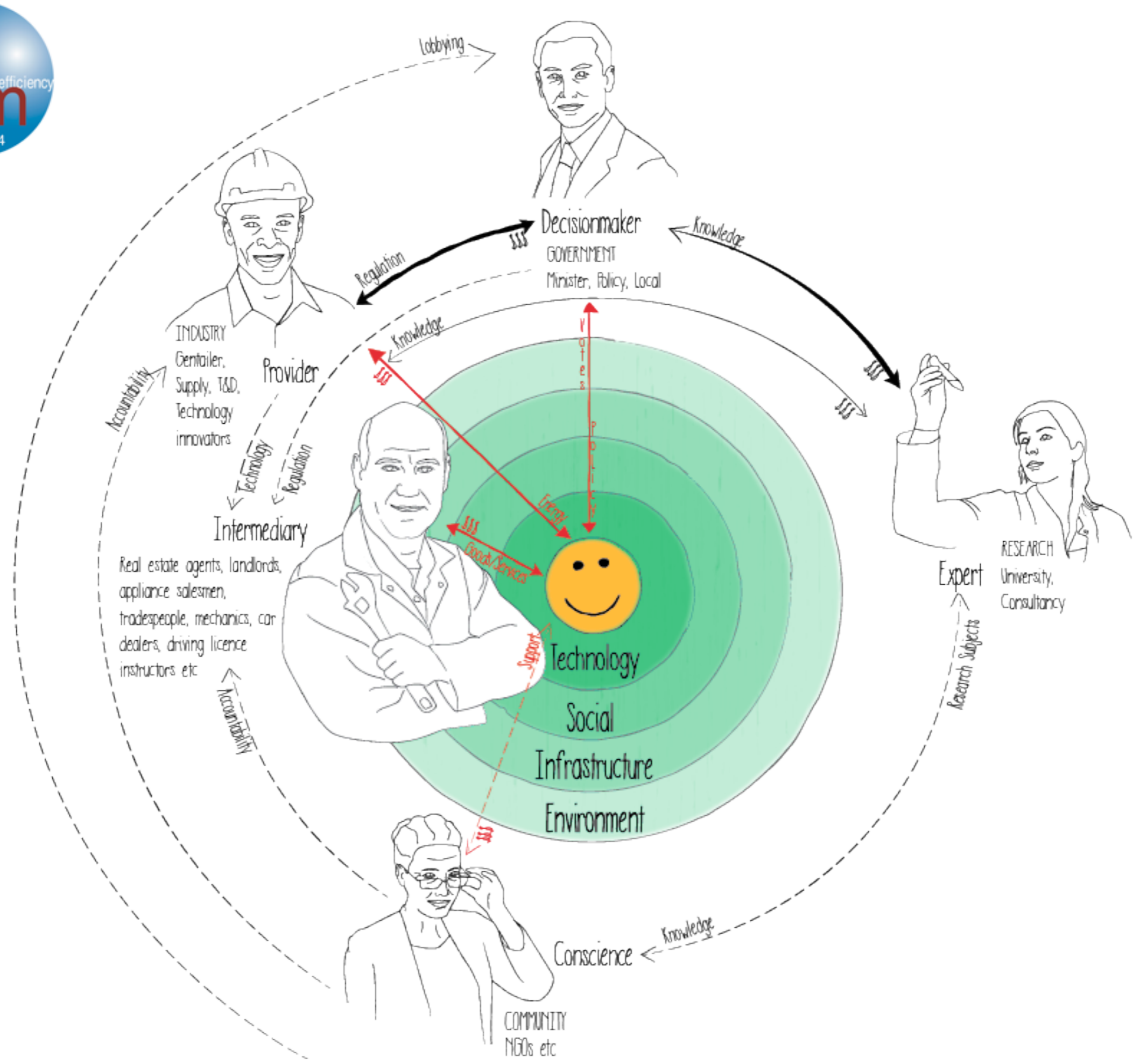


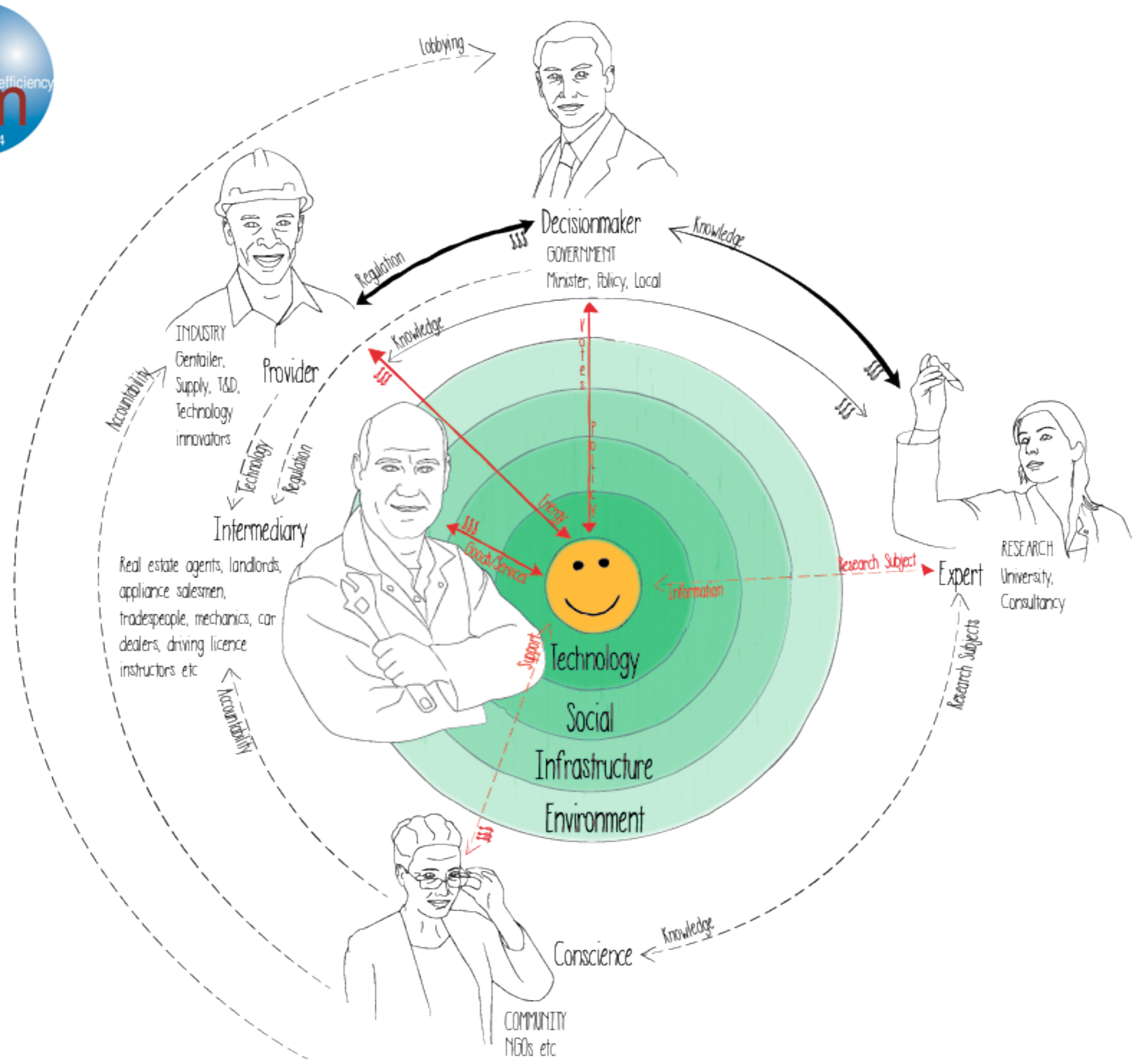


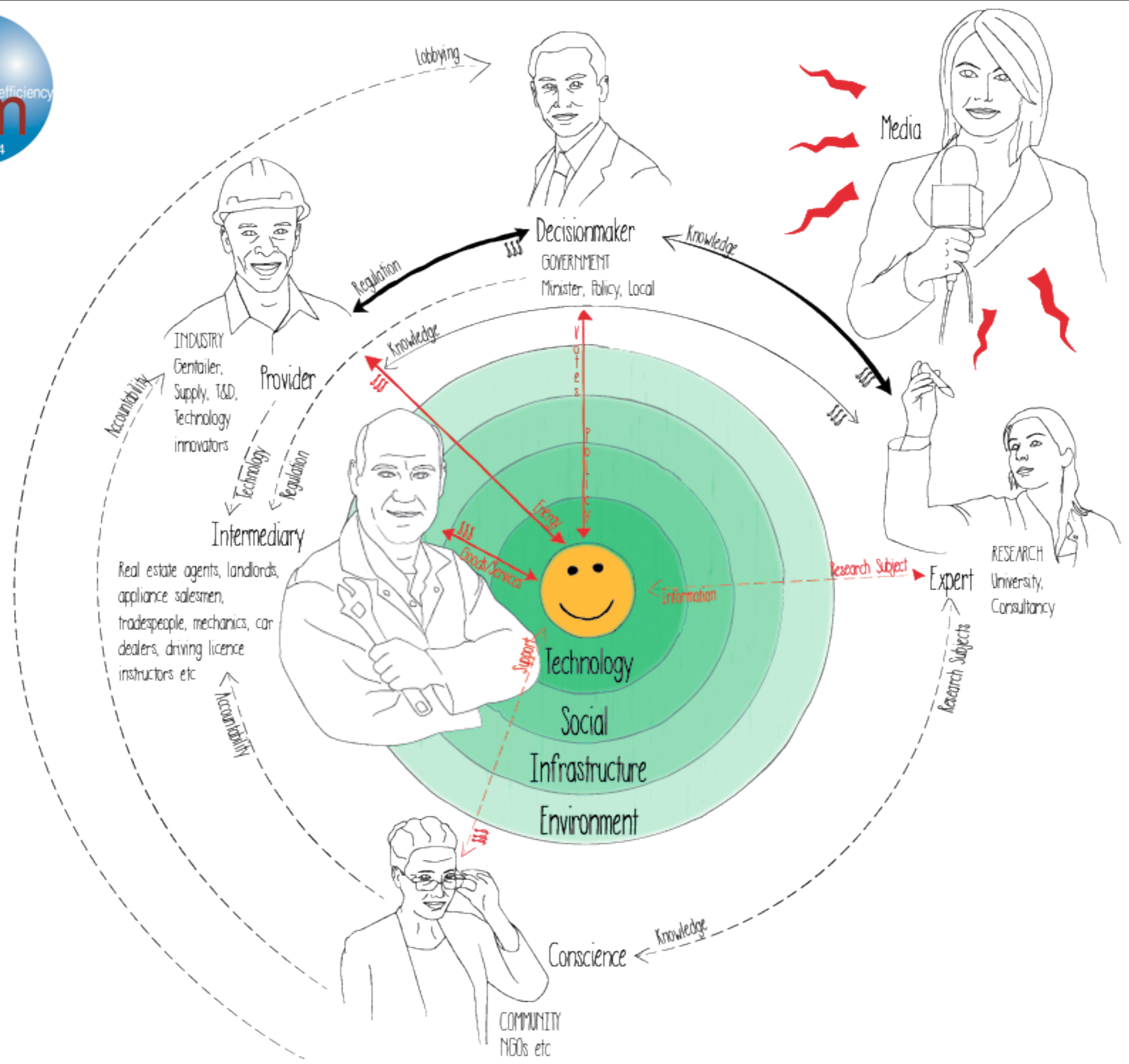


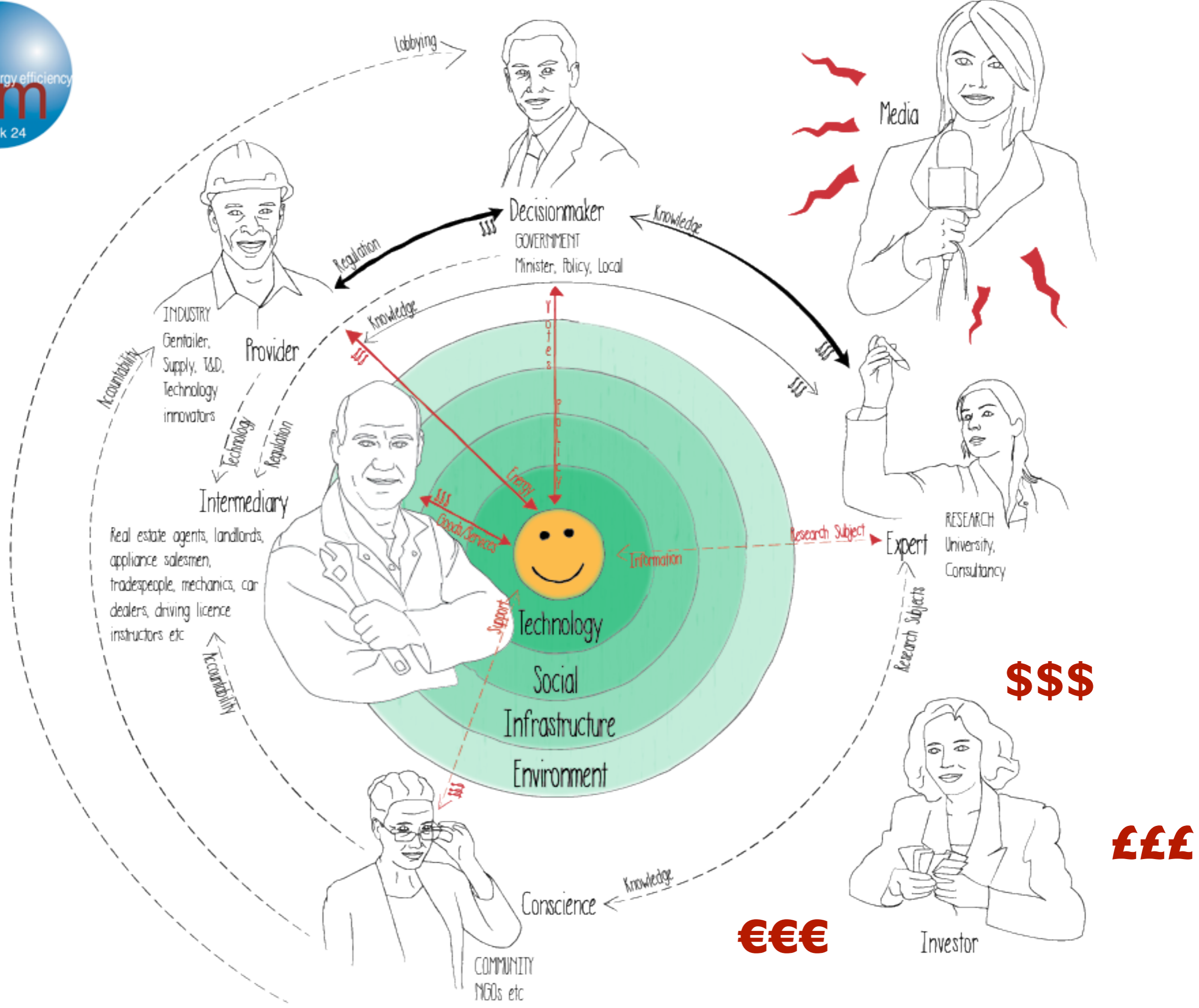


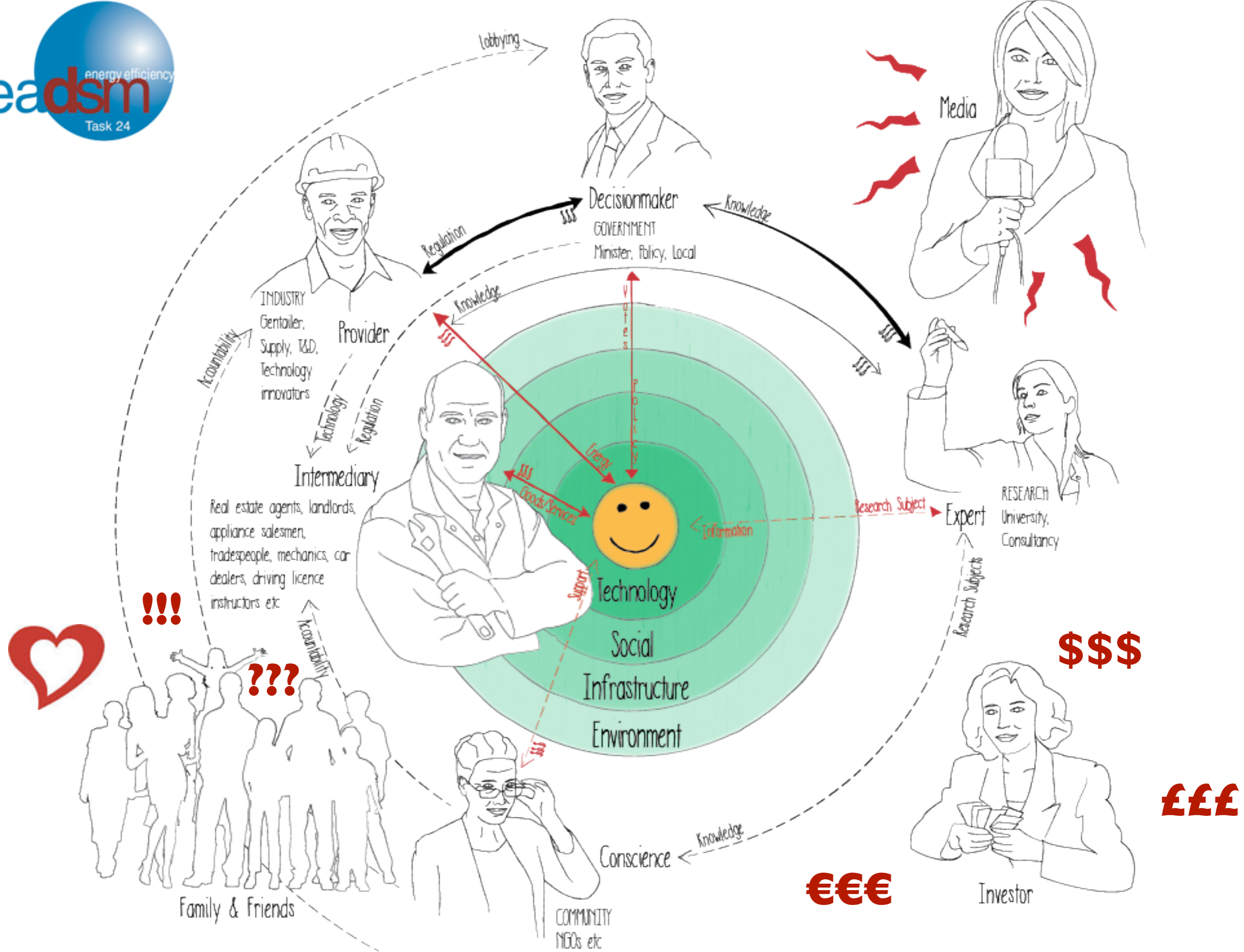


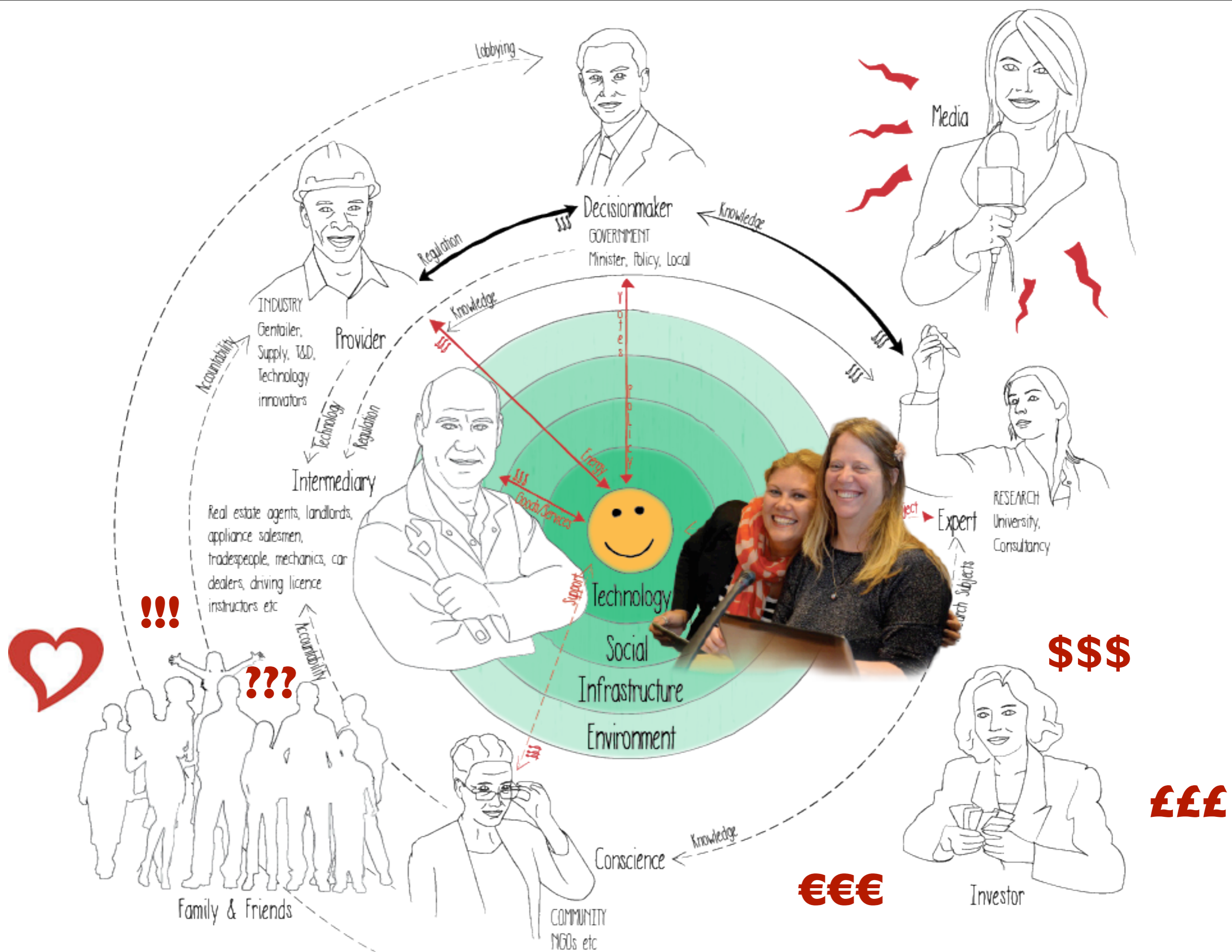












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# Task Extension

## 5 – Expert platform

6–

Understanding  
Behaviour  
Changer  
Practices in  
Top DSM  
Areas  
‘THE ISSUES’

7–

Identifying  
Behaviour  
Changers in  
these areas  
‘THE PEOPLE’

8–

Developing a  
toolbox of  
interventions  
to help  
Behaviour  
Changers  
‘THE TOOLS’

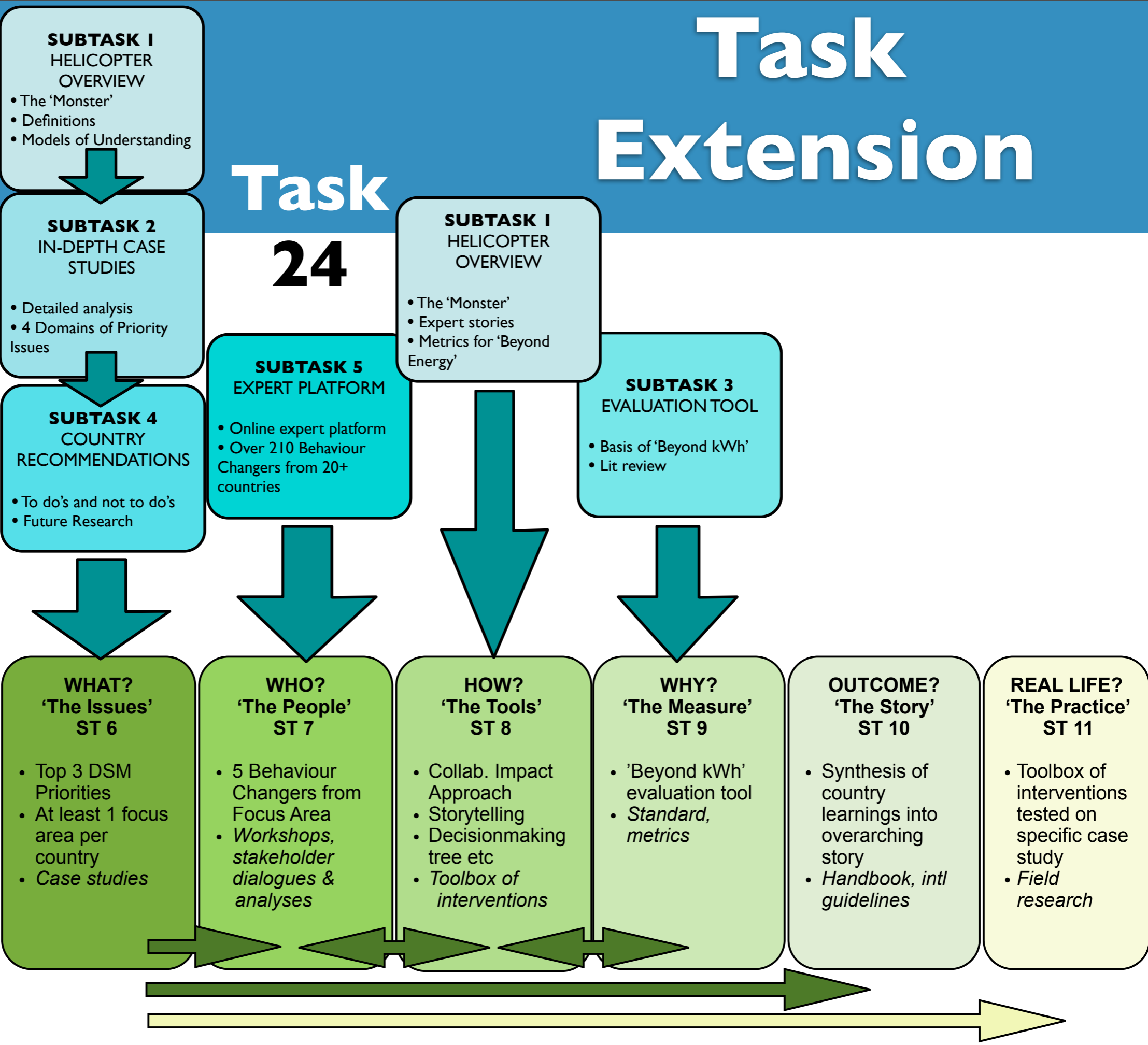
9–

Standardising  
Evaluation  
Beyond kWh  
('THE  
MEASURE')

10 – Telling an overarching story– ‘THE STORY’

# Task Extension

## Task 24



**SUBTASK 1**  
HELICOPTER OVERVIEW

- The 'Monster'
- Definitions
- Models of Understanding

**SUBTASK 2**  
IN-DEPTH CASE STUDIES

- Detailed analysis
- 4 Domains of Priority Issues

**SUBTASK 4**  
COUNTRY RECOMMENDATIONS

- To do's and not to do's
- Future Research

**WHAT?**  
'The Issues'  
ST 6

- Top 3 DSM Priorities
- At least 1 focus area per country
- Case studies

**SUBTASK 5**  
EXPERT PLATFORM

- Online expert platform
- Over 210 Behaviour Changes from 20+ countries

**WHO?**  
'The People'  
ST 7

- 5 Behaviour Changes from Focus Area
- Workshops, stakeholder dialogues & analyses

**SUBTASK 1**  
HELICOPTER OVERVIEW

- The 'Monster'
- Expert stories
- Metrics for 'Beyond Energy'

**HOW?**  
'The Tools'  
ST 8

- Collab. Impact Approach
- Storytelling
- Decisionmaking tree etc
- Toolbox of interventions

**SUBTASK 3**  
EVALUATION TOOL

- Basis of 'Beyond kWh'
- Lit review

**WHY?**  
'The Measure'  
ST 9

- 'Beyond kWh' evaluation tool
- Standard, metrics

**OUTCOME?**  
'The Story'  
ST 10

- Synthesis of country learnings into overarching story
- Handbook, intl guidelines

**REAL LIFE?**  
'The Practice'  
ST 11

- Toolbox of interventions tested on specific case study
- Field research



# A model for collaboration?

**Collective impact** = the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.

## The Five Conditions of Collective Impact

### Common Agenda

All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.

### Shared Measurement

Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.

### Mutually Reinforcing Activities

Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

### Continuous Communication

Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.

### Backbone Support

Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.

# Budget

4 - 5 countries	6 - 7 countries	8 - 9 countries	10+ countries
<p><b>€75,000 per country (€25,000 per annum)</b> (2 OAs, 1 PI, travel, platform maintenance, filming, workshops, toolbox, reports overheads)</p> <p><b>Total budget €300,000-€375,000</b></p>	<p><b>€75,000 per country (€25,000 per annum)</b> (2 OAs, 1 PI, travel, platform maintenance, filming, workshops, toolbox, reports overheads)</p> <p><b>Total budget €450,000-€525,000</b></p>	<p><b>€75,000 per country (€23,000 per annum)</b> (2 OAs, 1 PI, travel, platform maintenance, filming, workshops, toolbox, reports overheads)</p> <p><b>Total budget €600,000-€675,000</b></p>	<p><b>€75,000 per country (€21,500 per annum)</b> (2 OAs, 1 PI, travel, platform maintenance, filming, workshops, toolbox, reports overheads)</p> <p><b>Total budget €750,000</b></p>
<p>Level of detail in deliverables:</p> <ul style="list-style-type: none"> <li>· Social expert platform</li> <li>· Top DSM issues of 4-5 countries</li> <li>· Behaviour Changers</li> <li>· Toolbox of interventions</li> <li>· Standard evaluation tool</li> <li>· International handbook</li> </ul>	<p>Level of detail in deliverables:</p> <ul style="list-style-type: none"> <li>· Social expert platform</li> <li>· Top DSM issues of 6-7 countries</li> <li>· Behaviour Changers</li> <li>· Toolbox of interventions</li> <li>· Standard evaluation tool</li> <li>· International handbook</li> </ul>	<p>Level of detail in deliverables:</p> <ul style="list-style-type: none"> <li>· Social expert platform</li> <li>· Top DSM issues of 8-9 countries</li> <li>· Behaviour Changers</li> <li>· Toolbox of interventions</li> <li>· Standard evaluation tool</li> <li>· International handbook</li> </ul>	<p>Level of detail in deliverables:</p> <ul style="list-style-type: none"> <li>· Social expert platform</li> <li>· Social expert platform</li> <li>· Top DSM issues of 10+ countries</li> <li>· Behaviour Changers</li> <li>· Toolbox of interventions</li> <li>· Standard evaluation tool</li> <li>· International handbook</li> </ul>
<b>36 months duration</b>	<b>36 months duration</b>	<b>39 months duration</b>	<b>42 months duration</b>



# questions or comments?

