

Impact Indicators

How to measure progress

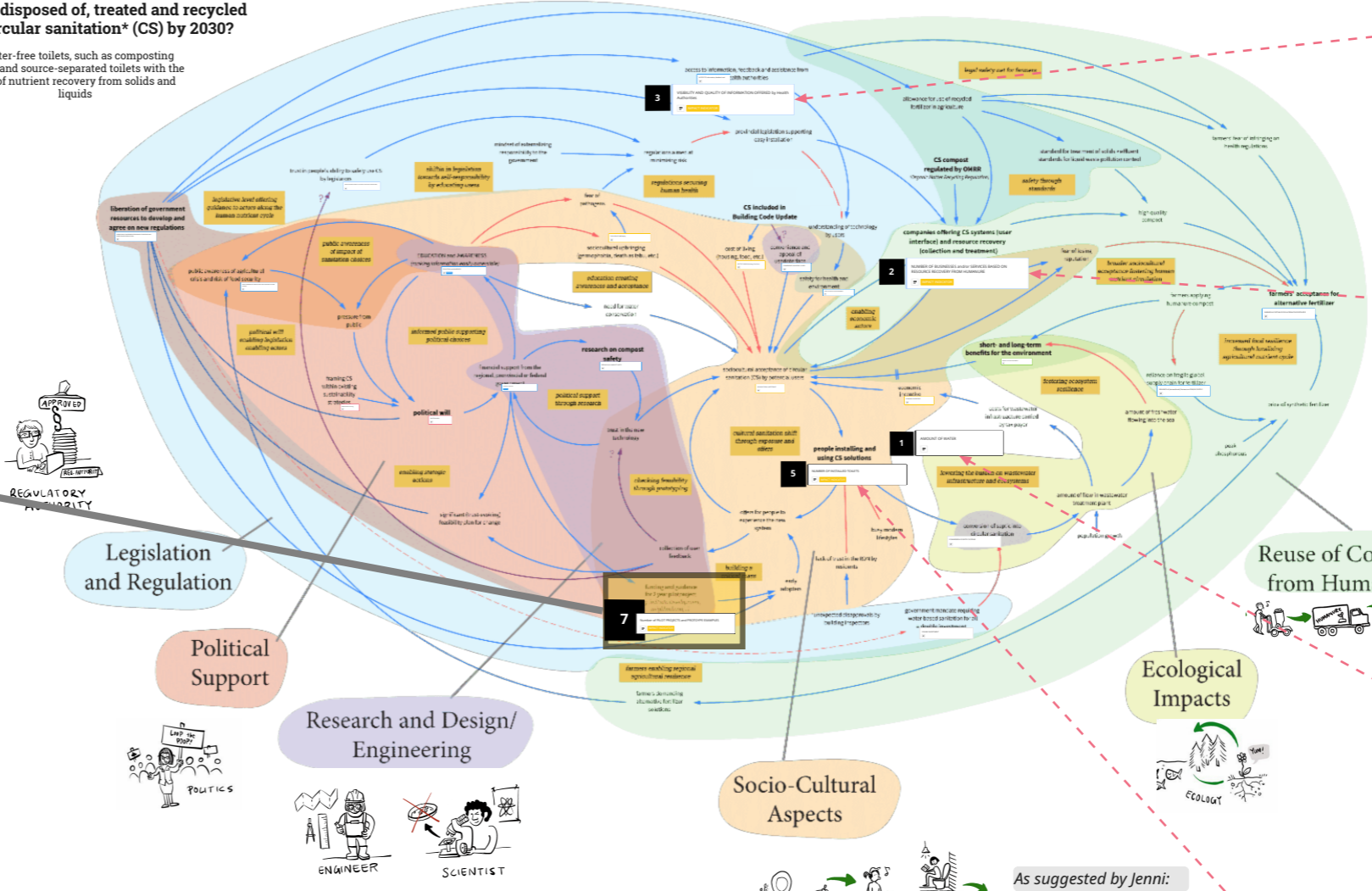
For seeing the rationale for each point zoom in to the card and click on the icon

The prompt for identifying Impact Indicators:
In the year 2030 what variable(s) can tell us that we have come closer to the goal?

Circular Sanitation in the MABR

What is needed for 20% of human "waste" generated in the Mount Arrowsmith Biosphere Region to be disposed of, treated and recycled through circular sanitation* (CS) by 2030?

* water-free toilets, such as composting toilets and source-separated toilets with the aim of nutrient recovery from solids and liquids



Main Impact Indicator

As suggested by Jenni:

#4 | Number of PILOT PROJECTS and PROTOTYPE EXAMPLES

IMPACT INDICATOR

Rationale:
The presence of Pilot Projects (prototypes at different scales and environments) would be a significant first step towards implementing CS on a broader scale. It would imply the backing from across levels of decision-making: individual, communal, municipal, regional, provincial and possibly even federal. It would also mean a strong stepping stone for further developments in these directions will be laid, as it will increase exposure of the topic and enable collecting valuable feedback for users and sociocultural acceptance.

How to measure the actual impact of the projects:

- impact scale; number of people involved across all levels
- user surveys
- matrix for rating impact (power) of the outreach that each collaborator of the pilot projects has, e.g. is mayor was part of it, or journalist, or influencer etc.
- social media resonance of the projects?

Highland Park Example:

As suggested by Jenni:

#1| VISIBILITY AND QUALITY OF INFORMATION OFFERED by Health Authorities

IMPACT INDICATOR

Rationale:
• if provincial legislation has taken action on informing the public on the topic, it shows that the topic has reached higher decision making levels and gained support from politicians and public

Possible Criteria:

- accessibility of information:
 - e.g. where can I find it (how many clicks away)?
 - web, print, social media
 - activity of spreading information
- what services are offered by the government:
 - handbooks, workshops, trainings for engineers, etc.?
 - user-friendliness of material:
 - high amount of visual information vs. text blocks

As suggested by Jenni:

#2| NUMBER OF BUSINESSES and/or SERVICES BASED ON RESOURCE RECOVERY FROM HUMANURE

IMPACT INDICATOR

Rationale:
• if there are businesses or services making money or being funded to offer the service of collecting, treating humanure and distributing finished compost as a product, it means that legislation has passed laws as well as installed regulations that secure this process to be safe to humans and their environment, also there has been an increase in awareness and acceptance among the public (sociocultural acceptance) and the narrative of human waste has started to change towards seeing human waste as a valuable resource, which points to a change in mindset in leading actors of the system and the beginning of a shift in the paradigm towards circular thinking.

Possible Criteria:

- # of organic matter and liquids processed in the facilities

Added during workshop:

#5| AMOUNT OF WATER

Indicator:

- measure water from point of installation
- different municipalities have different measuring of water as wastewater use
- need a baseline, e.g. newly installed home

Hurdle:

- has a lot of variables coming in
- more applicable for municipal use, where composting toilets are currently less likely to be installed
- people who conserve water are already low in water-use

Could be overcome with BASELINE (moment of installation)

- Compare per capita overall use in the region v.s. household with composting toilet

As suggested by Jenni:

#3| NUMBER OF INSTALLED TOILETS

IMPACT INDICATOR

Rationale:

- number of toilets can be counted (!) in theory...
- assumption that data on toilet installation in new homes (rather than in retrofits) would be collected by housing & building sector

Hurdle to measuring it:

- private owners unlikely to share information of toilet installation

Ideas for possible proxy indicators

- health authorities documenting # of fillings for compost toilets
- building permits? difficult, as processing for permits is different for indoor implementation

Legend

A/A → B/B
Blue/S = Same directional development;
the more of variable A the more of variable B

A → B
Red/O = Opposite directional development;
the more of variable A the less of variable B

blue arrow shows a decreasing, down-regulating effect

red arrow shows an increasing, enabling effect

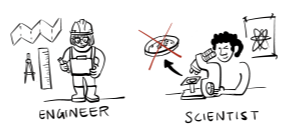


Legislation and Regulation

Political Support



Research and Design/Engineering



Socio-Cultural Aspects



Reuse of Compost from Humanure



Ecological Impacts

