An online community for open energy analysis

Improving trust, legitimacy, and participation

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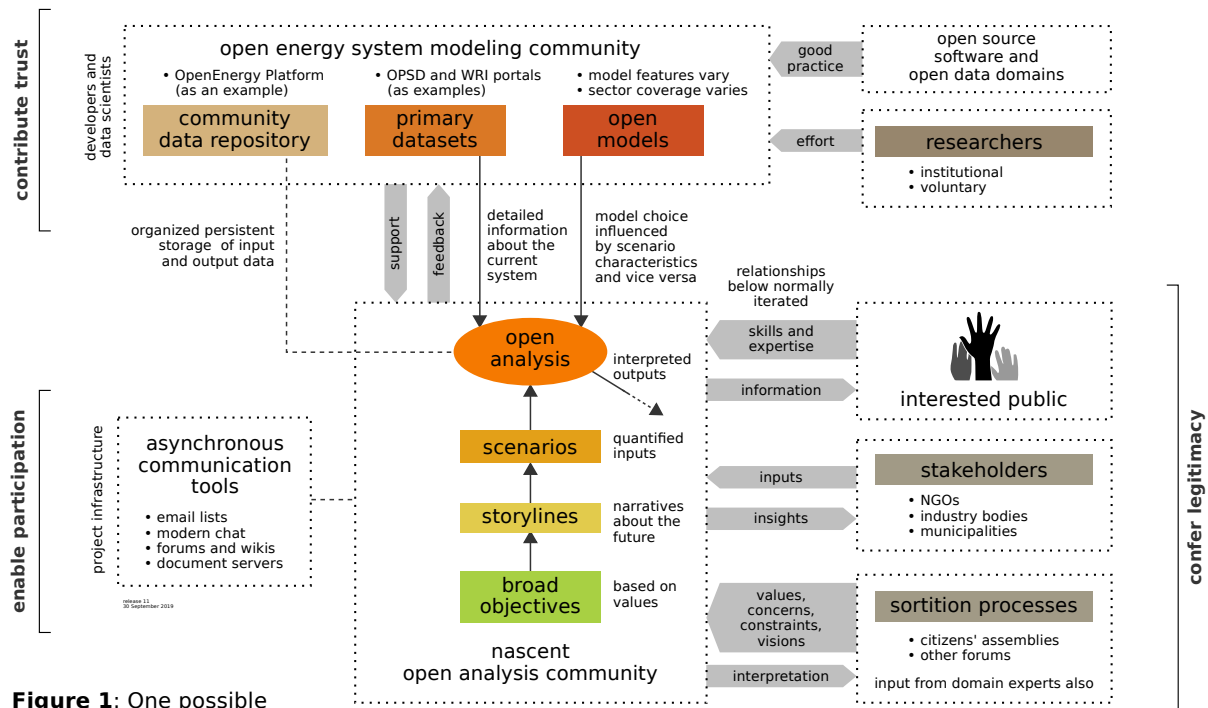

Figure 1: One possible community architecture for common-pool analysis

Context

Open energy system models and open energy sector data portals, taken together, have reached the point where potentially anyone can undertake energy system analysis. It is no longer necessary to develop specialist tools and stock primary databases from scratch. This is clearly a milestone.

This juncture also provides an opportunity to build an online community to pursue such analysis in the open and for the public interest using techniques pioneered by open source development.

The diagram above depicts one possible community architecture. Its purpose is to engender debate on how stakeholder engagement over future energy systems can be improved using community-led common-pool analysis. And how civil society sortition processes might also be supported using that same community.

1. Trust

Genuinely open code and data — enabled by suitable open licenses — allow a level of public transparency and trust not possible with closed models and withheld datasets.

2. Legitimacy

While energy modelers can develop models and curate primary databases, it should not be them who design and endorse scenarios. Rather it is stakeholders that should determine:

- the overarching objectives for managing the energy system
- what they are prepared to accept and not accept
- how best to square the inevitable financial and non-financial trade-offs
- and finally, which of the complying trajectories to prioritize

3. Participation

An online community, built using the social model and management tools pioneered by open source software developers over three decades, offers several potential benefits:

- participation can be diverse and inclusive, not bounded by location, timezone, and work and family commitments
- participation scales well
- both documented knowledge and soft knowledge tend to be nurtured and retained
- online activity is, for the most part, public and chronicled
- community governance methods, appropriate to size and circumstances, are well understood and well tested

Common-pool analysis can contribute to allied social initiatives. One is providing support for sortition-based civil society processes, including citizens' assemblies.

Next steps

- broaden and extend discussion of the concept
- work with projects developing open science infrastructure
- support emerging citizens' assembly experiments

Closure

Civil society organizations have traditionally developed and promoted relatively ad-hoc sets of public policy positions.

Open analysis adopts a fundamentally different approach. The focus is instead on complete scenarios, integrated assessment, feasible transition pathways, and the criteria used to determine which routes should be embarked upon. This is, in essence, a sophisticated iterative form of backcasting.