

The end of the RES auction?

scenarios and pathways outline task 7.2 findings report



AURES II has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 817619

Defining auctions

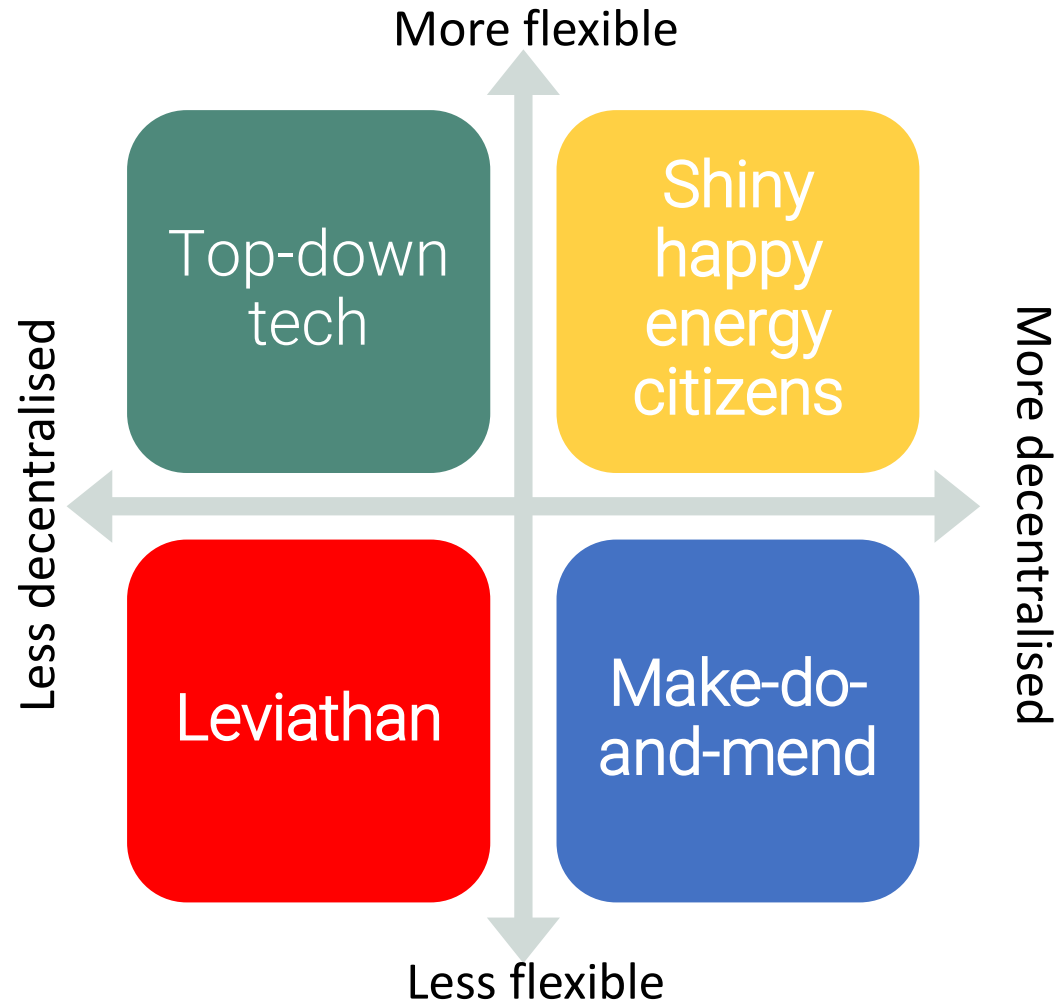
- It has been common to talk about RES auctions as a transitional instrument between (e.g.) FiTs and ‘unsubsidised’ renewables to be removed once prices become ‘competitive’
- But:
 - Auctions (or the outcomes) provide more than revenue support – including very substantially altering project risk profiles
 - The concept of the auction does not specify the identity of the auctioneer – it may be public, private, community, etc
 - Or what is exchanged

A scarce number of an agreements giving a route to market for electricity production and allocated through a competitive, largely bid price-driven ranking process

Defining scenarios

- Research questions
 - What *could* auctions be used for in the future?
 - Who is involved?
 - And what products are being priced?
- Future role for auctions determined by technical, economic and social trends
- Routes to market: commercial and/or regulatory arrangements

Proposed scenario framework



Future routes to market

- Public RES auction guaranteeing supplements to private revenues
- Corporate or community PPA
- Return of the feed-in tariff
- Merchant contracting

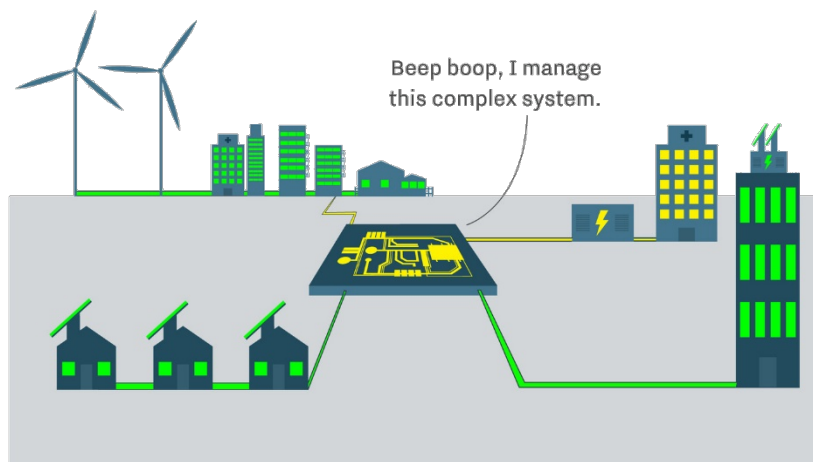
Boundary conditions

- All scenarios meet EU decarbonisation goals for 2050
- RES auctions for electricity production as the main focus

Shiny happy energy citizens

High flexibility, high decentralisation:

- Local governance
- Active distribution system management
- Greater demand-side response
- Accurate valuation of system services
- RES-compatible, local markets
- Broad participation (actor diversity)



RES auctions

- Private and public procurement
- Auctions held by diverse range of actors at numerous governance levels
- Regulatory input to manage (inter alia) network impacts, actor diversity

Top-down tech

High flexibility, low decentralisation:

- National or transnational governance
- Active transmission system management
- Greater demand-side response
- Accurate valuation of system services
- Large role for technology companies
- RES-compatible, national or trans-national markets
- Incumbent firms dominate



RES auctions

- Private procurement rather than public support (of a range of products)
- Auctions held by major consuming industries or utilities
- Public-good design input (e.g.) actor diversity likely absent from auctions

Make-do-and-mend

Low flexibility, high decentralisation

- Local governance
- More passive, but locally planned networks
- Less demand-side response but strong incentives to reduce demand through EE
- Poor valuation of system services
- Local markets
- Broad participation (actor diversity)



RES auctions:

- Little central procurement/ support
- Local and community-scale actors playing a significant role, primarily on the demand-side
- But possibly procuring energy through 'community' PPAs

Leviathan

Low flexibility, low decentralisation

- National or transnational governance
- More passive, centralised networks
- Less demand-side response
- Poor valuation of system services
- National or trans-national wholesale markets
- Incumbent firms dominate



RES auctions:

- High risk environment for independent producers
- Regulated PPA offers from incumbent utilities
- In extremis, public FiTs required to fulfil obligations

The end of the RES auction?

- Auctions (in some form) are likely to remain an important part of the RESe landscape for the foreseeable future

Next steps:

- Further validation of the framework until publication end October 2020

<https://exeter.onlinesurveys.ac.uk/scenarios-for-the-future-of-res-auctions>

- Future directions
 - Modelling some of the implications of the scenarios
 - Closer look at PPA innovation
 - Possible expansion towards non-RESe auctions



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