

# BUILDING UNDERSTANDING: INFORMED DECISION- MAKING FOR SSEG INTEGRATION IN MUNICIPALITIES

## Just Urban Transitions Webinar Series: Webinar 1

### 1. Context

South Africa's just energy transition will create unique socio-technical policy challenges and opportunities for local governments. The South African Local Government Association (SALGA) works to support local governments in navigating local energy transitions, within the complex South African institutional context. Aligned to the SSEG Support Programme, SALGA is collaborating with WWF SA, Stellenbosch University, the Just Urban Transitions Project<sup>1</sup> and Sustainable Energy Africa (SEA) to host a series of three webinars on practical and pressing issues currently facing municipalities.

SALGA is undertaking a range of projects within the just transition, much of which is focussed on concrete advancement of sustainable energy transitions at an urban scale, as well as the complexities of policy, institutional arrangement (powers and functions), fiscal issues, local energy system management (e.g. small-scale embedded generation (SSEG) facilitation), and support for local economic development (LED).

<sup>1</sup> The Just Urban Transitions project, supported by Agora Energiewende, aims to surface challenges and advance knowledge in the just transition, unique to the urban



This webinar series aims to support and add to this wide portfolio of activities.

### 2. Content

WWF SA and CRSES at Stellenbosch University received funding from the WWF Nedbank Green Trust to support municipalities with strategy development in support of the integration of electricity from household rooftop PV. CRSES has developed an agent-based model of electricity generation and consumption patterns, focused on showing how different decisions that incentivise or disincentivise SSEG play out, impacting:

- registration of privately owned systems;
- balancing the grid;
- maintenance;
- and, even more challenging, developing a tariff regime that serves both electricity users, as well as the municipal mandate to deliver electricity.

The model makes intended and unintended consequences of policy decisions visible, thereby supporting better decisions for local policymakers.

There is widespread agreement that an increase of rooftop PV at household level has climate benefits and holds the potential to reduce municipalities' dependence on Eskom. However, these benefits will need to be balanced with the operational, technical and financial challenges related to these installations. Responding to this challenge, the CRSES tool demonstrates the consequences of tariff decisions, with an emphasis on how it affects investment decisions,

scale, as well as to undertake engagement and research in support of collective learning and problem-solving.

and also how investment decisions, in turn, affect tariff decisions.

A significant insight that the tool helps to highlight is that local government, household and commercial decisions on SSEG are impacted by the state of the broader electricity system (Eskom tariffs and load shedding); but equally, decisions made by households and businesses impact on the municipal electricity system, and decisions made in the municipal electricity system have consequences for the national electricity system. In other words, there is a need for harmonisation, in order to ensure that the system, overall, remains least-cost and efficient, with just and equitable outcomes.

### 3. Resources

WWF SA and CRSES have prepared accessible research publications to support policymaking. These are listed below.

#### ***Residential Investment in Solar PV: what does it hold for the future?***

[https://www.wwf.org.za/our\\_research/publications/?30201/residential-investment-in-solar-pv](https://www.wwf.org.za/our_research/publications/?30201/residential-investment-in-solar-pv)

#### ***Understanding and managing residential solar rooftop PV***

[https://www.wwf.org.za/our\\_research/publications/?32304/understanding-and-managing-residential-solar-rooftop-pv](https://www.wwf.org.za/our_research/publications/?32304/understanding-and-managing-residential-solar-rooftop-pv)

Municipalities can access practical support for the facilitation of SSEG through the

#### ***SALGA-GIZ-DMRE SSEG Development Support Programme***

<https://www.sseq.org.za/>

The programme is implemented by SEA. This support offers access to training and technical advice on all things SSEG, and currently there



are already 41 municipalities that are part of the programme.

For more information, mail: [support@sseg.org.za](mailto:support@sseg.org.za)

For more information on this webinar series or to request or share information related to energy and climate change, please contact Lauren Hermanus ([lauren@howweadapt.com](mailto:lauren@howweadapt.com)) or Silas Mulaudzi ([smulaudzi@salga.org.za](mailto:smulaudzi@salga.org.za)).