

# Purposeful innovation through space

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# Purpose of the European Space Agency

“To provide and promote, for exclusively peaceful purposes, cooperation among European states in space research and technology and their space applications.”



Article 2 of  
ESA Convention

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European Space Agency



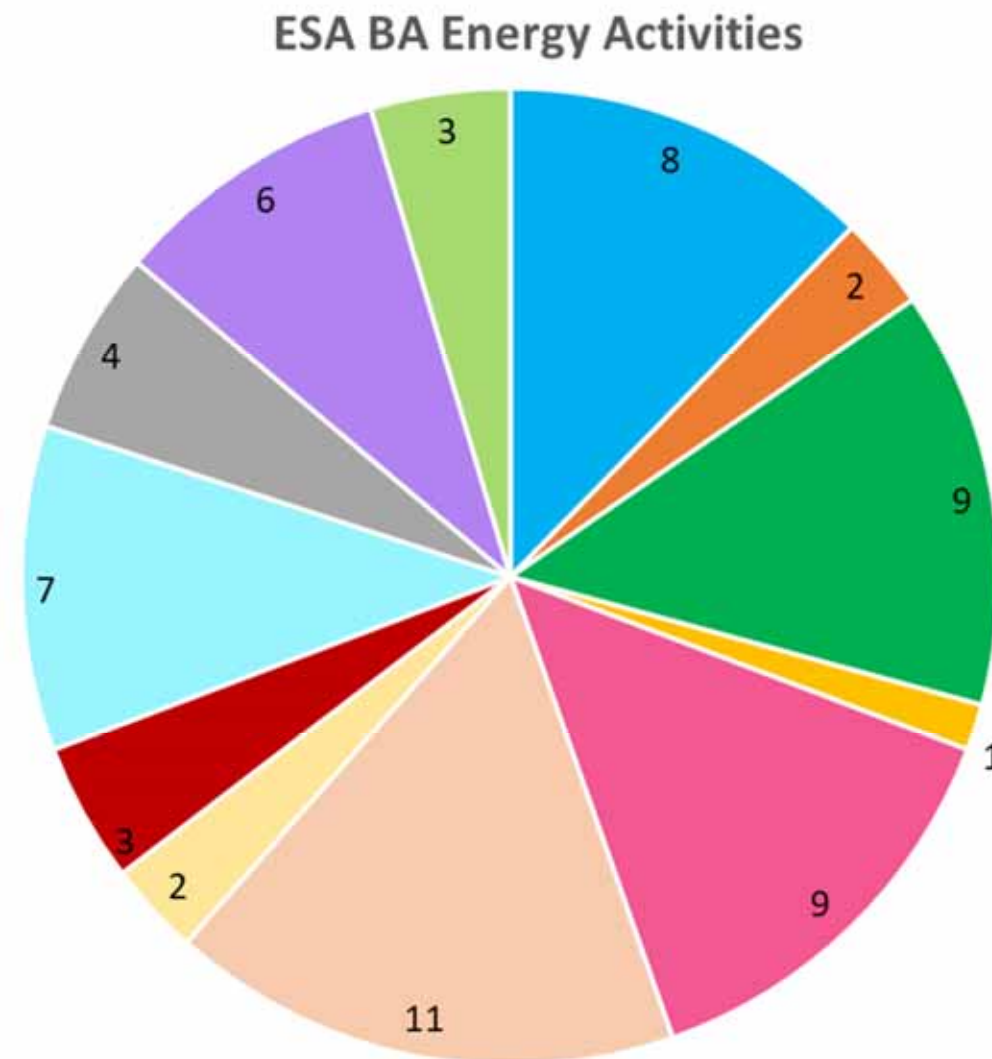
## → ESA SPACE SOLUTIONS

### The largest space innovation network in the world

- The go-to place for great business involving space to improve everyday life.
- Supporting European start-ups and SMEs to develop businesses using space technology and data.
- Offering funding, business and technical support to help to generate successful business and create jobs.



# Energy activities



- Hydro energy
- Wind energy
- Pipeline monitoring
- Bioenergy
- Environmental monitoring
- Energy efficiency

- Solar energy
- Carbon capture and storage
- Smart electricity grids and powerline monitoring
- Microgrids
- Financial services
- Electric vehicle

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# Space Technology lights up developing countries

## *Space for microgrids*

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<https://business.esa.int/news/new-funding-opportunity-space-support-for-microgrids-developments-india>



European Space Agency

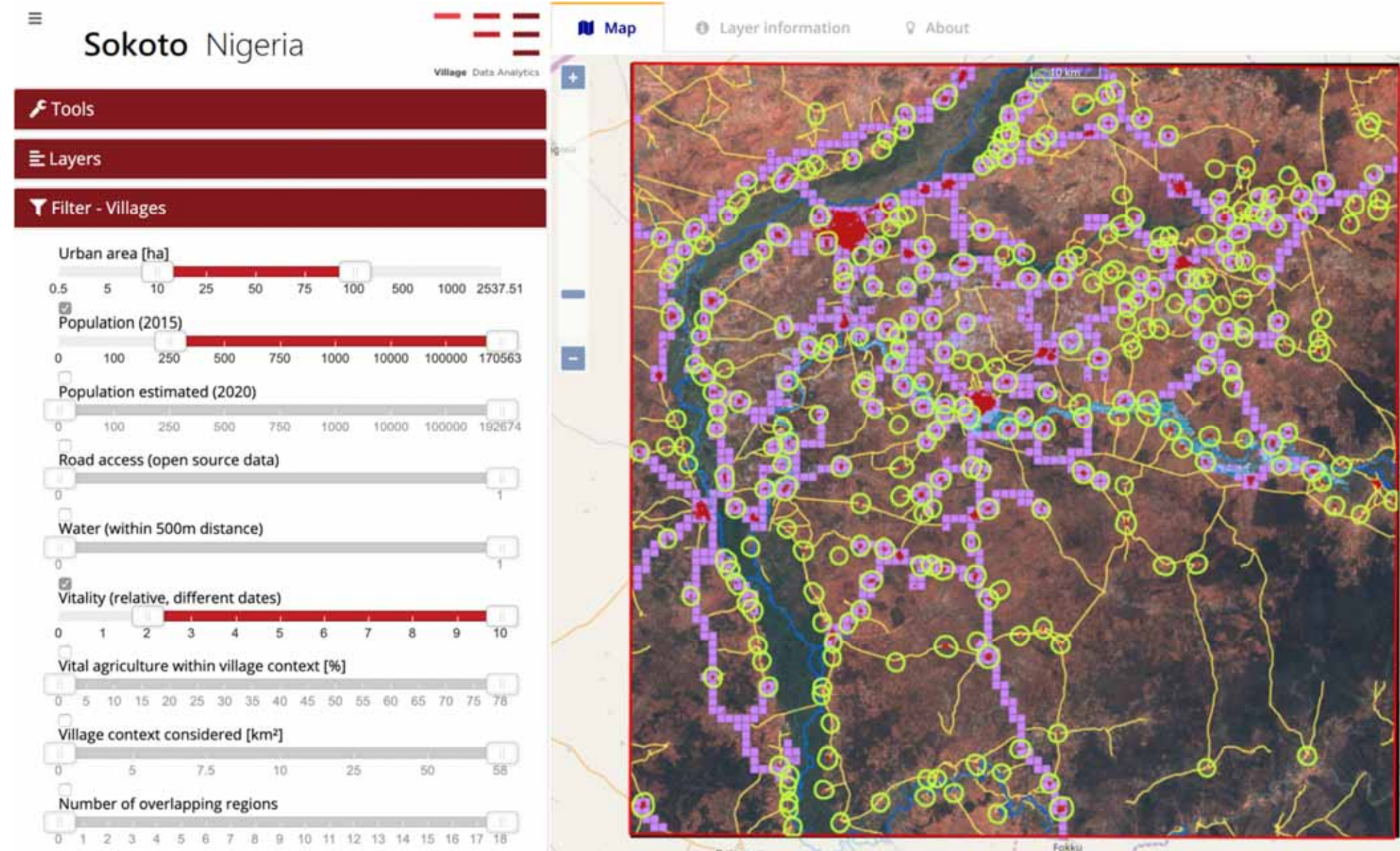




# Village Data Analytics

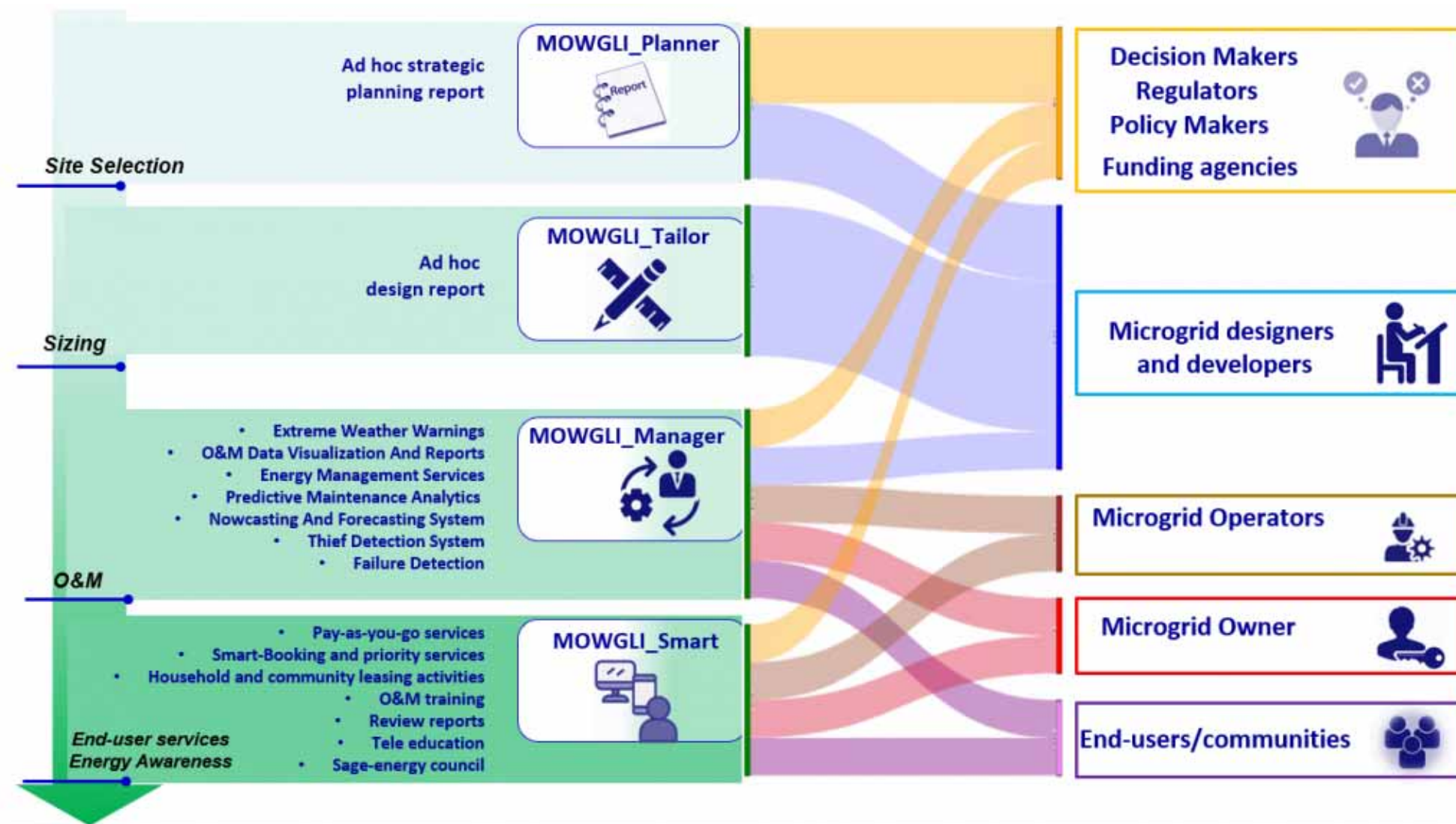
VIDA provides summary statistics about settlements in a defined region of interest. The result is an intelligent map showing the best sites for rural electrification through microgrids.

- Village size and demographics
- Road network analysis
- Vegetation analysis
- Water body analysis
- Survey analysis
- Energy modelling



# MOWGLI

- MOWGLI provides four main services that fulfil the needs described above:
- Strategic planning (site assessment)
- Microgrid optimal design (renewable energy sources basket, sizing)
- O&M (load balancing, remote control, anomaly detection predictive maintenance)
- Energy awareness and payments services (pay-as-you-go, smart-booking, priority-booking, community leasing, tele-medicine, tele-education, O&M training)





ESA Space Solutions

Thank you!

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