



Geospatial mapping for sustainable energy investments

Presentation to Eastern Partnership Platform III on Energy Security

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BUILDING PARTNERSHIPS FOR ENERGY SECURITY

Agenda



- Concept
- Results of Scoping Mission
 - Intended final product
 - Participants
 - Focus
- Role of Inogate
- Approximate Partner Country contributions
- Next steps

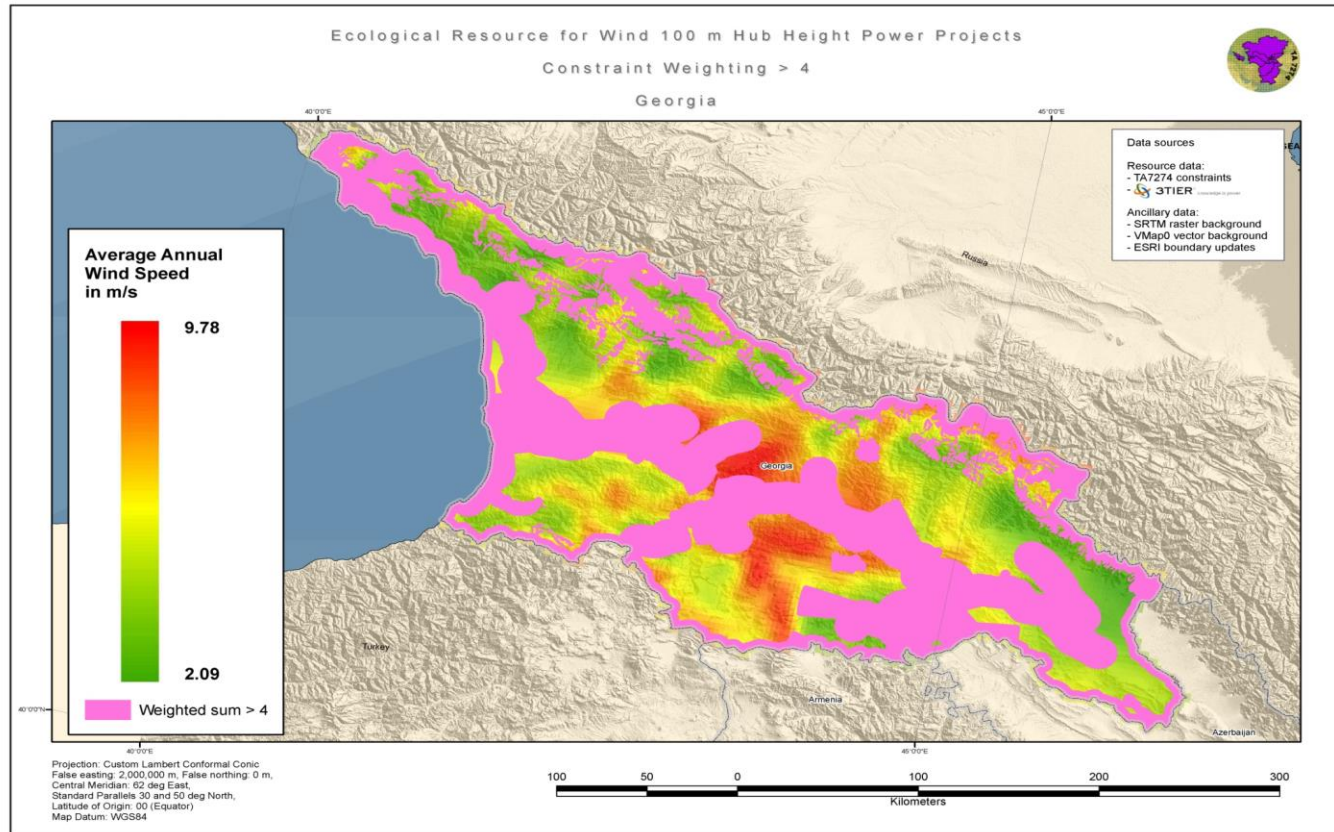
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PROGRAMME FUNDED BY THE EU

RE resource mapping concept

- Determines 'value at stake' from renewable energy
- Screens out areas where construction is disallowed
- Ranks resource by relative economic viability



Intended final product



- Online tool to help investors and national agencies decide where to invest in RE feasibility studies
- Shows how much resource might be developed, where, at what cost and what return, for a range of tariff/discount rate combinations
- Allows map creation for site-specific discussions
- Registry function to store site-specific data
- Zoom, bookmark, measure functions
- Map resolution: 10km²
- **NOT** a substitute for feasibility studies

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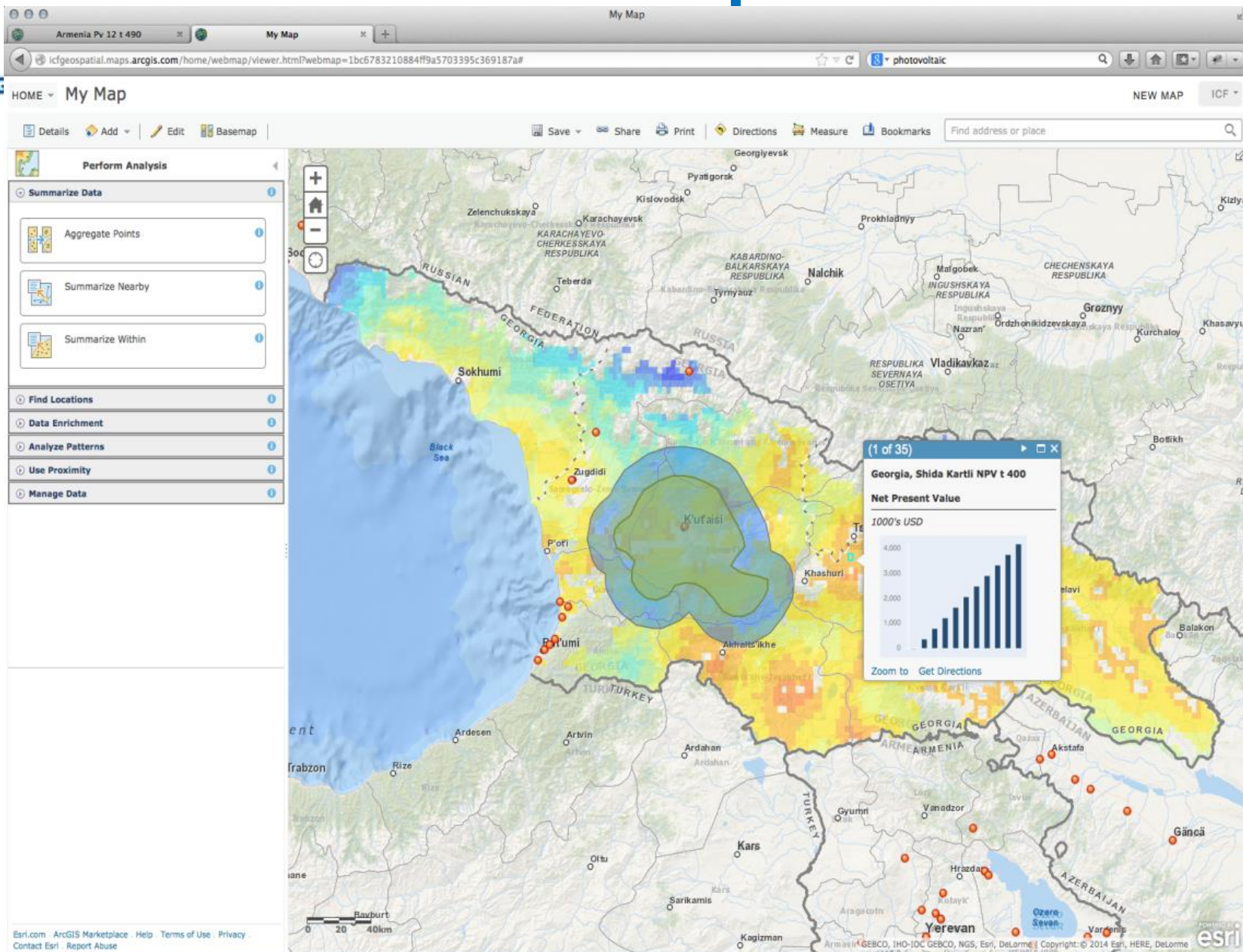
Intended final product



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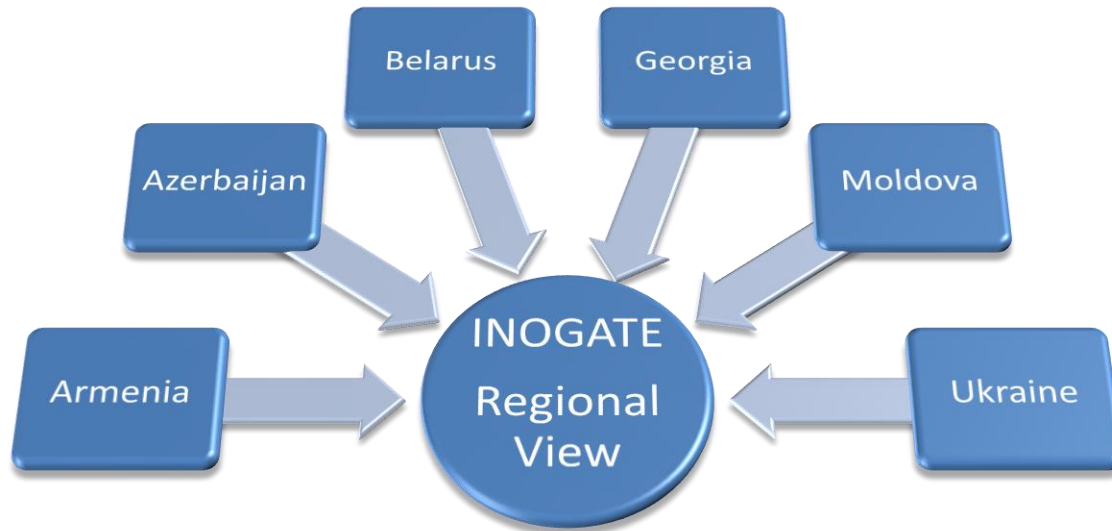
PROGRAMME FUNDING BY THE EU



Inogate regional view



- Updates from countries automatically update Inogate regional view, at same resolution



System environment and hosting



- ArcGIS Online – each partner country designated agency to hold a licence. Inogate also to hold a licence.
- Cloud hosting – simplest and cheapest
- Ownership of data remains with the source organisation, but must be shared for regional view
- Inogate supports development, training and initial hosting, then transfers to partner countries
- Partner countries pay for continued hosting, update and maintenance

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Nominated beneficiaries/agencies

Country	Beneficiary	Designated national agency
Armenia	MENR	R2E2 Fund
Azerbaijan	Min Energy	State Agency for Alternative and Renewable Energy Sources
Belarus	Min Energy	MNREP
Georgia	Min Energy	Georgian Energy Development Fund
Moldova	Min Economy	Energy Efficiency Agency
Ukraine	Min Energy	State Agency of Energy Efficiency and Energy Saving

- Letters of interest received from all
- Letters of commitment received from GE, MD, UA to maintain, update and use the tool at their cost

Focus for RES-maps



- Map existing reference projects in all 6 countries
- Map wind and solar resource in all 6
- Improve data collection/management in all 6

Other requests:

- Small hydro mapping in BY, GE, MD, UA
- Country-specific projects:
 - Armenia geothermal
 - Moldova energy efficiency
 - Ukraine biomass

Inogate role



- Develop maps and online GeoExplorer tool jointly with beneficiary agencies, who will get hands-on knowledge
- Coach beneficiaries in tool update, maintenance and use for investment attraction
- Hand over to beneficiary after development and training is complete

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Approximate Partner Country contributions



Partner Country contribution to development:

- Help to gather data and to co-develop tool: 0.1 – 0.3 Full Time Equivalent (dependent on size of datasets)

Estimated Partner Country costs in operation:

- Update and maintain tool: 0.1 Full Time Equivalent
- Cloud-hosting / licence fees €2.5k/yr

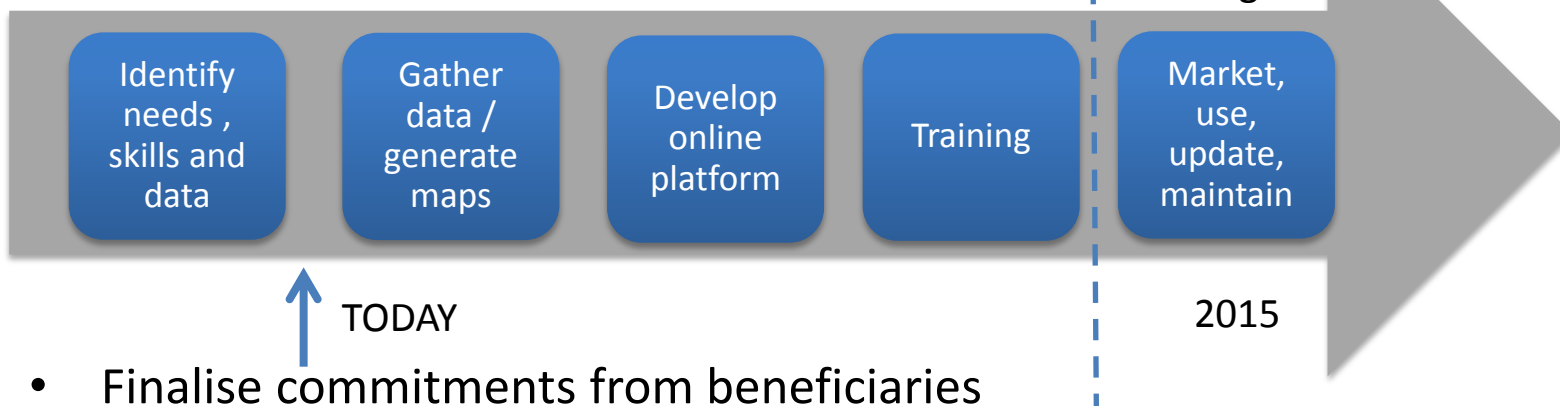
Next steps



Handover from Inogate to
Partner Countries

- Inogate leads development
- PCs provide data, skills and trainees

Partner
Country
in charge



- Finalise commitments from beneficiaries
- Revise work programme accordingly
- Seek budgetary approval
- Implement work programme (likely duration 8 months) with stringent quality and progress monitoring
- REMINDER: this is **NOT** a substitute for feasibility studies

Geospatial mapping for sustainable energy developments



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