



SUNREED assessment of biomass potential and logistics in the Kosovo Southeast region

An Overview of Opportunities Ahead

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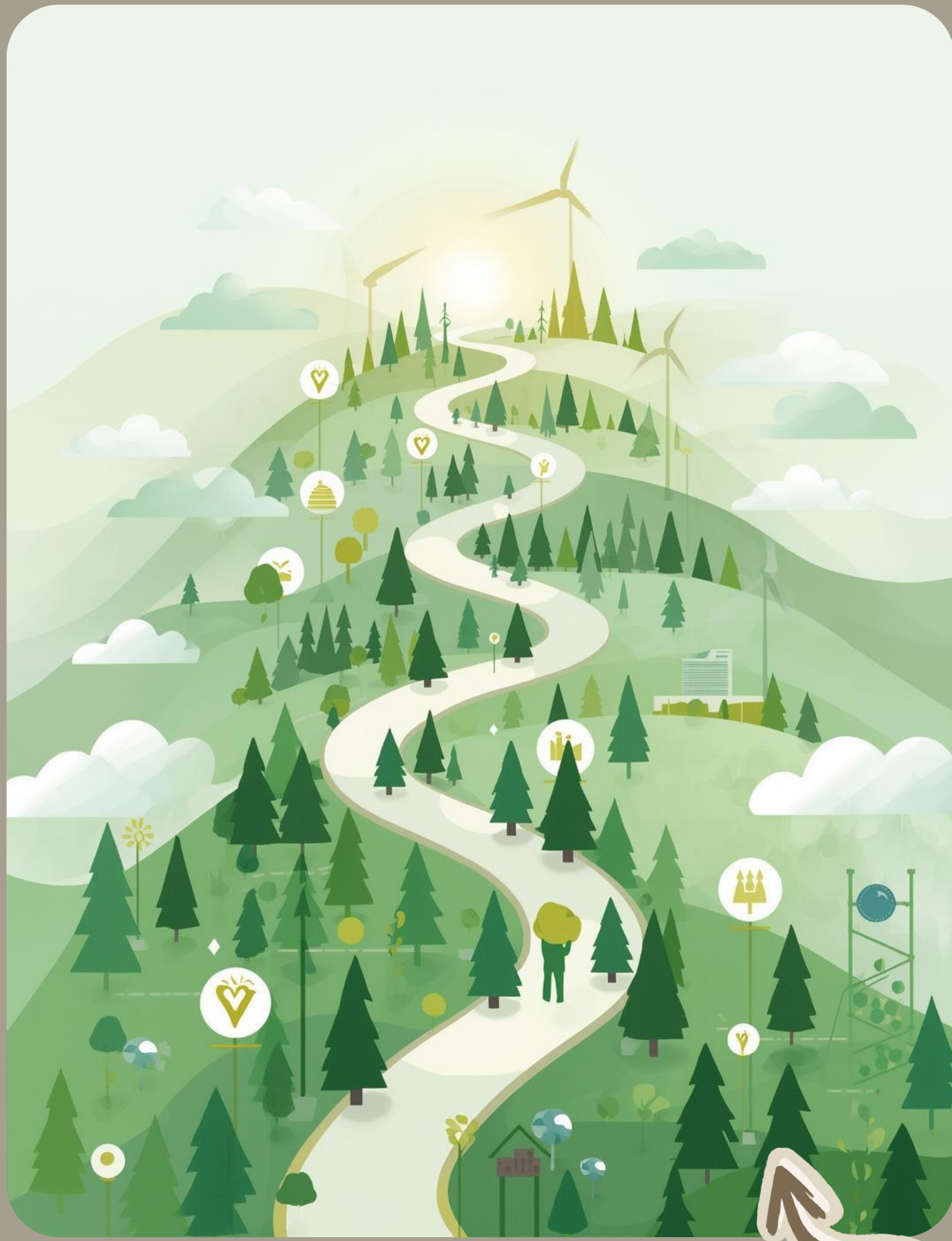
Current State and Potential

Kosovo's **wood biomass sector** presents significant opportunities for sustainable energy.

With abundant forest resources, there is potential to enhance energy production while promoting environmental stewardship.

Strategic goal

To increase the share of wood biomass as an energy source by implementing modern and efficient technologies without additional pressure on forests.



Wood Biomass Roadmap

The Wood Biomass Roadmap outlines **strategic pathways** for developing the biomass sector, focusing on sustainable practices, increased efficiency, and fostering local communities' engagement in Kosovo's energy transition.

1. Increasing production of wood biomass without putting more pressure on forests

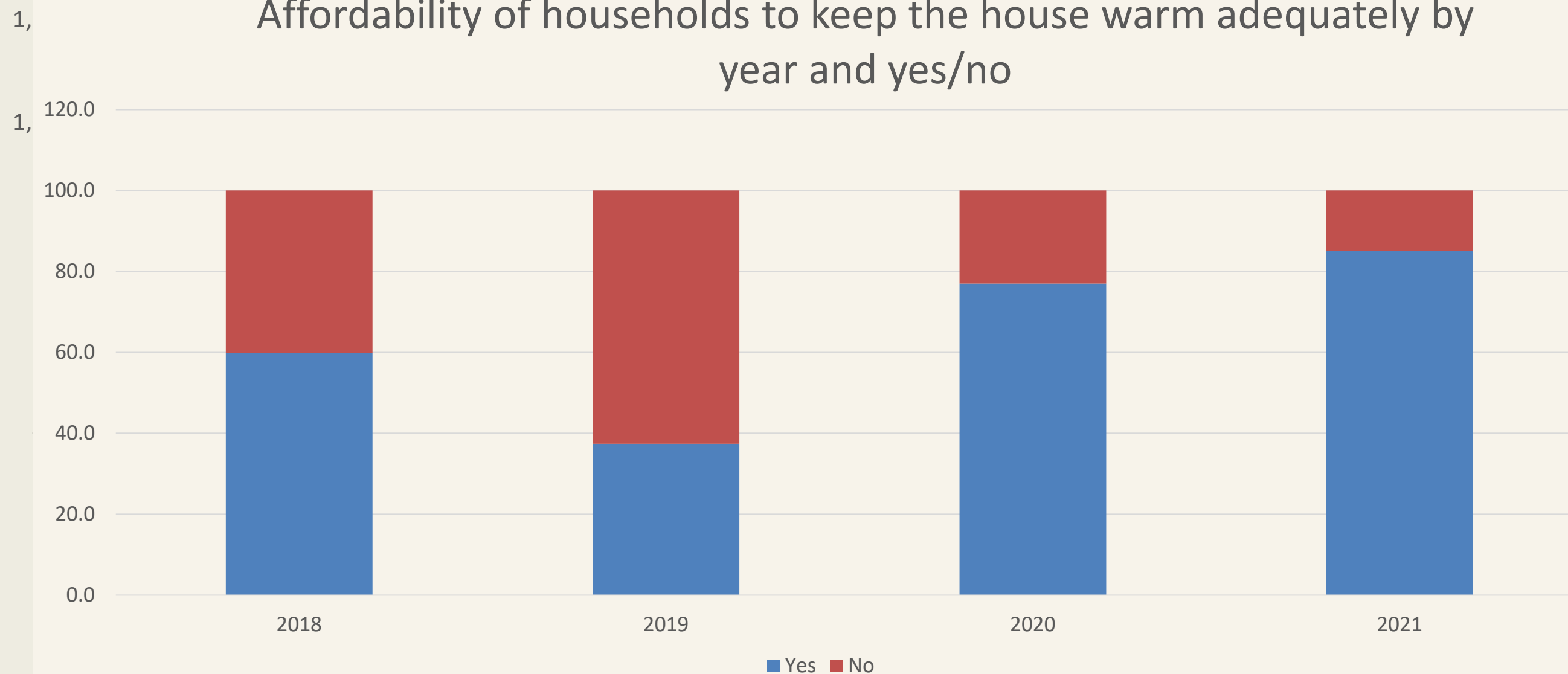
2. Use of new, modern and more efficient technologies in wood biomass production and use

3. Setting up a local production chains

New estimation of wood biomass use



Affordability of households to keep the house warm adequately by year and yes/no



Key actions in forestry— forest capacity didn't change?!



01

Sustainable Management

- Forest management plans,
- Forest certification
- **Subsidy scheme for silvicultural activities and afforestation**

02

National Forest inventory

.....in progress

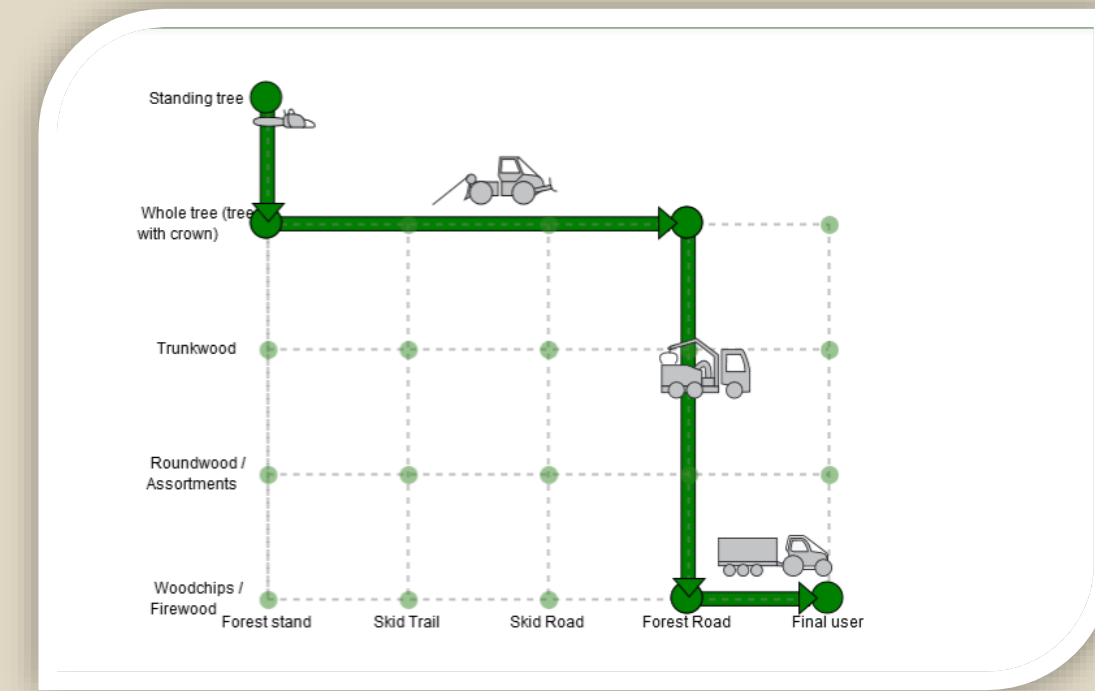


03

Human capacity

- Scholarships for young people and women's to enter forestry sector and capacity building of foresters
- **Vocational trainings for forest workers and forest owners**

Wood biomass production chains - Connecting local stakeholders



Forest owners –
private/local
communities/state



Forest companies



Wood biomass
users



Wood processing
companies



Wood biomass
producers (logs,
wood chips,
pellets, briquettes)



Local communities



Impacts of Modern technologies for Wood Biomass use

Reduced Deforestation

The use of wood biomass promotes sustainable forestry practices, leading to responsible forest management and significantly decreasing the rate of deforestation in Kosovo.

Improved Air Quality

Transitioning to wood biomass energy reduces reliance on fossil fuels, resulting in lower emissions and significantly enhancing air quality, benefiting both the environment and public health.

Waste Reduction

Utilizing wood biomass for energy helps manage agricultural and forestry waste, reducing landfill contributions and promoting a circular economy focused on sustainability and resource efficiency.



Job Creation

The wood biomass sector is expected to generate thousands of new jobs, enhancing local employment opportunities and stimulating economic growth in rural communities across Kosovo.

Rural Development

Investment in biomass initiatives will foster infrastructure improvements, including transportation and utilities, leading to enhanced living standards and greater economic resilience for rural areas in Kosovo.

Energy Security

Developing wood biomass resources will diversify Kosovo's energy portfolio, reducing dependence on imports and ensuring a more stable, sustainable energy supply for future generations.

How to balance demand and supply?

1. Looking for other resources of biomass (outside the forests)

2. Afforestation and reforestation

3. Management of young forests

1. Efficient use of energy

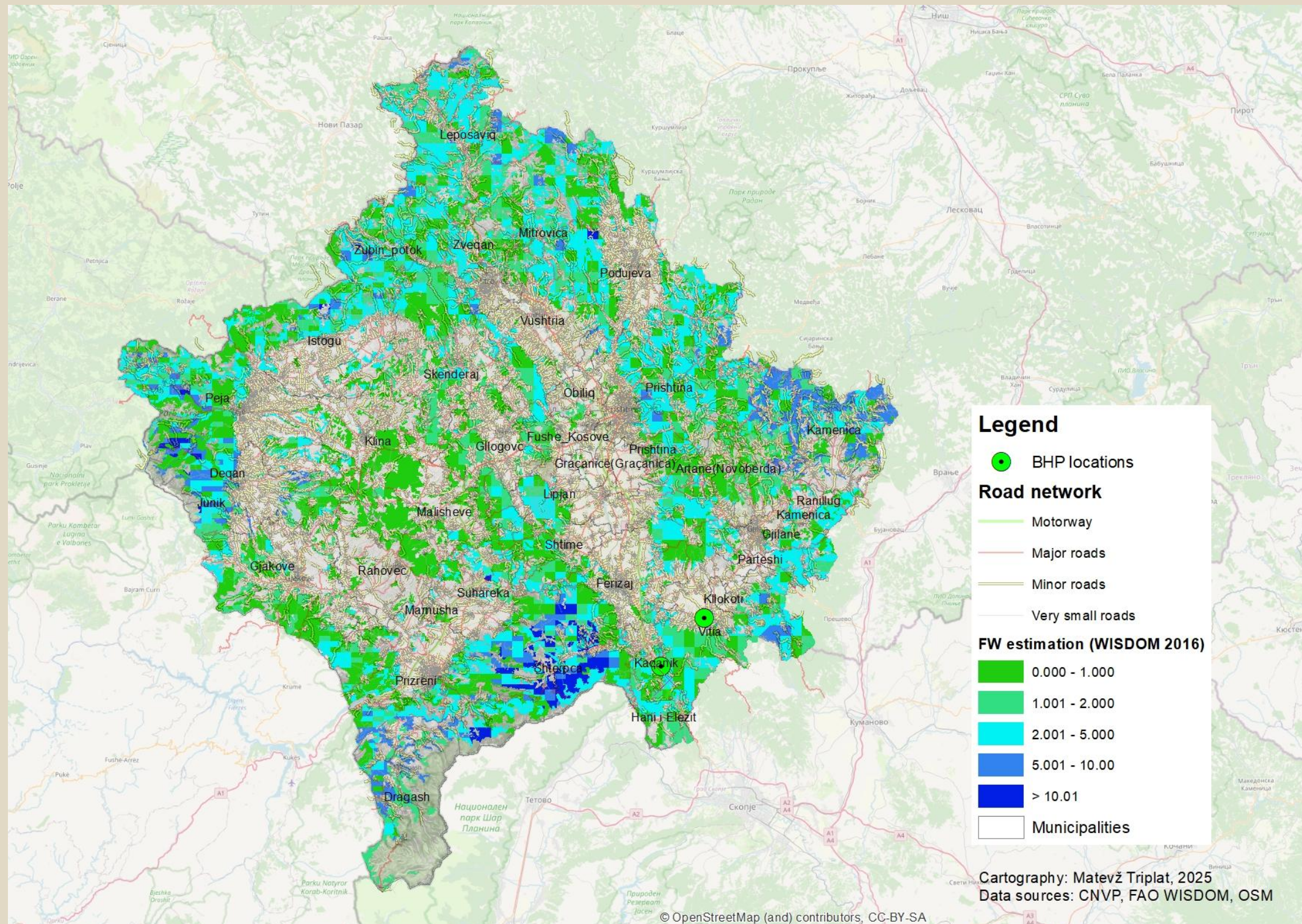
2. Implementation of modern technologies

Demand



Call to Action – a case study

Together, we can create a sustainable future by advancing wood biomass initiatives, harnessing local resources, and fostering community engagement for environmental and economic benefits in Kosovo.



Biomass potentials

- Last forest inventory in Kosovo was done in 2012
- Information on sustainable biomass potentials, including firewood (FW) estimations was prepared by FAO (WISDOM, 2016)

Road network

- Must be a routable network data source
- OpenStreetMap data was used:
 - clean from non-trafficable tracks
 - Checked for disconnections and prepared in a routable manner

Scenario definition – a case study

Scenarios

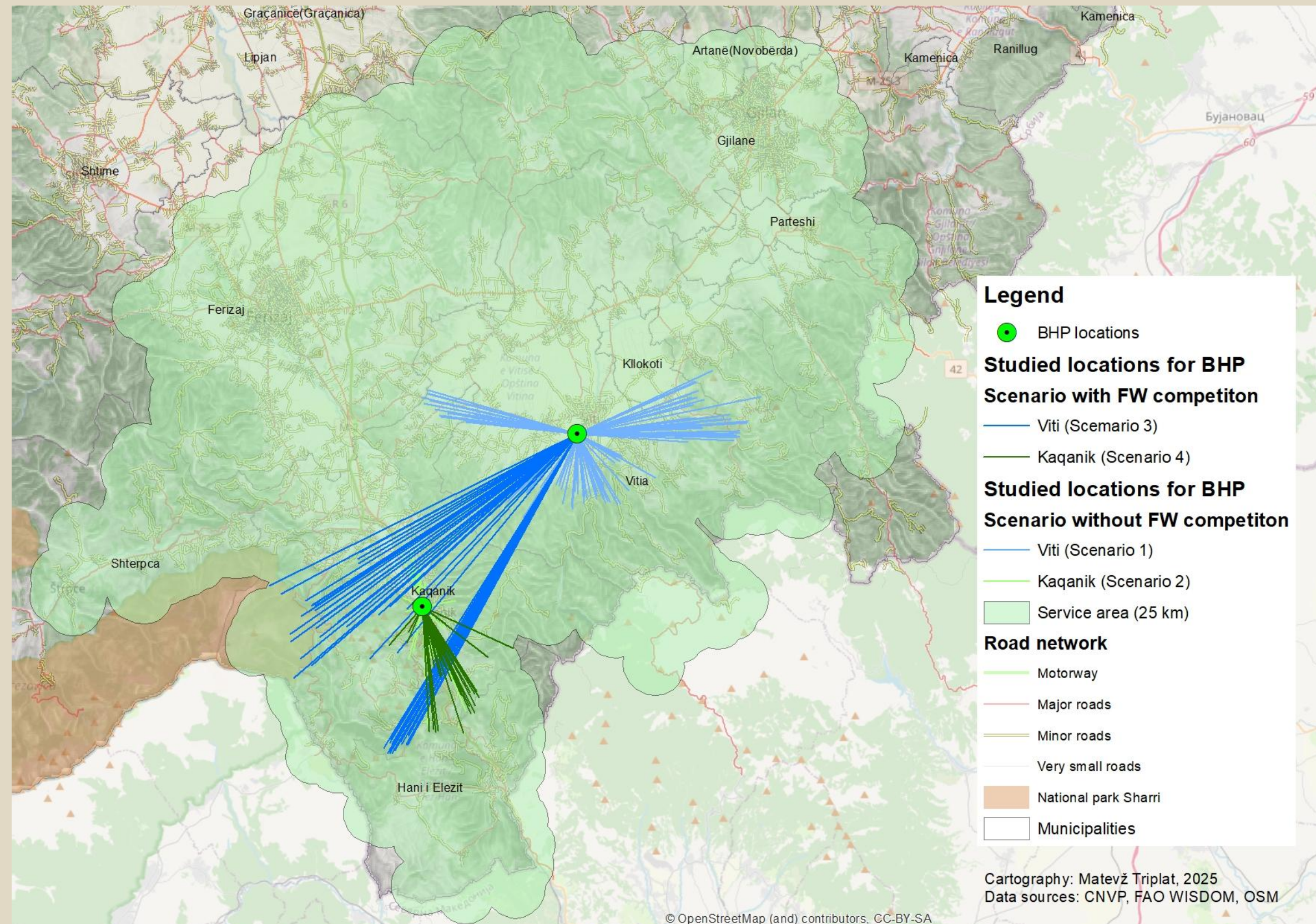
- Viti – 1100 (fresh) tons - Scenario 1
- Kaqanik – 600 (fresh) tons - Scenario 2

Scenarios taking into account competitive use

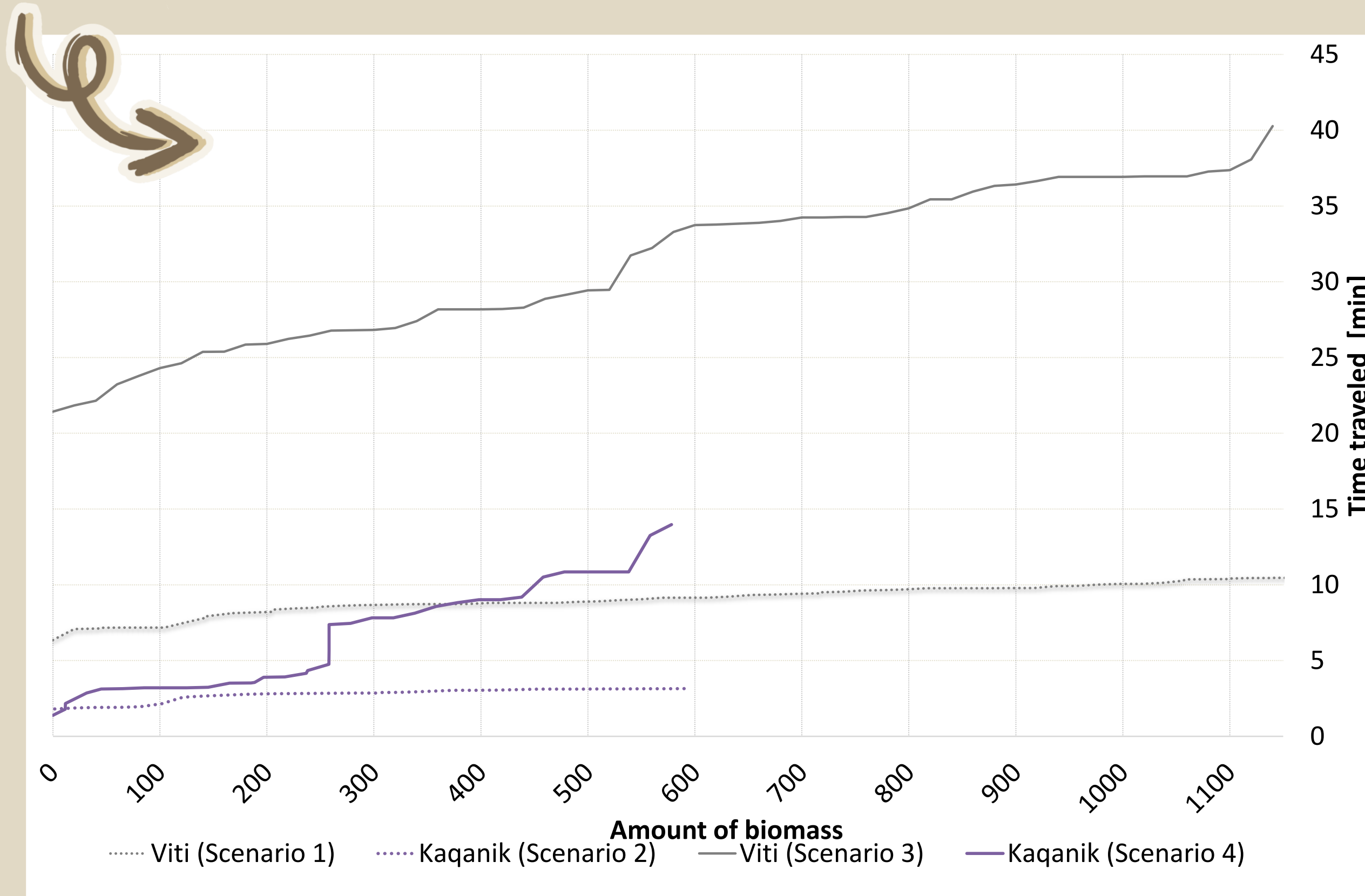
- Viti – 1100 (fresh) tons - Scenario 1
- Kaqanik – 600 (fresh) tons - Scenario 2
- 145 settlements in radius of 25 km – 207.000 (fresh) tons

Competitive use

- Update of informations on demand size (data are available from 2016 census performed by FAO – WISDOM project)
- Firewood demand from settlements in radius of 25 km have been involved as competition.



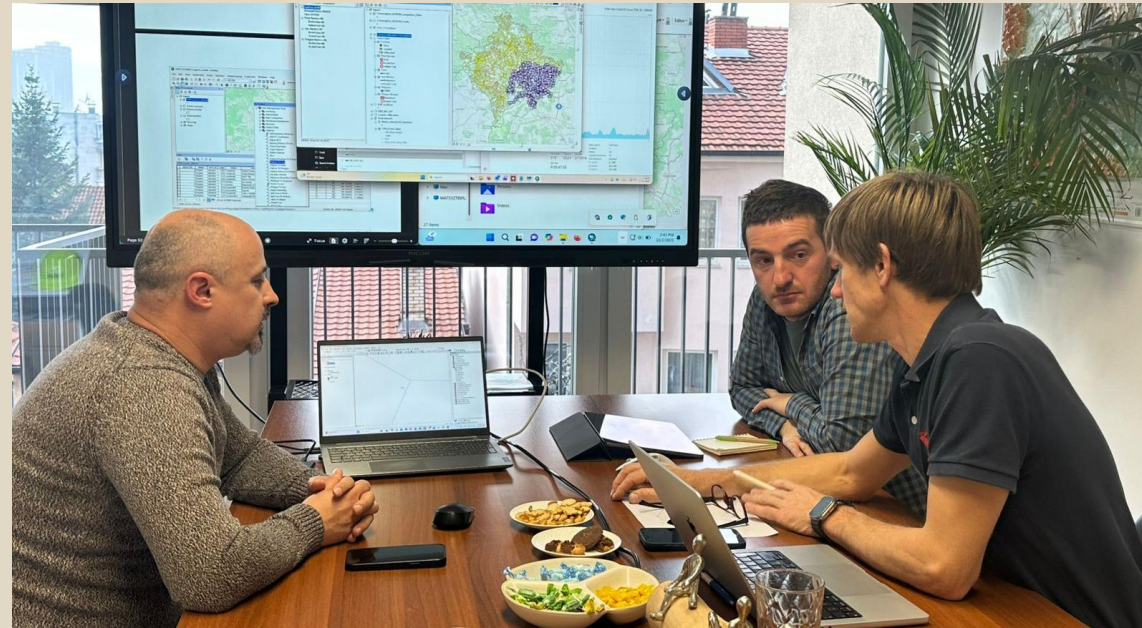
Cost estimations – a case study



Call to Action

Forest inventory

Provides essential data to guide sustainable forest use and support reliable investment decisions on supply, demand, and logistics.



Biomass consumption

Provides crucial insight into competing biomass uses, supporting sustainable resource allocation and informed investment decisions.



Knowledge exchange

Lacking reliable data, we strengthened expert training and knowledge exchange to ensure capacity for analysis once new information becomes available.



Thank you

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