# ECOmakala: meeting energy needs, fighting poverty and protecting

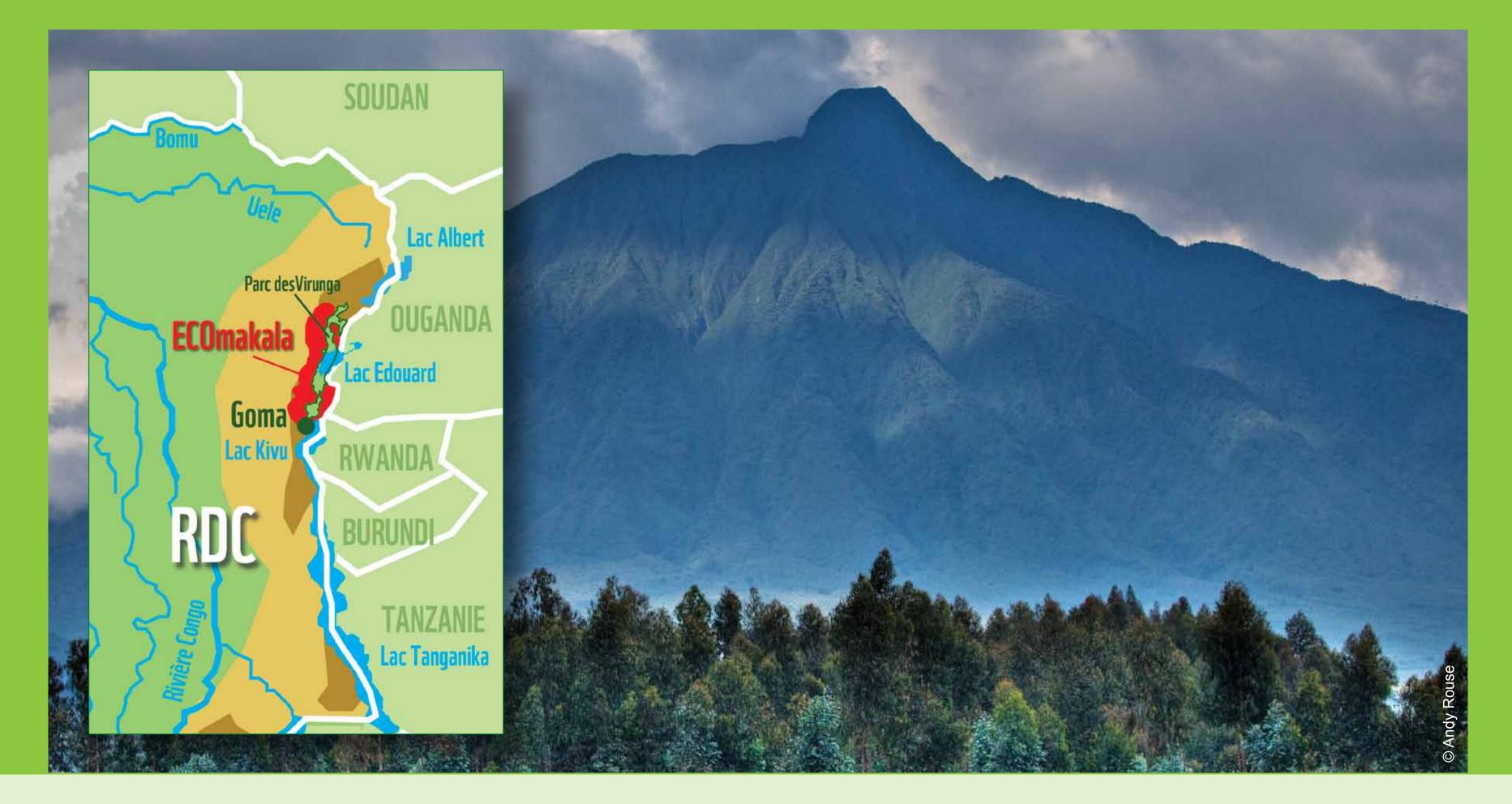
the forests of the Virunga National Park, eastern Democratic Republic of Congo.





#### Location

North-Kivu province, eastern DRC, vicinity of the ViNP



- Overall objective: to supply the major cities in the surrounding of the Virunga National Park (ViNP) with sustainable charcoal or "eco-makala" through the reforestation of at least 10.000 hectares in collaboration with small holders
- Beneficiaries: small holder farmer planters, local farmers' associations, farmer planters' cooperatives
- Context: high degree of poverty, poor access to electricity & other alternative energy sources, wood energy as basic fuel, high population growth and density, forests in the surroundings of the ViNP practically all cut down, ViNP as one of the major sources for wood => huge pressure on its forest resources

## Project components

- Reforestation (installation woodlots)
- Eco-makala production by optimizing traditional and semi-traditionnal techniques
- Constructing and optimizing the eco-makala production and commercialization value chain together with the farmer planters
- Promotion of efficient wood stoves
- Agro-forestry (introducing trees into crop land)



### Development impacts



- Job creation due to activities requiring a high intensity labor force (HILO)
- New and additional source of income for thousands of small scale farmer planters
- Participation and role of women
- Reduction in the households' energy expenses
- Crop quality improvement



# Perspectives

- An additional 10.000 hectares of tree plantations in the next 10 years
- The continuation of the work regarding the eco-makala value chain and the promotion of efficient wood stoves
- Diversification of pure woodlots towards agro-forestry systems

# Environmental impacts

- **Biodiversity**: decreasing the pressure on the ViNP's forest resources due to the illegal cut down of trees for charcoal production by providing an alternative for the charcoal that illegally comes from the park (supply side) and by promoting the use of efficient wood stoves requiring up to 50% less of charcoal (demand side)
- Climate: carbon up-take of standing trees in the ECOmakala plantations on the one hand and carbon reduction through avoided deforestation by energy substitution on the other hand (mitigation)
- Soil improvement through soil stabilization and fertilization

