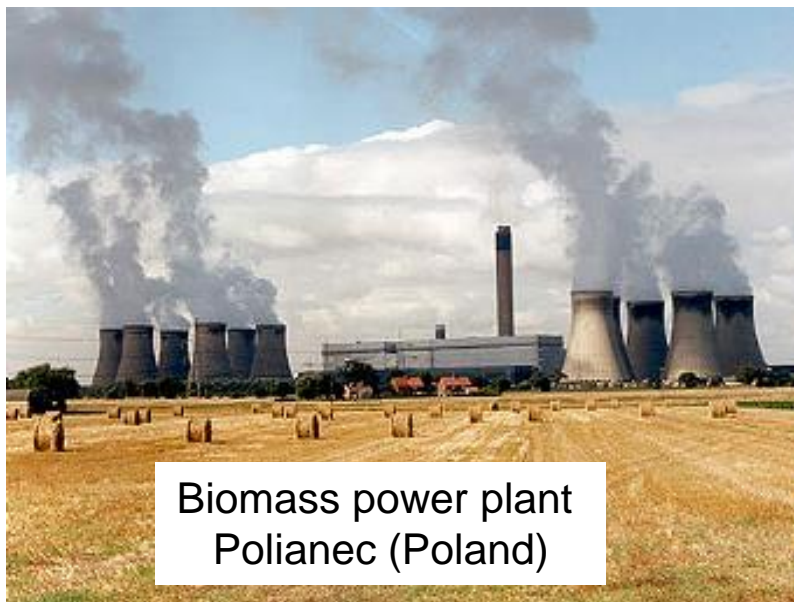


Woodfuel in a Global Change Context

Laurent Gazull, CIRAD
Denis Gautier, CIRAD

Woodfuel : a global demand



Biomass power plant
Polianec (Poland)



Fuelwood retail market
Bamako (Mali)

Use : electricity

200 Mwe = 450 000 households
1.2 Mt of woodchips/agricultural waste

Origin: natural forest, fields

Within radius : 150 km

Retail price : 35 €/Mwh

Use: cooking

400 000 households

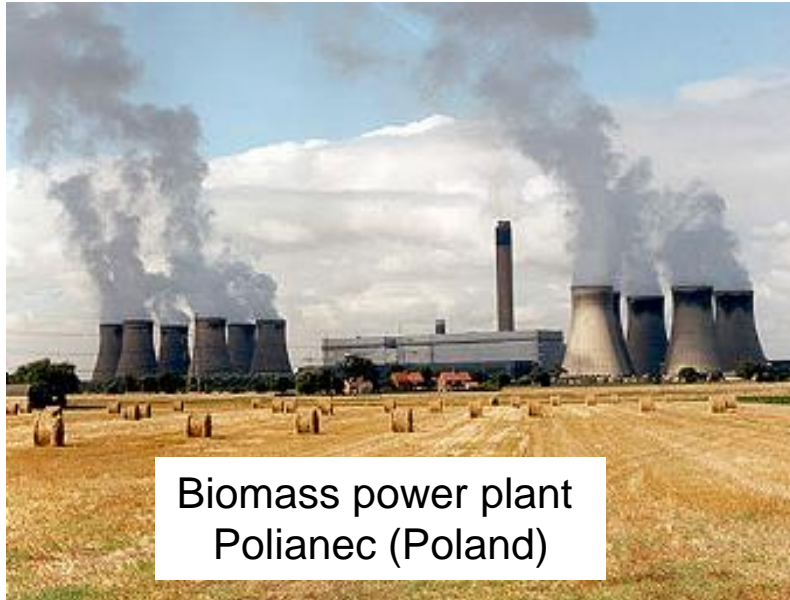
1.1 Mt of firewood/charcoal

Origin : savannas, fields, fallows

Within radius : 150 km

Retail price : 30 €/Mwh

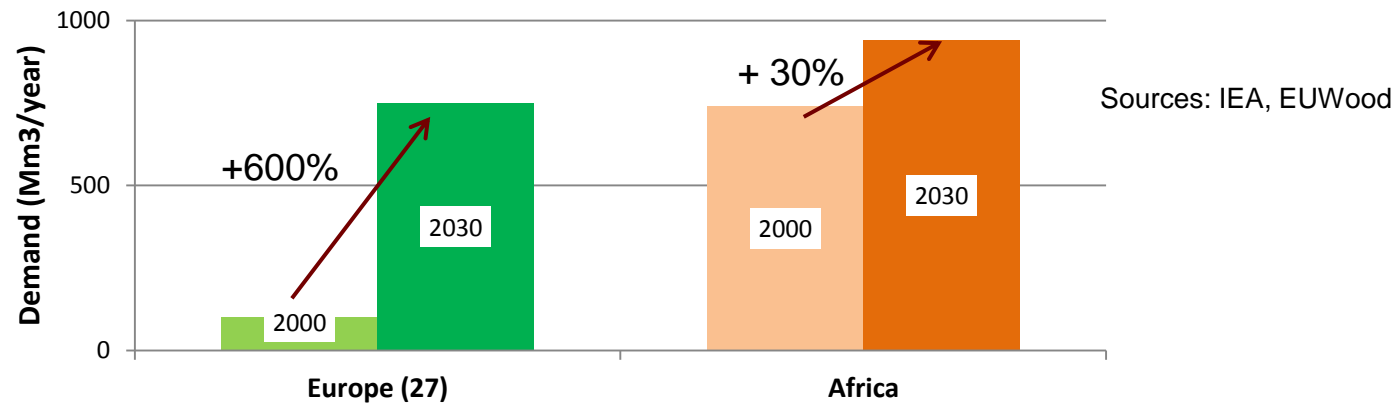
Woodfuel : a global demand



Biomass power plant
Polianec (Poland)

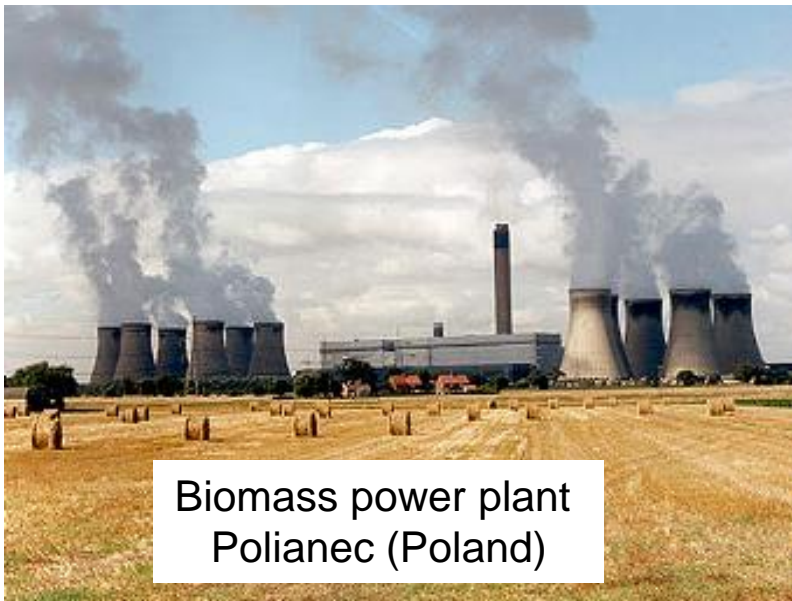


Fuelwood retail market
Bamako (Mali)



Current world demand for Fuelwood = 2 500 Mm³/year

Woodfuel : a global demand



Biomass power plant
Polianec (Poland)



Fuelwood retail market
Bamako (Mali)

2 different contexts, but similar concerns

Risk of shortages, need for new resources, sustainability, profitability...



... despite opposite images

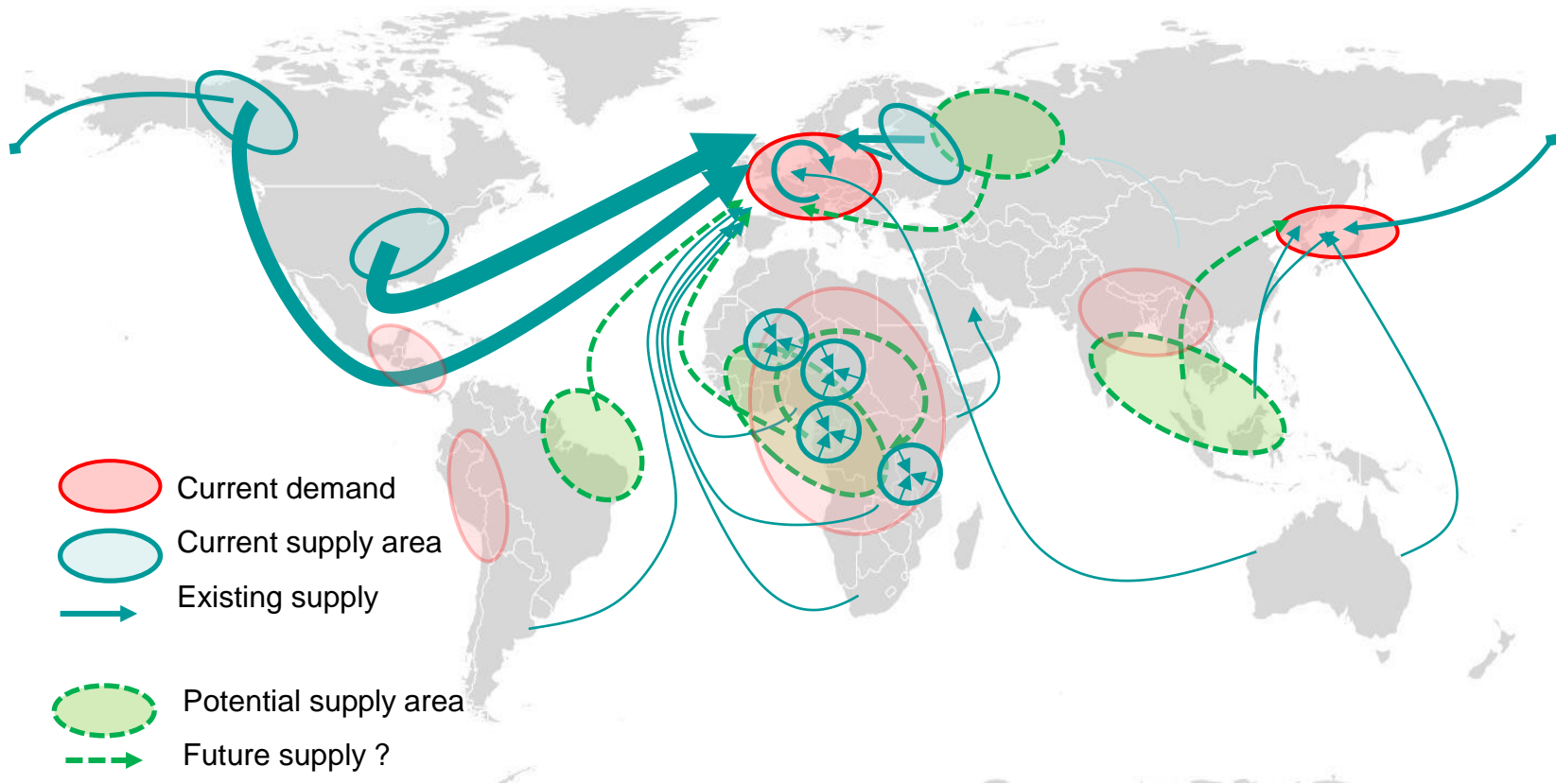


Rural employment/development
GHG reduction
Technological innovation

Poverty
Pollution, respiratory diseases
Deforestation

Woodfuel : a global trade

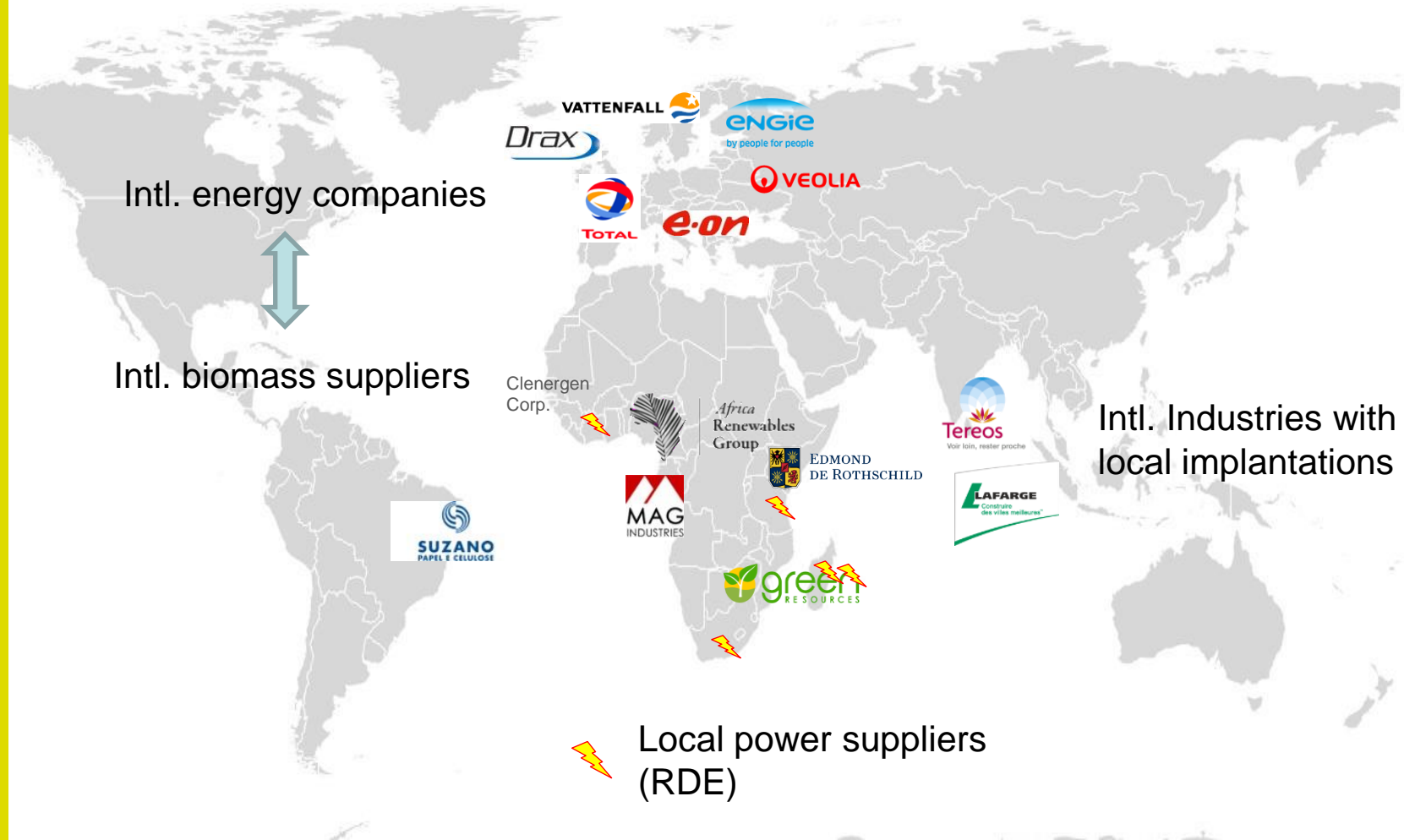
trades of woodchips, pellets and charcoal



Sources : Irena 2011, Gdf-Suez 2015,
Pelcert 2012, authors 2015

Times are changing

Emergence of new stakeholders



Times are changing

Discourses are changing

- Woodfuel = profitable, modern, job reservoir, source of innovation
- Woodfuel = central to diversify energy portfolio

A window of opportunities for...

- energy plantation, modernization of traditional supply chains
- more transparency and sustainability standards
- new markets in Africa (InterAfrica, Europe, Asia)

But ...

- Various woodfuel stories and experiences
- Need for data on consumption, flux, preferences
- Need for innovative sustainable production models