

### FOREST RESIDUES FROM FIRE PREVENTION RECYCLED IN A PORTUGUESE MUNICIPALITY

Seminar to promote innovative practices at European level. Project BRANCHES

> André Pires | Biomass Unit (UB.CBE) | Biomass Centre for Energy

> > 29 june 2023

#### **PROBLEM ADDRESSED** RURAL FIRES

Most frequent causes of rural fires in 2022 (ICNF, 2022):

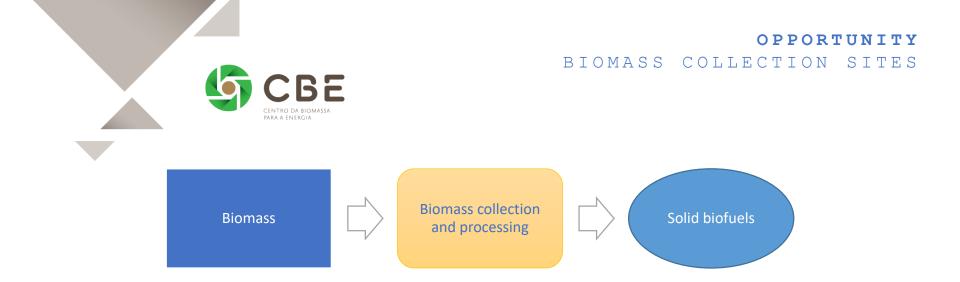
- Arsonism Attributable (28%)
- Burning of forest and agriculture residues (19%)

# Burning of forest and agricultural residues is one of the main causes of rural fires:

- Forested properties' owners are obliged to clean their lands by removing the fuel load (forest residues);
- The need to eliminate forest and agriculture residues frequently leads to their burning on site, because there is a lack of an alternative solution;
- This practice often results in big rural fires.

#### A new solution is able to address other problems:

- Dispersed raw materials;
- Transportation costs;
- Energetic dependency and inefficiency;
- Abandonment of rural areas and unemployment.



- Providing a solution near the rural populations for biomass disposal as an incentive for the removal of the
- fuel load existent in forest stands;
- Concentration of the residual raw materials in order to improve the effectiveness of the pre-treatment industrial equipments;
- Valorisation of woody biomass by transforming it in an easy-handling and transportation solid biofuel;
- Regulating the supplied quantities, adjusting supply and demand.



#### BIOMASS COLLECTION SITES VISEU EXAMPLE

The municipality of Viseu has installed, since 2019, biomass collection sites, allowing the populations to deposit **forest and agriculture residues** extracted from their properties, and thus, **avoiding its burning on site.** 

These sites are located in three different localities. One of them, Bodiosa, has already collected **1.200 tons** of forest residues since 2019, which represented a revenue of **10.000 €**.





#### BIOMASS COLLECTION SITES VISEU EXAMPLE



The **local councils**, which also use these sites to deposit public greeneries and forest residues from their own properties, are **responsible for transporting** the biomass collected for the **Biomass Power Plant of Viseu**, where it is processed and consumed.

The revenue obtained by selling the biomass is then used by these local councils to promote the development of those regions.



#### BIOMASS COLLECTION SITES OTHER CASES

## Biomass parks and loaders of Penacova



Partnership between the municipality and Altri Florestal – an important forestry company in Portugal

#### Biomilling center of Braga

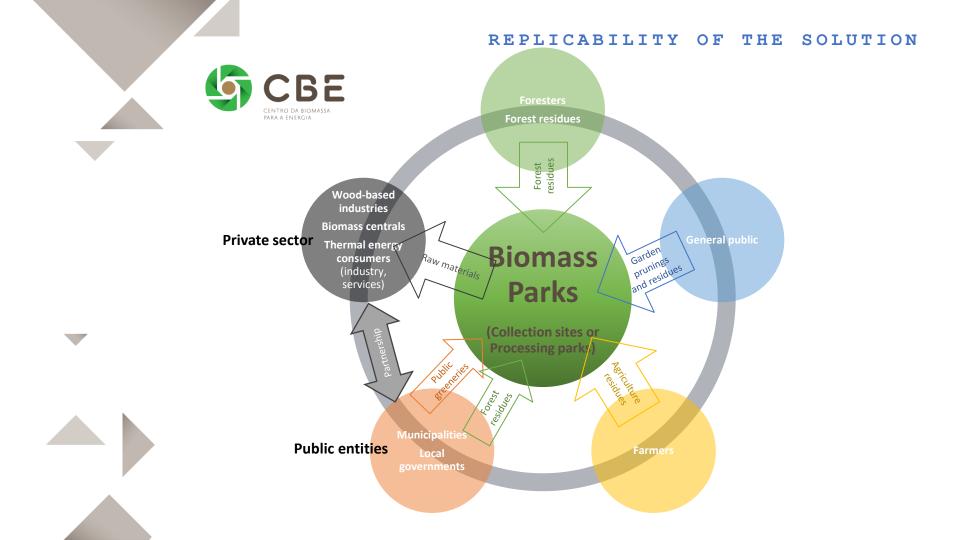


Partnership between the municipality and Braval - a company of solid residues treatment

#### Biomass collection sites of Arcos de Valdevez



Network of biomass parks, distributed across the municipality territory





Zona Industrial - 3221-119 Miranda do Corvo geral@centrodabiomassa.pt

www.centrodabiomassa.pt https://www.facebook.com/Centrodabiomassa/