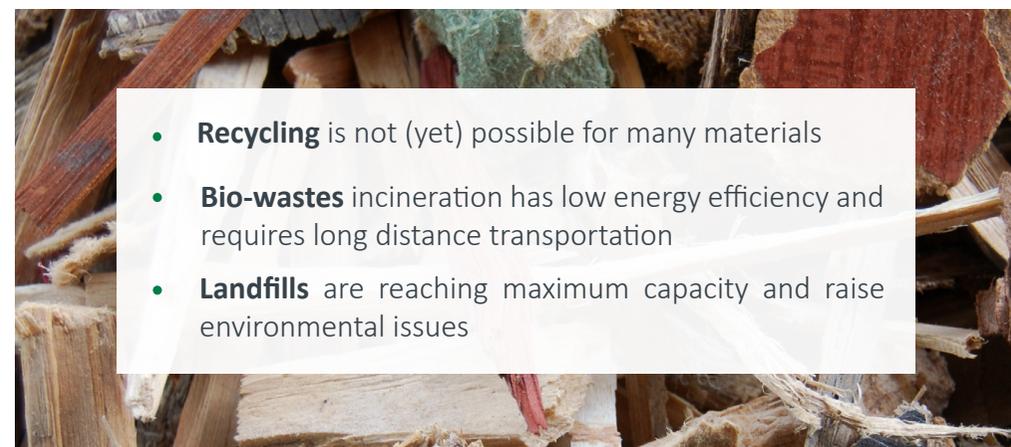


Xylowatt developed the multi-stage downdraft **NOTAR[®] air-gasifier** to convert polluted and / or high mineral content biomass and waste into a clean combustible gas **with no tar residues**.

TWO CRITICAL ENVIRONMENTAL ISSUES:

1. COSTLY AND POLLUTING WASTE

High-mineral content waste and recycled solid biomass pollute the environment yet they are difficult to get rid of. Why?



2. HIGH CO₂ EMISSIONS FROM INDUSTRY

Energy-intensive industries are major producers of CO₂ emissions. Since the **EU Emissions Trading System (ETS)** came into effect in 2013, these industries must purchase emission allowances or implement complementary solutions to reduce their CO₂ emissions.

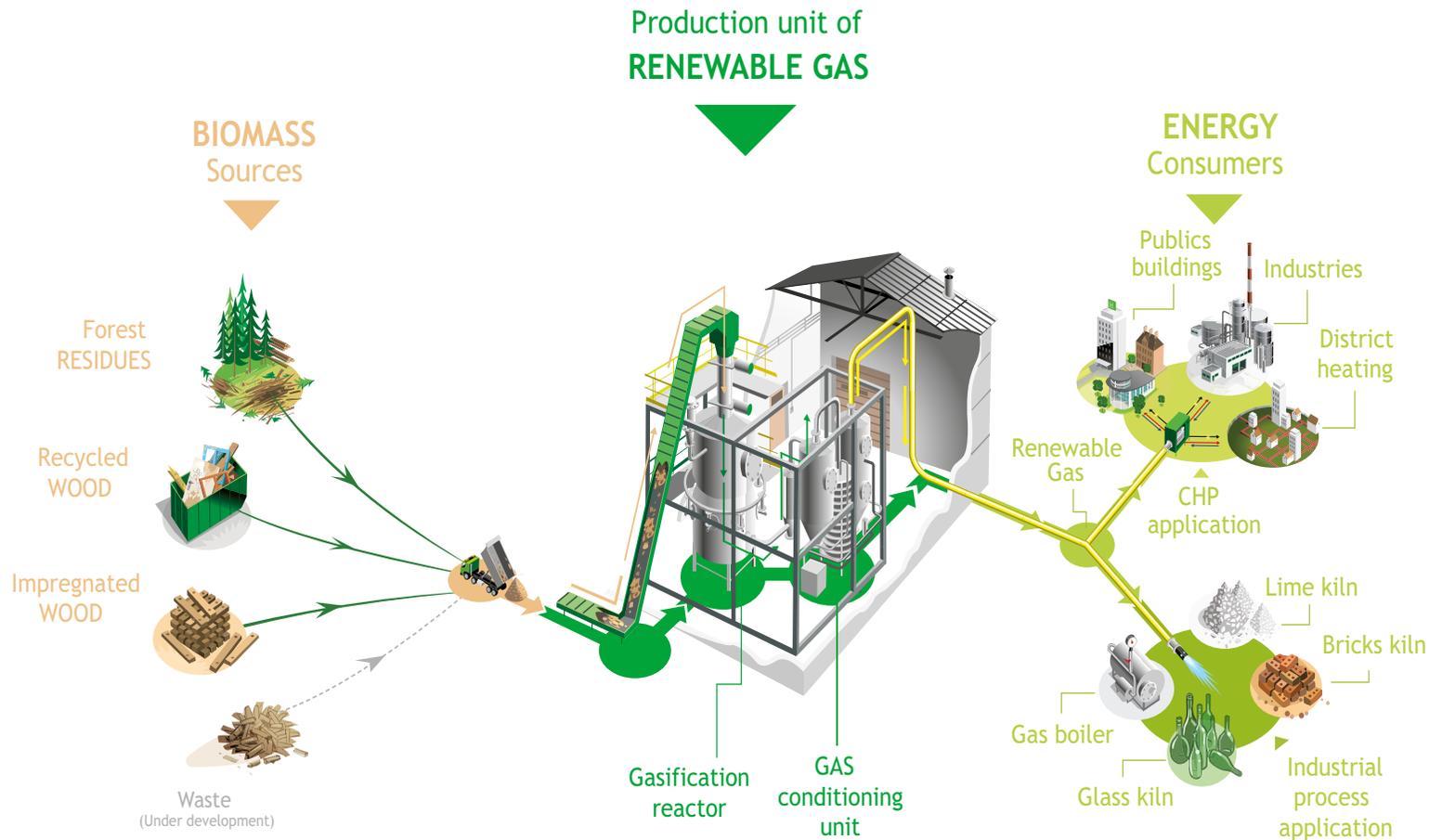


TRANSFORM BIO-WASTES INTO LOCALLY PRODUCED SYNGAS THROUGH **SMALL-SCALE GASIFICATION**

Suited for fossil fuel substitution in energy-intensive industries

xW

XYLOWATT sa



Objectives of the Life OxyUp project

- Upscale and validation of a small-scale **biomass gasification unit** with a syngas output of 1.8MW.
- Optimization of gas combustion conditions and maximization of **fossil fuel substitution** in industrial applications combined to cogeneration units.
- Validate the effective **gasification of various sources** of bio-wastes on a specifically designed FLEXI prototype unit with the focus on local valorisation of difficult biomass.

BIO-WASTES GASIFICATION is the thermochemical conversion of carbon-containing materials into a combustible syngas. This syngas can be used in combined heat and power applications or as direct **substitute to fossil fuel in industrial applications**.

THE NOTAR® TECHNOLOGY generates less CO₂ emissions (15 kgCO₂/MWhp) than fossil fuels units with high carbon emissions (251 to 385 kgCO₂/MWhp). This equals to **90% reduction of CO₂ emissions**.