



Torr-Coal Group

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Commercialisation
Torr-Coal
torrefaction technology



Introduction

- **Worldwide increasing demand for energy**
- **Increasing demand for sustainable energy**
- **Reduction of CO₂**
- **Use of biomass**
- **Many biomass conversion technologies**



Our answer

- **Choice for torrefaction of a**
 - **wide range of biomass.**
- **Development of a new process with**
 - **Use of existing machines to**
 - **Lower the present risks of an innovative process.**



Our answer

- **Start RDE in 2005**
- **First torrefaction of SRF**
 - Worldwide patents
- **Second torrefaction of woodchips**



TORR COAL

- **Start building first production line in July 2009 for the torrefaction of woodchips. Capacity input 76.000 t/y and output 35.000 t/y**
- **In operation since October 2010.**
- **Permits for second line received.**





Torrefaction process

- **Pre-treatment**
- **Torrefaction**
- **Final treatment**



Challenges in general

- **Torrefaction unknown**
- **Legal framework**
- **Each country own regulations**
- **No common understanding of product, process and sustainability**
- **Supply chain raw materials**



Challenges process

- **Different types of raw materials**
- **Changing process conditions**
- **Hot spots**
- **Various requirements customers**



Thank you for your attention



TORR COAL



Contact

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