

## ABSTRACT

TITLE

### Global trends in Biomass to Energy

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#### Global trends in Biomass to Energy

Co-firing of biomass at coal power plants, as well as stand-alone biomass combustion plants (CHP or electricity only) can utilize many feedstocks other than wood chips and wood pellets. During various assignments across the world, COWI experts have identified a range of different biomass feedstocks from agriculture, forestry and agro-industry, which are suitable for bioenergy projects. This includes straw, stalks, shells, husk, cortex, and other residual biomass from a range of different crops. The available quantities and the characteristics of the feedstocks depend on local circumstances, such as harvesting practices, alternative uses, and the regulatory framework, but certain common lessons can be drawn across the different localities.

In this presentation, we will give an introduction to the different feedstocks, their potential as bioenergy fuel, the supply chain considerations, which must be taken into account to utilize these, as well as issues pertaining to sustainable use of the feedstocks. Furthermore, we will present different concepts for utilization of biomass residues, especially stand-alone biomass power plants and co-firing in coal-fired power plants. A number of showcases with different technologies, sizes, and biomass fuels from countries like Mexico, Pakistan, Namibia and Denmark will be presented.

Finally, the International Finance Corporation guidebook "Converting Biomass to Energy – A guide for Developers and Investors", which we have authored, will be briefly presented.