

OUR SERVICES

End-to-end support for conventional power plant transformation and revitalization

We help utilities and plant owners transform existing coal-fired assets into flexible, lower-emission and future-ready multi-fuel power plants – while maintaining capacity, reliability and system value.

1 ASSESS & ANALYZE

Existing Plant Assessment



- Technical due diligence
- Condition & remaining lifetime analysis
- Operational performance & bottleneck review
- Environmental baseline

2 DEVELOP STRATEGIES

Fuel & Concept Development



- Multi-fuel & co-firing strategies
- Waste, biomass, sludge, eco-fuels & gas integration
- Fuel supply & logistics concepts
- Capacity & operational flexibility concepts

3 SIMULATE & EVALUATE

Technical & Environmental Analysis



- Thermodynamic modelling
- Combustion & co-firing simulation
- Emissions modelling
- Performance & efficiency concepts
- Multiple scenario comparison

4 ECONOMIC & FINANCIAL EVALUATION



- CAPEX / OPEX assessment
- Fuel & energy price forecasting
- CO₂ cost & sensitivity analysis
- Business case & bankability
- Lifecycle cost evaluation

5 REGULATORY & PERMITTING READINESS



- Regulatory gap analysis
- BAT / BREF compliance
- Environmental permitting support
- Waste management integration & permitting pathway

6 IMPLEMENTATION SUPPORT



- Concept to FEED support
- EPC & tender strategy
- Stakeholder & authority coordination
- Project management & implementation advisory

OUR APPROACH



ANALYZE

We assess your assets, data and operational context.



DEVELOP

We develop multiple technically feasible and sustainable scenarios.



SIMULATE

We model, simulate and compare performance, emissions and costs.



ALIGN

We align technical, regulatory, commercial and stakeholder requirements.



PREPARE

We prepare clear recommendations, implementation roadmaps and next steps.

OUR OBJECTIVE



Reduce emissions and coal dependency



Maintain generation capacity & reliability



Integrate circular and sustainable fuels



Create economic and regulatory value

TRANSFORMATION PATHWAYS – EXAMPLE SCENARIOS



COAL ONLY
Reference scenario



COAL + WASTE / BIOMASS
Co-firing concept



GAS + WASTE / BIOMASS
Lower emission concept



GAS + BIOMASS / SLUDGE / ECO-FUELS
Hybrid concept



DEDICATED WASTE TO ENERGY (WtE)
Waste-to-Energy concept



POTENTIAL FUELS & FEEDSTOCKS



RDF / SRF



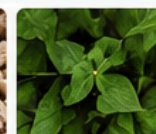
SEWAGE SLUDGE



BIOMASS
(WOOD CHIPS)



BIOMASS
(PELLETS)



ECO-FUELS



NATURAL GAS

YOUR BENEFITS



Lower emissions & regulatory compliance



Access to alternative & circular fuel streams



Economic efficiency & investment security



Reliable, flexible & future-ready operations



Goduni

Engineering the transition. Preserving capacity. Creating value.

www.goduni.com