

Selected References – Consultancy and Engineering

Green Field Photovoltaic Plant with a Capacity of min. 7 MWp

Project development up to the realisation stage on a former military training area in Saxony.

- Technical planning and tendering
- Permit planning (B-Plan)
- Economic feasibility
- Building preparation and grid connection
- Financing through KWA Contracting AG
- Grid connection planned for the end of 2011



2010-2011

Technical Assessment of Supplier for CHP Engine Technology

Supporting private equity funds in the framework of the company's audit as a basis for an investment decision

- Short assessment of the market and its development for biogas cogeneration unit plants in Germany and Europe
- Specifications and USPs of the suppliers for CHP-unit-technology
- Perspectives for engine manufacturers and CHP-unit-packager
- Analysis of competitors on the biogas CHP unit market



Client: German Private Equity Fonds

2010

Feasibility Study for an Industrial USE of CHP Based on a Micogasturbine

- Energy balance of steam supply
- Load profile analysis
- Technical concept of realization of the CHP
- Integration of the steam- and low temperature use
- Costing and profitability analysis



Client: production plant in the textile industry

2010

Selected References – Consultancy and Engineering

BlmschG- Permits investigation for a Biogas Plant – Permission Process Details

- Evaluation of the permission preliminary answer for a 1 MWe-biogas plant focusing on influencing project planing and profitability



Client: German Energy Company

2010

Expansion and Change of a District Heat Grid from Steam to Water and Modernisation and Change to Sustainable Heating Solutions

- Feasibility Analysis and variation comparison of different sustainable supply solutions (wood heating plants, cogeneration units, green gas)
- Technical, economic and permission processing evaluation of the realisation options



Client: AG Bad Neuenahr & Ahrtalwerke

2010/2011

Holzheizkraftwerk auf ORC-Basis

Site Identification and Feasibility Study for an ORC-Wood CHP in the Ruhr Region

- Site analysis focusing on permission procedures, logistics, district heating and acceptance by the population
- Biomass availabilities and logistics
- Technical pre-planing
- Profitability



Client: two German Energy Companies

2010/2011

Sustainable energy supply for an expansion of a shopping centre - conceptual study

- Comparison between possible energy supply scenarios (heat, cold, electricity) for an expansion of a shopping centre
- Consideration of further expansion plans within the city's development plan
- Technical and economic analysis of different supply alternatives (CHP, Gasturbines or CHP-engines)



Client: German local utility

2010

Selected References – Consultancy and Engineering

Engineering services and consultancy to realise a 500kWe-biogas plant

- System planning and tender management
- Support of EPC-contract negotiation and awarding
- Construction supervision
- Support of commissioning
- Providing operational assistance

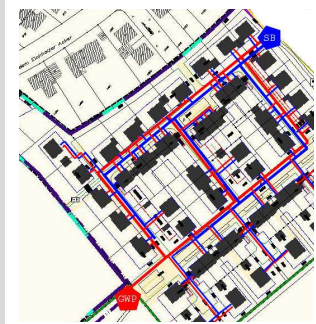


Client: Freiherr von Eltz'sche Verwaltung

2009-2010

Innovative semi-central heat pump system for new housing development area "Eichholz " in Wesseling - techno-economic feasibility and implementation support

- Feasibility analysis and comparison of different renewable energy supply solutions
- Draft and preliminary planning of a unique semi-central heat pump solution on a basis of ground water supplying heat to up to 200 tenements
- Assessment of the technical, economic, and permitting aspects of the different system solutions
- Operating costs and risk analysis
- Public relation and subsidy management



Client: Stadtwerke Wesseling

2010

Techno-economic feasibility, planning and construction monitoring of industrial commercial photovoltaic plant in Köln-Wahn

- Feasibility analysis and comparison of variations of different systems
- preliminary planning of the construction of the PV plant in difficult structural settings
- consulting in respect of „self supply“ following § 33 EEG as well as upcoming EEG changes with all variations compared
- Planning, request for preliminary planning permission and construction monitoring of the PV plant



Client: Freiherr von Eltz'sche Verwaltung

2010

Selected References – Consultancy and Engineering

Set-up of the Effnet Rheinland (i.Gr.)“ to provide consultancy in energy efficiency for the region Köln/Aachen within the 30-Pilot-Netzwerke project

- Co-operating for the set-up of an energy efficiency network of 15 industrial companies in the Aachen-Cologne region
- Providing energy efficiency consultancy to the network participants in respect of all cross section technologies using the certified LEEN methodology
- Substantial contribution to the regular meetings of the network
- Monitoring of the achieved energy efficiency achievements
- Technical hotline



Client: Fraunhofer ISI, Bundesumweltministerium

2010

Development of a sustainable airport

- Global overview on „green“ airport initiatives
- Definition of sustainability: economy, ecology, social
- Account of possible goals and the necessary steps towards a sustainable airport
- Outline of measures, activities and projects (type of activity, cost-efficiency, amortisation, timeframe, image: economic or innovative)



Client: German local utility

2010

Technical and economical feasibility of the production of biodiesel from Jatropha in the Dominican Republic

- Jatropha oil and use in diesel engines: costs of conversion
- Biodiesel production: cost analysis of small and middle-sized plants for biodiesel production from Jatropha in the Dominican Republic
- Global prices of Jatropha oil and its production features
- Technical feasibility and risk analysis of biodiesel production from Jatropha oil
- GHG Analysis



Client: SQ Consult

2010

Selected References – Consultancy and Engineering

Sustainable local heat supply for municipal buildings with modern wood chip based heating plants in Rhineland-Palatinate

Engineering services for the construction of two biomass heating plants with thermal capacities of 500 kW and 980 kW

- License planning and detailed design
- Tendering management and contract awarding
- Construction supervision and monitoring



Client: German local utility

2010

Sustainable local heat supply for a housing area with a biomass heating in Bremen

Engineering services for the construction of a wood chip based heating plant with 900 kW thermal power

- Tendering management and contract awarding
- Construction supervision and monitoring



Client: German Energy Contracting Company

2010

Sustainable local heat supply for an industrial site with combined heat and power

Engineering services for the realisation of a local district heating network from a biogas-driven CHP engine to an industrial heating grid

- License planning and detailed design
- Tendering management and contract awarding
- Construction supervision and monitoring



Client: German Energy Contracting Company

2010

Selected References – Consultancy and Engineering

Seminars on the Financing of Renewable Energy Projects in South Africa and Mexico

Knowhow-transfer on the financing of renewable energy projects in the framework of the TREE-Projects of the Bundesministeriums für Umwelt, Naturschutz und Reaktorsicherheit (BMU)

- Realisation of seminars on project financing for biogas , photovoltaic plants and solar thermal energy for project developers and institutions of the banking sector in South Africa and Mexico



Client: RENAC AG

2010

Local Heat Grid for two Wood Heating Plants in the South of the Eifel Region

Planning services for the realisation of two local heat grids for wood heating plants

- Preperation and support of the tendering and contract award process
- Permit and execution planning
- Bauleitung, Objektbetreuung und Dokumentation



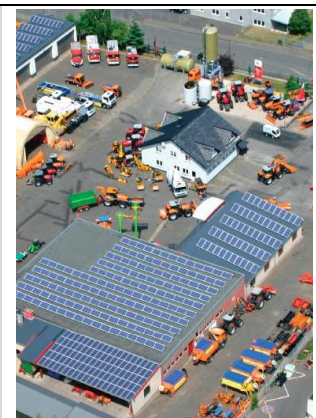
Client: German local utility

2010

Solar Energy from the Eifel Region

Technical and Economic Feasibility, Planning and Construction Supervision of a 156 KWp Photovoltaic Plant in Prüm Dausfeld

- Feasibility and comparison of several versions for three distinct mounting systems
- Pre-planning of the installation of the photovoltaic system under difficult static circumstances
- Consulting for complete feeding into the grid, the coming up changes in the EEG regulations, and also taking into account the different versions
- Planning, acquisition, provider choice (German moduls) and construction supervision of the photovoltaic systems



Client: Private company in the engineering field for agriculture, communities and airports

2010