

Risk Management and Energy Crop Projects

- A Senior Lenders' Perspective



A presentation for the Biomass Conference at Queen's College, Cambridge – organised by RPA

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Senior Lenders' Perspective: What is classified as a „Main Risk“ in a biomass project?

- **Sponsor / Equity Commitment**
.. .. Experience, time of equity injection, stand-by equity
- **Construction Phase**
.... EPC contract versus Multi Contracting, track record of EPC contractor
- **Operating Phase**
..... Operator experience, technical issues, long term availability levels, maintenance
- **Offtake Arrangements**
..... Financial strength of Offtaker, tenor, “remuneration” package
- ***Fuel Supply Risk***

Fuel Supply Risk – Due Diligence Process:

For which kind of questions do Senior Lenders need satisfying answers?

Quantity

- enough acreage available in a viable catchments area?
- is the crop grown only for fuel?
- do any external economic factors impact the suppliers motivation to plant the crop?
- market study available?

Logistics & Transport Costs

- Can the crop be easily sourced and transported to the plant site (road, ships, rail)?
- Are transport costs quantifiable for a long period?

Fuel Costs

If “established” fuel source, independent market study is must

- Lenders will have to run sensitivities to check on robustness of project assumptions

If no established fuel supply chain, case by case assessment

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Reliability of Suppliers

- Sophisticated enough to understand benefits of long term (supply) relationships?
- Substantial enough to be worth pursuing for breach of contract?

Alternative Fuels

- Technically feasible?
- Readily available in the catchments area?

Storage Risks

- Protection from moisture?
- Protection from arson?
- Accessibility of storage sites in adverse weather conditions?

Senior Lenders' Perspective:

A perfect solution to mitigate the Fuel Supply Risk could be a combination of the following:

- **Long term, fixed price fuel supply contract** with
- **penalties for failure** to supply contract quantity/quality but
- **Incentives for suppliers** (shareholding?) for excellent performance
- **Focus** on contracts with **fewer/larger supplies**
- **Availability** of back-up fuel supply (via spot market)
- **Certainty** of (and accurate calculations for) logistic costs in Financial Model

Senior Lenders' Perspective

- General Market Dynamics / Outlook:

- Excellent growth potential for Renewable Energy in Europe (high market liquidity)
- Some areas in the Renewable Energy Market are more mature than others (on-shore wind)
- Well structured biomass deals will attract liquidity / lenders (at appropriate margins)
- Difficult to see projects being financed if there is *no* established **Fuel Supply Chain (but case by case decision)**

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Biomass projects will be
another piece in the puzzle to
combat climate change!!

Thank You

Klaus Frietsch

Tel: +44 (0)207 573 8433

E-

Mail: klaus.frietsch@hvbeurope.com