

CREATIVE CALORIES

Opportunities and Options for Coal Suppliers and Consumers

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CONTENT (5 x C)

- COAL in and to INDIA
- COMMERCIAL BEHAVIOUR
- CALORIFIC VALUE
- CARBON CONTROL
- COMMUNICATION

COAL in INDIA

- access to electricity increasing
- coal need for power growing strongly
- domestic coal production growing slower
- coal imports growing faster
- imports soon exceeding 100 mtpa

COAL to INDIA

Likely actual focus of coal importers:

- competitive price
- security of supply
- sustainability

Is this the most advantageous following order,
now and for the future?

COMMERCIAL BEHAVIOUR

Gains from creative ways of dealing with coal

- relationship
- delivery
- pricing
- reliability

COMMERCIAL BEHAVIOUR

RELATIONSHIP

- “equity coal” from owned mines abroad
- long term contract (security of supply)
- mid term/annual contract
- spot (no security of supply)

COMMERCIAL BEHAVIOUR

DELIVERY

Supply by coal producer or coal trader:

- FOB, in country of production, freight by buyer
- CIF, transfer of title in loading port
- DES, transfer of title in discharge port

COMMERCIAL BEHAVIOUR

PRICING

- spot, per cargo
- term, fixed for period e.g. annually negotiated
- term, linked to production cost plus margin
- term, linked to index acceptable to both sides
- term, same, but with bottom and ceiling of price

COMMERCIAL BEHAVIOUR

RELIABILITY

- taking advantages only? (is that possible?)
- cooperation only when this suits
- cooperation for better and worse
- loyalty both ways brings reliability
- meeting obligations rewards long term

CALORIFIC VALUE

Opportunities of influencing cv of coal/cost of fuel

- cv level
- blending
- boiler feed
- flexibility

CALORIFIC VALUE

CV LEVEL

- high cv: high price with bonus for supplier?
opportunity of blending
blending with domestic coal?
- low cv: low price with discount for buyer?
higher logistic cost per GJ
- look at total chain

CALORIFIC VALUE

BLENDING

- with: other coal, imported or domestic
other solid fuel petcoke, biomass, waste
- where: in port, of loading or discharge
at power plant
- impact: possibly lower cost per GJ in boiler
possibly environmental advantages

CALORIFIC VALUE

BOILER FEED

- stable same quality of fuel brings best efficiency
- quality variations may affect boiler efficiency
- good cooperation with suppliers and/or blending may enhance solid fuel stability

CALORIFIC VALUE

FLEXIBILITY

- coal suppliers value flexibility of quality and time
- coal buyers may be happy to grant flexibility
- consider to agree multi-origin GigaJoule Deals
- on indexed price with upto 10% discount

CARBON CONTROL

Methodologies to reduce coal's carbon footprint

- India's climate targets
- type of solid fuel
- biomass in India
- biomass challenges
- CER's

CARBON CONTROL

INDIA'S CLIMATE TARGETS

- Copenhagen's 2°C climate goal for this century
- emission intensity of GDP in 2020 to be 20-25% below 2005 level
- emission reduction by electricity sector in 5-year plan 2007-2012

CARBON CONTROL

TYPE OF SOLID FUEL

- coal only: full CO₂ emissions and likely in India no Carbon Capture and Storage this decade
- coal blended with petcoke or waste: no CO₂ reduction (no renewable fuels)
- coal blended with biomass: CO₂ reduction, since biomass considered to be CO₂ neutral

CARBON CONTROL

BIOMASS IN INDIA

- especially crop residues e.g. sugarcane bagasse, rice husk, rape seed meal
- estimated annual production over 300 mtpa
- equivalent of some 200mt of coal!
- projects of power from biomass so far mainly in 2-20MW units of manufacturing industry

CARBON CONTROL

BIOMASS CHALLENGES

- identifying the opportunities
- organising the collection
- pelletising the product (where possible)
- optimising the transport
- avoiding competition food – energy (crops)

CARBON CONTROL

CERTIFIED EMISSION REDUCTIONS

- under UN Clean Development Mechanism
- biomass as fuel may create CER's
- income by selling CER's
- reduces dependency of coal
- helps creating sustainable/green image

COMMUNICATION

Positively influencing the acceptability of coal as well as your success as coal user/buyer

- public opinion
- working together

COMMUNICATION

PUBLIC OPINION

- tell everyone what you do, why , how
- inform on your concerns and solutions
- develop sustainable programs
- consider to produce “green” power

COMMUNICATION

WORKING TOGETHER

- partnerships of coal suppliers and buyers
- good deals both sides by clear strategies
- cooperation in good and bad times
- strategic alliances may make you stronger

CLOSING REMARKS

SO CALORIES HELP CREATING SUCCESS

- many opportunities/options available to you
 - make best suitable selection/combination
 - exploit your specific skills and situation
 - develop realistic long term strategy/tactics
 - communicate clear targets in your markets
 - create your own competitive edge
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- COAL remains a great SOURCE of POWER

Thank you for your attention
Please discuss

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