



East Harbour Bioenergy

East Harbour is an energy-focused consulting firm that undertakes commercial and strategic projects for a wide range of businesses and organisations. We have strong technical and commercial capability and experience, based on over 10 years of assignments for a diverse range of industrial and commercial energy users.

Our specific expertise includes developing energy-related strategies, implementing energy projects, introducing new technologies, and assisting customers to effect utilisation improvements and reductions in energy use, carbon emissions and associated costs. We have particular capability in financial and commercial analysis and are familiar with many types of project structures, including BOOTs and BOOs, and in structuring agreements on a win-win basis.

Our bioenergy related focus areas include:

- Commercial advice, strategy development, risk assessment, and business planning
- Feasibility studies: covering heat and electricity generation and use, including the use of all fuels and a range of new technologies
- Fuel and resource assessment and auditing, including cost assessment, benchmarking and application/solution development
- Emission assessment, and mitigation and cost reduction strategy development
- Fuel and energy supply and contracting, and price and supply forecasting; including biomass, fuel crops, geothermal and all hydrocarbon fuels
- Commercialisation of energy projects, including financial assessment, business case development, consenting, and project management

The key to bioenergy projects:

East Harbour sees the key to commercially successful bioenergy projects in maximizing the benefits from of a range of parameters: fuel or feedstock quality and concentration, the scale of the operation, the optimisation of revenues streams (i.e. in the gas of digestion primarily fertilizer, and electricity and heat from methane generation) and securing a range of secondary benefits.

Digestion technology itself is well proven and extensively used overseas, with the processes and costs well established. ***The development of a sound commercial outcome is therefore primarily a commercial and economic issue, rather than technical one.***

East Harbour works with specialist engineers to establish system requirements and costs as part of the business case development, and has no preconceptions in terms of technology or system selection.

Some East Harbour biogas projects:

Recent projects carried out by East Harbour, or its team members, include:

- Feasibility of piggery effluent digestion for a medium sized pig breeding operation
- Fruit and vegetable residue to energy study (anaerobic digestion) for Food Hawkes Bay (resource assessment, and application assessment)
- Chicken litter (anaerobic digestion) to energy study for a group of chicken farmers

- Technical and economic assessments of a piggery-based biogas project for potential investors
- Solution development, economic assessment, construction and ownership and operational experience on a landfill gas to energy project (and involvement in assessments of a range of other similar projects)

East Harbour’s full range of services:

East Harbour and its staff have worked across a range of disciplines and industries. Areas in which the business works include:

- Commercial strategy, due diligence, optimisation studies and investment planning
- Renewable energy project development, e.g. wind, biomass, bio-gas, geothermal
- Commercial, technical and environmental project evaluation
- Technical and commercial assessment of fuel crop options and applications
- Energy advice, monitoring, management, auditing and advisory services
- Advice on energy pricing, supply, billing and network charges
- Business planning, project management and implementation
- Commercial electricity supply, pricing and contract negotiation
- Commercial project facilitation; assistance with partnering and project financing
- Policy and strategic advice: addressing corporate, local, and national government
- Executive and project manager leasing
- Resource consent advice and planning

East Harbour staff with effluent digestion experience include:

Mike Suggate, Director: Mike’s experience includes project management in energy project construction and mechanical contracting, and a range of management positions in energy and other companies. Most recently Mike led the start up and establishment of Energy for Industry which invested in a range of energy facilities fuelled on wood-waste, industrial process wastes, biomass, coal and natural and landfill gas; building, owning and operating them and supplying heat, electricity and other services to the host businesses.

Brian Cox, Director: Brian has 30 years of experience in large infrastructure and energy projects and considerable bioenergy experience. His primary role has been the management of investigations to evaluate the technical, environmental and economic viability of new business opportunities, and where appropriate following them through to subsequent phases of commercial development.

Brian has experience in most forms of electricity generation and an extensive general knowledge of the energy industry. He has managed the commercial development of a number of industrial energy facility projects. He is executive officer of the Bioenergy association.

Barrie Wilkinson: Barrie has over 30 years of practical industry experience with a chemical and process engineering focus. Barrie has a strong analytical capability and has evaluated the costs of energy from all forms of energy including coal and renewable sources.

Please contact us for further information or with any enquiries that you may have.

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