

Investment Decision Costs/Savings Checklist A Detailed List ...

| Initial Investment Costs | |
|---------------------------------|-------------------------------|
| Planning/Engineering | Utility Systems & Connections |
| Permitting | Start-up/Training |
| Site Preparation | Contingency |
| Purchased Equipment | (Salvage Value) |
| Working Capital | |

| Annual Operating Costs & Savings | | |
|---|---|--|
| Operating Inputs | <u>Waste Management*</u> | <u>Less Tangibles</u> |
| Operating Input Mat | Waste Management Materials | Productivity |
| Operating Input Energy | Waste Management Energy | Future Regulation |
| Operating Input Labour | Waste Management Labour | Potential Liability |
| Operating Floor Space | Waste Management Floor Space | Insurance |
| Operating Taxes & Depreciation | Waste Management Fees | Company Image |
| Operating Cost of Capital | Waste Management Taxes & Depreciation | <u>Revenues</u> |
| | Waste Management Cost of Capital | |
| | * Waste Management includes waste handling, recycling, treatment, disposal, and regulatory compliance | Product Sales By-product Sales Pollution Credits |

Investment Decision Cost/Savings Checklist (pg.2)

A Detailed List ...

| Initial Investment Costs | | |
|---|---|--|
| <p>Planning/Engineering (include materials & labour)</p> <ul style="list-style-type: none"> • planning • design/engineering • accounting • procurement <p>Permitting (include materials, labour, permit fees)</p> <ul style="list-style-type: none"> • siting permits • construction permits • environmental permits • contractor/consultant fees <p>Site Preparation (include materials & labour)</p> <ul style="list-style-type: none"> • land purchase • equipment rental • demolition & clearing • old equipment/rubbish disposal • grading, landscaping • building construction | <p>Purchased Equipment (include taxes, delivery, insurance, & installation costs)</p> <ul style="list-style-type: none"> • process equipment • monitoring equipment • protective/safety equipment • materials handling equipment • storage equipment • laboratory equipment • transportation equipment • waste handling equipment • rework/recycle equipment • waste treatment equipment • initial spare parts <p>Working Capital</p> <ul style="list-style-type: none"> • raw materials inventory • product inventory • accounts receivable/payable • taxes payable • cash | <p>Utility Systems and Connections (include materials & labour)</p> <ul style="list-style-type: none"> • electricity • fuel • heating • cooling/refrigeration • water • steam • sewerage • plant air • inert gas <p>Start-up Training (include materials & labour)</p> <ul style="list-style-type: none"> • process/equipment training • safety/environmental training • test runs <p>Contingency</p> <p>Salvage Value</p> |

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| Annual Operating Costs & Savings: Operating Inputs | | |
|---|---|--|
| <p>Operating Input Materials</p> <ul style="list-style-type: none"> • raw materials • solvents • catalysts • water • gases • office supplies • equipment maintenance supplies • facility maintenance supplies <p>Operating Input Energy</p> <ul style="list-style-type: none"> • electricity • natural gas • coal • oil • wood/biomass • district heating & cooling • fuel additives • coolants | <p>Operating Input Labour (including benefits)</p> <ul style="list-style-type: none"> • equipment operation • supervision • inspection/QA/QC • maintenance • design/engineering • laboratory • procurement • logistics • sales/marketing • financial/accounting • clerical • management <p>Operating Floor Space</p> <ul style="list-style-type: none"> • rent • mortgage | <p>Operating Depreciation & Taxes</p> <ul style="list-style-type: none"> • depreciation of equipment • and assets • taxes • tax credits <p>Operating Cost of Capital</p> <ul style="list-style-type: none"> • financing costs • investment opportunity |

Investment Decision Cost/Savings Checklist (pg.3)

A Detailed List ...

| Annual Operating Costs & Savings: Waste Management (Waste Handling, Recycling, Treatment, Disposal, and Regulatory Compliance) | | |
|---|--|--|
| Waste Management Materials <ul style="list-style-type: none"> • raw materials • solvents • catalysts • water • gases • office supplies • protective equipment • spill response equipment • containers • labels Waste Management Energy <ul style="list-style-type: none"> • electricity • natural gas • coal • oil • wood/biomass • district heating & cooling • fuel additives • coolants | Waste Management Labour <ul style="list-style-type: none"> • equipment operation • supervision • inspection/QA/QC • environmental permitting • environmental training • sampling/monitoring • medical surveillance • waste collection & handling • waste labelling • spill clean-up • recordkeeping • regulatory reporting • inspections Waste Management Floor Space <ul style="list-style-type: none"> • rent • mortgage | Waste Management Fees <ul style="list-style-type: none"> • permit fees • emissions fees • disposal fees • legal fees • laboratory fees • training fees Waste Management <ul style="list-style-type: none"> • Depreciation & Taxes • depreciation of equipment • and assets • taxes • tax credits Waste Management <ul style="list-style-type: none"> • Cost of Capital • financing costs • investment opportunity |

| Annual Operating Costs & Savings Less Tangibles | | |
|---|--|--|
| Productivity <ul style="list-style-type: none"> • product quality • production throughput • production flexibility • production reliability • worker absenteeism • worker morale Future Regulation <ul style="list-style-type: none"> • stricter enforcement of current regulations • modification of current regulations • new regulations | Potential Liability <ul style="list-style-type: none"> • business shutdown costs • non-compliance fines • site clean-up costs • legal costs • personal injury claims • property damage claims • natural resource damage claims | Insurance <ul style="list-style-type: none"> • worker's health insurance • workers' compensation • general property/fire insurance • general liability/hazard • environmental liability • unemployment Company Image <ul style="list-style-type: none"> • access to customers/markets • access to financing • public relations |

| Annual Operating Costs & Savings Revenues | | |
|---|--|--|
| <ul style="list-style-type: none"> • product sales | <ul style="list-style-type: none"> • by-product sales | <ul style="list-style-type: none"> • marketable pollution credits |