Ctrl and + or - to zoom in our out (or Ctrl and mousewheel); left and right arrows to scroll horizontally (or Shift and mousewheel); up and down arrows to scroll up and down (or mousewheel)

COMPARING TWO OPTIONS FOR SUNRISE AND TROUBADOUR

THE WICKHAM POINT OPTION AND ITS CONSEQUENCES REGARDING INCOME

The option is to recondition the Bayu Undan FSO and transfer it to the Sunrise field after depletion of the Bayu Undan liquids; to build a 207 km shallow water pipeline spur to the Bayu Undan-Wickham Point pipeline; to share the Wickham Point LNG plant when Bayu Undan gas production drops, thus extending gas production at Bayu Undan several years; and to use all the LNG plant capacity when the Bayu Undan gas is depleted.

Technical feasibility:
elevated

Political feasibility:
very high

Shallow water pipeline
207 km

Highly industrialized
environment. Highly educated workforce.

Large existing
infrastructure, port, airports, roads

Title validity:
existing, very good

Professionalism:
very high

Risk of
territorial dispute
for Australia: status quo, or gain, back to 82%

Consequence of
Sunrise procrastination
for Australia and owners: indifferent

Australian GDP
US$1250 billion

Field owners current
annual revenue
US$600 billion

Cost of assets and infrastructure
US$4 billion

Total cost
US$4.5 billion

Cost of fields
US$0.5 billion

Overall risk:
extremely low

Consequencet of failure:
negligible

Cost of failure in relation to owner annual revenue
and national GDP
0.25%

Lead-time: 2 to 3 years

Resource value in current market
(crude oil US$45 per barrel):
US$35 billion

Bayu Undan
extended revenue:
US$1.5 billion

Field lifetime
30 years

Assumed financial cost:
6.0% per annum

Required financial recovery
term: 7 years

Lifetime cashflow:
US$20 billion

CMATS
invalidated

CMATS
valid

Tax paid to East Timor:
US$3 billion

Tax paid to Australia:
US$13 billion

Tax paid to East Timor:
US$8 billion

Tax paid to Australia:
US$8 billion

*Project **breaks even** if crude oil **at or above US$25 per barrel until 2050***
(Average crude oil price over last 35 years was US$56)
(constant 2015 US dollars)

*If crude oil **at or above US$85 per barrel until 2050***
*lifetime cashflow is **US$50 billion***
At US$100 per barrel,
*return on investment is **45%** annual*

Operator profit:
US$4 billion

Overall profit:
US$20 billion

THE TASI MANE OPTION AND ITS CONSEQUENCES REGARDING INCOME

The option assumes East Timor has 100% jurisdiction over Sunrise. The option is to builtd all infrastructure, ports, roads, airports, LNG plant and ultradeep water pipeline from the ground up.The option allows Bayu Undan to be shut down prematurely, once gas production falls under the economic threshold for the Wickham Point LNG plant. The option allows the Wickham Point LNG plant to be used for other projects such as Evans Shoals, that would successfully compete with Sunrise for funds and market.

Technical feasibility:
extremely low

Political feasibility:
very low to inexistent

Ultradeep water pipeline
287 km

Totally un-industrialized
environment. Highly uneducated workforce.

Very poor infrastructure, no existing port, very bad roads, small airport

Title validity:
inexistent, questionable to very bad

Professionalism:
very low to inexistent

Risk of
territorial dispute for
East Timor: loss of status quo, back to 18%

Consequence of
Sunrise procrastination
for East Timor: highly highly detrimental

East Timor GDP
after Bayu Undan
US$0.30 to US$0.45 billion

Potential field owner current
annual revenue
US$0.01 billion

Cost of assets and infrastructure
US$20 billion

Total cost
US$24 billion

Cost of field acquisition
US$4 billion

Overall risk:
overwhelming

Consequencet of failure:
catastrophic

Cost of failure in relation to owner annual revenue
and national GDP:
between 6000% and 12000%

Lead-time: 7 to 10 years

Bayu Undan
shut down

Resource value in current market
(crude oil US$45 per barrel):
US$35 billion

Field lifetime:
30 years

Assumed financial cost:
6.0% per annum

Required minimum financial recovery
term: 30 years

Lifetime cashflow **if project succeeds technically**:
US$28 billion **loss**

Lifetime cashflow **if project fails technically:**
US$55 billion **loss**
(including loss of all revenue)

*If technically successful, project **breaks even** if crude oil **at or above US$85 per barrel until 2050***
***At US$100 per barrel,** return on investment is **3%** annual*
(Average crude oil price over last 35 years was US$56)

Tax paid to East Timor (100% jurisdiction):
US$2 billion

Tax paid to East Timor (100% jurisdiction):
nil

Operator **loss**:
US$30 billion

Operator **loss:**
US$55 billion
(including loss of all revenue)

Overall **loss**: US$28 billion
(60 years of non-petroleum GDP)

Overall **loss**: US$55 billion
(120 years of non-petroleum GDP)

Long term jobs created:
320
(Wickham Point current: 160)

Loss for each East Timorese
man, woman and child:
US$25,000

Loss for each East Timorese
man, woman and child:
US$50,000

Overall loss per
long term job:
US$88 million

Years of current East Timorese
middle management salary
equivalent to overall loss per long term job:
3,000 (three thousand years)