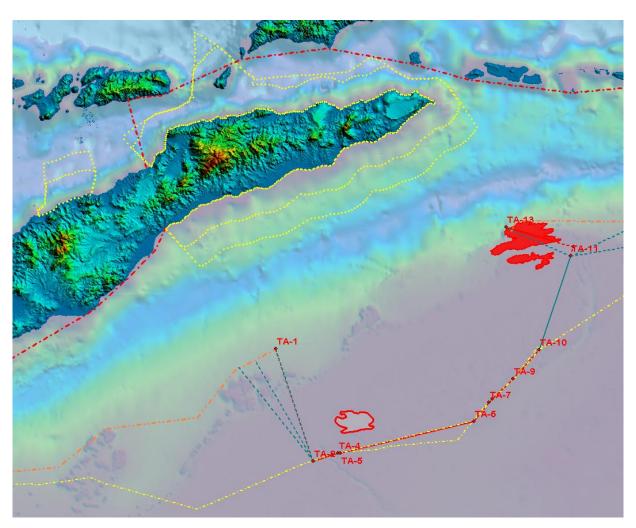
Reasonable and productive ways to develop Sunrise in 2020

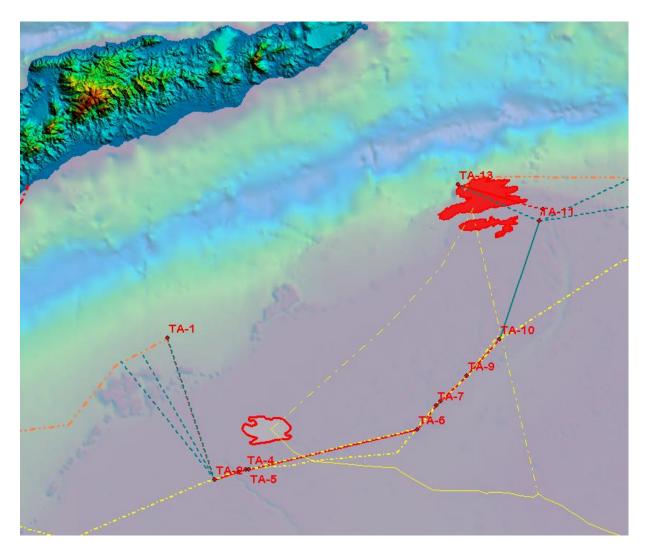
As a priority, define the maritime boundaries with Indonesia. Without boundaries
even the 12 NM territorial sea cannot be delimited. No financial institution will
accept to sink billions of dollars in an area where there's no defined sovereignty.
At issue are EEZ (Exclusive Economic Zone) and aeronautical rights.

See map below: even the 12 nautical miles and 24 nautical miles territorial seas cannot be defined yet (yellow dotted lines).

- a. South of the island, there is no lateral limit, so the extent of the boundaries cannot be drawn. See also " *The reality of the East Timor boundaries after the 2018 Treaty*";
- b. North of the island, some of what should be Timorese Territorial Sea lies inside Indonesian internal archipelagic waters, north of Atauro and of Oecusse. Internal archipelagic waters are considered internal waters, like lakes would be. The red dashed line is the official Indonesian base line that defines its internal waters.

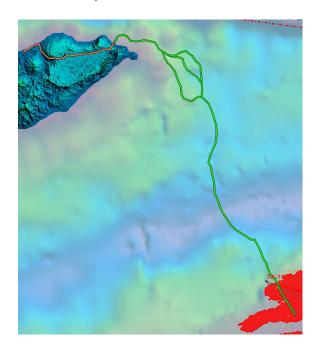


- Negotiate an agreement with Woodside, to the effect that the production of petroleum liquids can start locally at Sunrise, with reinjection of dry gas underground after extraction of liquids. Facilities shall include local platforms and an FPSO.
- 3. As part of the agreement, dry gas from Sunrise shall in due time be piped either to the Bayu Undan facilities through a 220 km shallow water pipeline, for subsequent piping through the existing pipeline to Wickham Point in Darwin, or directly to the Darwin pipeline through a 210 km shallow water spur. These activities shall be subject to a further agreement with Santos and its co-owners at Bayu Undan. The distance between Bayu Undan and the spur junction is also 210 km.



4. As part of the agreement, the corporate owners shall loan to Timor GAP the 56.6% of capital expenditure that Timor GAP should normally disburse.

- 5. It is understood that the large deliveries of natural gas to the Wickham Point LNG plant from other sources will have the potential to extend the life of the Bayu Undan field beyond production levels that would otherwise not be sufficient economically to operate the plant, should supplemental sources not be available from either the Sunrise or the Caldita-Barossa fields.
- 6. As part of the agreement, Santos shall authorize East Timor to pick-up natural gas either in the gaseous phase at Bayu Undan, or as LNG at Wickham Point. Tariff will be preferential. Said gas deliveries shall be used to feed East Timor's power plants (East Timor's National Gas Project).
- 7. As part of the agreement, the sharing with East Timor of local industrial and corporate tax receipts in Australia shall be negotiated. Some of the tax payments could be in the form of natural gas.
- 8. As part of the agreement, the corporate owners other than Timor GAP (Woodside, Santos, Osaka Gas, and others) shall assist in the funding of East Timor's National Gas Project, primarily in the form of a loan guarantee.
- As part of the agreement, the corporate owners other than Timor GAP shall commit to train, either in East Timor or abroad, a number of East Timorese technicians to be determined later.
- 10. An alternative would be to install an LNG plant on the Timorese North Coast, and deliver the gas through a 199 km deep water pipeline to Tutuala and from there through a 55 km land pipeline to the vicinity of Buiomau, or any similar location suitable for the plant.



The advantages of this option, compared to the South Coast option, are multiple, among which:

- a much better and shorter pipeline route;
- much more suitable underwater terrain;
- much easier access to the facilities;
- incomparably better roads;
- much better potential for an industrial infrastructure;
- much better suitability for a large floating port;
- more amenable climate and pluviosity;
- much better sea state;
- shorter distance to the marine facility, etc.

The main unknown is the actual nature of the bottom of the Timor Trough along a 3 km segment of the deepest part of the pipeline.

The North pipeline is 10% deeper than the pipeline to the South Coast, but depth is not the real actual issue, which resides in the physical nature of the seabed. One big disadvantage for both options is that any ultradeep pipeline to Timorese shores, north or south, would have to be completed <u>before</u> the LNG plant even starts being built, in order to minimize the risks associated with a failure to lay the pipeline for technical reasons: who wants a \$15 billion LNG plant if in the end the gas cannot be brought to it?

However, as large as the advantages for the North Coast are, compared to the South Coast, the northern option is still a very distant second when opposed to the Darwin option, for multiple reasons:

- the overall cost would be in the vicinity of \$15 billion, while the existing plant in Darwin was recently appraised at about \$2 billion, including the Bayu Undan field and facilities;
- the plant on Timorese shores would need to be built from scratch, while the plant in Darwin already exists;
- LNG prices are currently at a record low, \$2 per MMBTU in the U.S. for example;
- only about 200 long term jobs would be created, most of them for expatriates;
- there is no way the project would ever be profitable, so capital would not be available from financial institutions;
- Timor GAP would have to foot 100% of the bill, because no other company would take such a huge financial risk for such a poor investment:
- any incentive for East Timor's National Gas Project would disappear.

A possibility would be to allow Woodside to start the local production of liquids at Sunrise, after boundary negotiation with Indonesia, and reinject the dry gas underground, officially for future hypothetical piping to the North Coast. However, any leverage for picking up gas from Bayu Undan to feed the power plants would be lost, and, anyway, if the Sunrise gas is piped to the North Coast there is no need for the Bayu Undan gas at all.

- 11. It appears that the single most important issue for East Timor is to have a serious honest national reflection about the real reasons for insisting on a Timorese LNG plant in the first place:
 - Why do we want an LNG plant to start with?
 - An LNG plant is not a toy, it's not fun to play with;
 - It's ugly;
 - It pollutes;
 - It would create perhaps 200 long term jobs, most of them for expatriates;
 - It would cost us all the money we have, with no reasonable hope to ever see a profit;
 - Are the large profits and revenue we are absolutely certain to derive from the Darwin plant, without any risk to us, and with others spending all the investment money, not considerably more important than a wasteful pipeline to Timorese shores?
 - Is the delivery of cheap natural gas to our power plants not preferable to wasting all our savings and resources on an LNG plant that we would be forced to abandon and scrap after a couple of years because of unsustainable financial losses?

And that, my friends, is the point.