Senator Rex Patrick's push for an inquiry into helping East Timor's onshore processing plans failed.

The Morrison government has joined with Labor to shoot down a senate inquiry into East Timor's controversial oil and gas project.

Crossbench senator Rex Patrick has warned Australia that not doing more to help its northern neighbour with the Greater Sunrise project could give China a strategic boost.

He worries China could offer a more attractive proposition to help with processing the oil and gas on East Timor's south coast.

"There is interest in Timor Leste from the Chinese as they expand their influence," Senator Patrick told parliament.

The Centre Alliance senator said ignoring the tiny nation would lead to Chinese military assets being established there.

"It is not in our interests to have a strong Chinese strategic footprint in this neighbouring country. Not in any way, shape or form," he said.

But his proposal to have an inquiry into how Australia could assist East Timor was defeated in the Senate 38 votes to 13 on Wednesday evening.

The Timorese government is keen on building the south coast processing facility but is yet to secure financial backing for the major project.

There's a cheaper option to use an existing plant at Darwin, but East Timor favours having the facility on its shores.

_Australian Associated Press_