

2020–2021 Minerals Yearbook

TIMOR LESTE [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF TIMOR-LESTE

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Note: In this chapter, information for 2020 is followed by information for 2021.

Timor-Leste (or East Timor) is situated on the eastern side of the Island of Timor, which is located 550 kilometers north of Australia. The western side of the island belongs to Indonesia. Timor-Leste officially became an independent country in 2002. In 2019, the National Petroleum and Minerals Authority of Timor-Leste launched the 3d Strategic Action Plan for 2019–23, in which development of natural resources, such as clay, dimension stone, limestone, and manganese, was one of the priorities for the country's economic development. The plan provides timelines and performance indicators for developing natural resources and includes documentation that will be prepared for communicating to key stakeholders about the Government's plan and direction (Autoridade Nacional do Petroleo e Minerais, 2019, p. 4, 215–216).

Minerals in the National Economy

In 2020, Timor-Leste's real gross domestic product (GDP) decreased by 8.6% compared with an increase of 2.1% in 2019; the nominal GDP was about \$1.9 billion in 2020. The GDP decrease in 2020 was due to the effects of the coronavirus disease 2019 (COVID-19) pandemic and the delayed approval of the 2020 state budget (Asian Development Bank, 2021, p. 327, 329; 2022, p. 390; World Bank, The, 2022).

The economy of Timor-Leste was based largely on the production of natural gas and crude petroleum (including condensate). The revenue from the petroleum sector (including fees and royalties from petroleum exploration in the Timor Sea) was \$323 million in 2020, which accounted for 64% of total Government revenue. The 2020 petroleum revenue was a decrease from the \$756 million obtained in 2019 (which accounted for 80% of total Government revenue) owing to the decrease in the price of crude petroleum and the decline in the country's petroleum output. The petroleum revenue was expected to continue to decrease because petroleum exploration at the existing fields in the Timor Sea was predicted to cease by 2023 (Banco Central de Timor-Leste, 2021, p. 31, 48, 73, 123).

The legislative framework for the mineral sector in Timor-Leste is provided by Decree-Law No. 32/2016 on offshore petroleum operations, No. 64/2016 on mineral exploration activities, and No. 13/2019 on petroleum activities. The Autoridade Nacional do Petroleo e Minerais [National Petroleum and Minerals Authority] manages and regulates petroleum and mining activities in Timor-Leste. The country's Institute of Petroleum and Geology assesses mineral resources and provides information related to geology and mineral resources (United Nations Environment Programme, 2016; Autoridade Nacional do Petroleo e Minerais, 2021; Institute of Petroleum and Geology, 2021).

Production

In 2020, local and foreign companies in Timor-Leste produced about 1.7 million metric tons of gravel and 195,000 metric tons of sand. Continued increases in gravel production in 2018–20 were due to the increased consumption for the construction of the Tibar Bay Port. The construction started in August 2018 and was expected to be completed in April 2022. Timor-Leste extracted 5.1 million barrels of crude petroleum (including condensate), which was a decrease of 39% compared with production in 2019. The decrease in crude petroleum output was due to depleted reserves in the Timor Sea (Autoridade Nacional do Petroleo e Minerais, 2020, p. 112; Banco Central de Timor-Leste, 2021, p. 31; Prime Minister, 2021).

Data on mineral production are in table 1. Table 2 is a list of major mineral industry facilities.

Commodity Review

Mineral Fuels

Natural Gas and Petroleum.—In May, Santos Ltd. of Australia completed the acquisition of a combined 56.9% interest (valued at \$1.265 billion) in the Bayu-Undan Field in the Timor Sea and the Darwin liquefied natural gas (LNG) plant in Australia from ConocoPhillips Co. of the United States. The transaction increased Santos's combined interest in both assets to 68.4% from 11.5%. The Bayu-Undan facility supplied natural gas to the Darwin LNG terminal in the Northern Territory of Australia, which had a production capacity of 3.7 million metric tons per year of LNG (Santos Ltd., 2021a, p. 21, 115, 118).

MINERAL INDUSTRY HIGHLIGHTS IN 2021

In 2021, Timor-Leste's real GDP increased by 1.8%; the weak increase in the GDP resulted from the ongoing COVID-19 pandemic and the flooding caused by Cyclone Seroja in April. The country's production of crude petroleum remained at about the same level as production in 2020. In April, SK E&S Co. Ltd. of the Republic of Korea acquired a combined 25% interest (valued at \$390 million) in the Bayu-Undan Field and Darwin LNG plant from Santos Ltd. After the transaction, Santos's combined interest in the assets decreased to 43.4%; the remainder was held by SK E&S (25%), INPEX Corp. of Japan (11.4%), Eni S.p.A. of Italy (11%), JERA Co. Inc. of Japan (6.1%), and Tokyo Gas Co. Ltd. of Japan (3.1%) (table 1; Santos Ltd., 2021b; Asian Development Bank, 2022, p. 341).

References Cited

- Asian Development Bank, 2021, Asian development outlook 2021: Manila, Philippines, Asian Development Bank, April, 389 p. (Accessed June 21, 2021, at https://www.adb.org/sites/default/files/publication/692111/ado2021.pdf.)
- Asian Development Bank, 2022, Asian development outlook 2022: Manila, Philippines, Asian Development Bank, April, 407 p. (Accessed May 4, 2022, at https://www.adb.org/sites/default/files/publication/784041/ado2022.pdf.)
- Autoridade Nacional do Petroleo e Minerais, 2019, Institutional strategic action plan period 2019–2023: Dili, Timor-Leste, Autoridade Nacional do Petroleo e Minerais, November 13, 235 p. (Accessed April 6, 2022, at http://www.anpm.tl/wp-content/uploads/2021/02/FINAL-ANPM-SAP-2019-2022-FINAL-OK.pdf.)
- Autoridade Nacional do Petroleo e Minerais, 2020, Annual report 2019: Dili, Timor-Leste, Autoridade Nacional do Petroleo e Minerais, July, 123 p. (Accessed June 21, 2021, at http://web01.anpm.tl/webs/anptlweb.nsf/vwAll/Resource-ANNUAL-REPORT-2019-FINAL/\$File/ANNUAL-REPORT-2019-FINAL.pdf?openelement.)
- Autoridade Nacional do Petroleo e Minerais, 2021, Timor-Leste legislation: Autoridade Nacional do Petroleo e Minerais web page. (Accessed June 21, 2021, via http://www.anpm.tl/tlea/.)
- Banco Central de Timor-Leste, 2021, Annual report 2020: Dili, Timor-Leste, Banco Central de Timor-Leste, April, 179 p. (Accessed June 21, 2021, at https://www.bancocentral.tl/uploads/documentos/ documento_1622165084_1888.pdf.)

- Institute of Petroleum and Geology, 2021, Who we are: Institute of Petroleum and Geology web page. (Accessed June 21, 2021, at http://ipg.tl/who-we-are/.)
- Prime Minister, 2021, New Tibar port starts operation in April 2022: Dili, Timor-Leste, Prime Minister, February 2. (Accessed June 21, 2021, at https://www.gpm.gov.tl/en/portu-foun-tibar-sei-halao-operasaun-ihaabril-2022/.)
- Santos Ltd., 2021a, Annual report 2020: Adelaide, South Australia, Australia, Santos Ltd., February 17, 144 p. (Accessed May 4, 2022, at https://www.santos.com/wp-content/uploads/2021/02/2020-Annual-Report.pdf.)
- Santos Ltd., 2021b, Santos completes Bayu-Undan and Darwin LNG sell-down to SK: Adelaide, South Australia, Australia, Santos Ltd., April 30, 1 p. (Accessed May 4, 2022, at https://www.santos.com/wp-content/uploads/2021/04/210430_Santos-completes-Bayu-Undan-and-Darwin-LNG-sell-down-to-SK.pdf.)
- United Nations Environment Programme, 2016, Ministerial order No. 64/2016 on the specific licensing rules for mineral exploitation activities: Nairobi, Kenya, United Nations Environment Programme, November 16. (Accessed June 24, 2022, at https://leap.unep.org/countries/tl/national-legislation/ministerial-order-no-642016-specific-licensing-rules-mineral.)
- World Bank, The, 2022, GDP (current US\$)—Timor-Leste: Washington DC, The World Bank. (Accessed May 4, 2022, at https://data.worldbank.org/ indicator/NY.GDP.MKTP.CD?locations=TL.)

 $\label{table 1} TABLE~1$ TIMOR-LESTE: PRODUCTION OF MINERAL COMMODITIES 1

Commodity ²	2017	2018	2019	2020	2021	
INDUSTRIAL MINERALS					-	
Sand and gravel, construction:						
Gravel	thousand metric tons		370	741 ^r	1,741	1,750 e
Sand	do.	269	478	164 ^r	195	200 e
MINERAL FUELS AND RELAT	TED MATERIALS					
Natural gas, dry million cubic me		5,800	5,800 ^r	5,100 ^r	5,100 e	5,100 e
Petroleum, crude, including condensate	thousand 42-gallon barrels	7,700 ^r	5,500 ^r	8,400 r	5,100	5,100

^eEstimated. ^rRevised. do. Ditto.

TABLE 2 TIMOR-LESTE: STRUCTURE OF THE MINERAL INDUSTRY IN 2021

Major operating companies				
Commodity		and major equity owners Location of main facilities		
Natural gas, dry	million cubic	Santos Ltd. (operator), 43.4%; SK E&S Co. Ltd., 25%;	Bayu-Undan Field, Timor Sea	6,200
	meters	INPEX Corp., 11.4%; Eni S.p.A., 11%;		
		JERA Co. Inc., 6.1%; Tokyo Gas Co. Ltd., 3.1%		
Petroleum, crude,	thousand 42-gallon	do.	do.	6,000
including condensate	barrels			
Sand and gravel	thousand metric tons	Private companies	9 sites along river plains in Dili,	2,000
			Liquica, and Manatuto	

^eEstimated. do. Ditto.

¹Table includes data available through May 10, 2022. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, marble may have been produced in Timor-Leste, but available information was inadequate to make reliable estimates of output.