

## **A New Gas Province in South Atlantic Region: Recent Gas Discoveries in Santos Basin, Offshore Brazil**

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Intensive exploration activities carried out by PETROBRAS during the last three years resulted in four important natural gas discoveries. These accumulations are located in Santos Basin, in the Southeastern Brazilian Continental Margin, in water depths ranging from 400 to 1,500 meters. The gas bearing reservoirs are composed by coarse to very fine-grained siliciclastic sandstones, deposited in shallow marine to outer shelf areas during Late Cretaceous. In spite of being characterized by low to very low values of permeability, ranging from 1 to 30 mD, these sandstones proved out to be very productive reservoirs. The well SPS-35 tested these reservoirs, where 100 meters thick sandstone presented flow rates of 2,500.000 cubic meters per day. Current gas production in Santos Basin comes exclusively from Merluza Field (original reserves less than 0.5 tcf). The volume of the new discoveries is estimated in 14.8 tcf, which make up almost twice the Brazilian gas reserves. Besides the expressive volumes of gas, these discoveries become even more important due to their exceptional location. They are situated on the offshore of São Paulo and Rio de Janeiro states, which are the Brazil main consumer market. These significant gas accumulations make Santos Basin a new gas province in the South Atlantic Region.

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