

Brazil ranked 15th with 30 points out of 100. Energy policy in Brazil largely emphasizes renewable energy production, especially in its electricity and transportation sectors. This focus on energy production leaves a great amount of energy efficiency untapped.

Transportation is the most efficient sector in Brazil; Brazil ranked towards the top of the pack of countries analyzed. Passenger-vehicle fuel economy is fairly strong, and the number of vehicle miles traveled per person is moderate. Further, the ratio of government investment in rail transit to investment in roads is the highest in Brazil out of all countries analyzed. The Brazilian National Development Bank has increased funding for the construction of new railway lines and the expansion of the current network to improve freight efficiency. It also plans to build a high-speed rail connecting Sao Paulo and Rio de Janeiro and to improve light-duty (passenger) vehicle fuel-economy.

The Brazilian government established a National Plan on Climate Change (PNMC) that contains some provisions related to the establishment of a national energy efficiency action plan. No national energy savings policy has been implemented, but a proposed national action plan would aim to reduce electricity consumption by 10%, saving up to 106 terra watt hours per year by 2030.

## AREAS FOR IMPROVEMENT

Although Brazil has a low energy intensity in residential and commercial buildings, it still scored at the bottom in the buildings section. Brazil has no mandatory residential or commercial building code and has only limited appliance and equipment standards, applying to few products. Many countries have seen significant energy savings by implementing building energy efficiency policies, including Australia, France, and Spain. The United States has saved large amounts of energy through robust appliance standards. Brazil thus has ample models from which to draw from to improve energy efficiency in buildings.

Brazil scored the lowest of any country analyzed in the industrial sector, and it would benefit from publicprivate voluntary agreements for energy efficiency and requirements for plant energy managers or periodic energy audits. Less than one percent of electricity in its industrial sector is generated with combined heat and power. Some European countries, most notably, Italy, have achieved strong energy savings by generating industrial electricity from combined heat and power, and Brazil would do well to follow that example.

## **ADDITIONAL RESOURCES**

For more information on Brazil's National Climate Change Plan: <u>http://www.iea.org/</u> <u>policiesandmeasures/energyefficiency/?country=Bra</u> <u>zil</u>

For more information on Brazil's energy efficiency policies: <u>http://www.bndes.gov.br/</u> <u>SiteBNDES/bndes/bndes\_en/Institucional/Press/</u> <u>Noticias/2014/20140522\_estudo.html</u>