

source or discharged to the environment, it has been rigorously tested to meet or exceed all discharge criteria. TransCanada's Ocean State Power, Ironwood and Coolidge generating stations utilize a zero-liquid-discharge water treatment system to eliminate any process water discharges to the environment.

Our hydropower assets have a very intimate relationship with water sources, harnessing the raw power of water in the natural environment to create electricity. The water we borrow in our hydropower process is a precious shared resource and TransCanada takes industry-leading measures to ensure its protection. We have achieved a Low Impact Hydropower Institute (LIHI) certification for the bulk of our hydroelectric generation in New England. LIHI is a non-profit organization dedicated to reducing the impacts of hydropower generation through the certification of hydropower facilities that have avoided or reduced their environmental impacts. The LIHI certification program is intended to protect multiple ecosystem components, including river flows, water quality, fish and wildlife, as well as meet recreation and cultural preservation needs. In order to be certified, a hydropower facility must pass the LIHI low impact standard for each of these ecosystem components, with criteria based on the most recent and most stringent state and federal mitigation measures.

ENVIRONMENTAL PROTECTION

We preserve the integrity of the environment through a comprehensive management system. This system is driven by an integrated Health, Safety and Environment Commitment Statement and an environmental management program that guides the proactive management of our risks and requirements.

See the Management Systems section on page 10 for more information on the management systems, programs and procedures that enable TransCanada to ensure compliance with regulatory requirements and support development and adoption of best management practices across all lines of business and assets.

GREENHOUSE GAS EMISSIONS

DIRECT GREENHOUSE GAS EMISSIONS (tCO₂e)¹

	2012	2013	2014	2015
Natural Gas Pipelines	6,000,000	7,100,000	7,400,000	7,300,000
Liquids Pipelines	0	0	0	0
Power	6,300,000	5,100,000	5,300,000	5,700,000
Total	12,300,000	12,200,000	12,700,000	13,100,000

¹ tCO₂e = tonnes of carbon dioxide equivalent.

Note: Numbers may not add up due to rounding. TransCanada's direct GHG emissions reporting boundary is based on an asset equity share. Our oil storage assets and liquids pipelines are below direct GHG reporting thresholds. The TransGas Natural Gas Pipeline System (in Colombia) is excluded. Coal combustion is the main source of GHG emissions at the coal-fired power plants for which we have agreements to purchase power from the facilities, and represents an indirect GHG emissions source for TransCanada. These arrangements are excluded from our reporting boundary and were terminated in 2016. Values reported in previous TransCanada reports may differ from the above as inputs may be updated after the date of publication of annual reports such as the CSR, and we regularly review reporting scopes and methodologies.

ENVIRONMENTAL PERFORMANCE

At TransCanada, we systematically measure and communicate our performance in a proactive and transparent manner. We are committed to continuously improving our environment performance.

Please see Recognition on page 9 for examples of TransCanada's achievements in environmental, social and economic performance.

Indirect Greenhouse Gas Emissions

Indirect GHG emissions are disclosed in our CDP reports, publicly available at www.cdp.net.