

## 2014 Electricity Generated (Net MWh)<sup>1</sup>

|                                   | United States   |               | Latin America   |               | Total           |               |
|-----------------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|                                   | MWh (thousands) | Percent       | MWh (thousands) | Percent       | MWh (thousands) | Percent       |
| Coal                              | 102,831         | 42.1%         | 411             | 2.6%          | 103,242         | 39.7%         |
| Natural gas                       | 65,875          | 26.9%         | 719             | 4.5%          | 66,594          | 25.6%         |
| Oil                               | 322             | 0.1%          | 1,500           | 9.5%          | 1,822           | 0.7%          |
| <b>Total fossil</b>               | <b>169,028</b>  | <b>69.1%</b>  | <b>2,630</b>    | <b>16.6%</b>  | <b>171,658</b>  | <b>65.9%</b>  |
| Nuclear                           | 67,809          | 27.7%         | 0               | 0.0%          | 67,809          | 26.0%         |
| Conventional hydro                | 2,885           | 1.2%          | 13,241          | 83.4%         | 16,126          | 6.2%          |
| Wind                              | 5,212           | 2.1%          | 0               | 0.0%          | 5,212           | 2.0%          |
| Solar                             | 265             | 0.1%          | 0               | 0.0%          | 265             | 0.1%          |
| <b>Total carbon-free</b>          | <b>76,171</b>   | <b>31.2%</b>  | <b>13,241</b>   | <b>83.4%</b>  | <b>89,412</b>   | <b>34.3%</b>  |
| Pumped-storage hydro <sup>2</sup> | (732)           | -0.3%         | 0               | 0.0%          | (732)           | -0.3%         |
| <b>Total</b>                      | <b>244,467</b>  | <b>100.0%</b> | <b>15,871</b>   | <b>100.0%</b> | <b>260,337</b>  | <b>100.0%</b> |

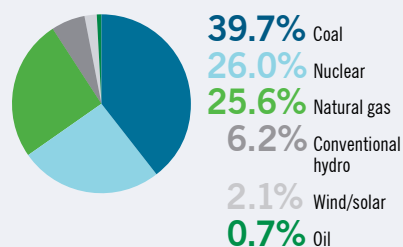
<sup>1</sup> All data based on Duke Energy's ownership share of generating plants. Totals may not add up exactly because of rounding.  
<sup>2</sup> Pumped-storage hydro helps meet peak demand and, like other storage technologies, consumes more energy than it produces.

## 2014 Generation Capacity (MW)<sup>3</sup>

|                                   | United States |               | Latin America |               | Total         |               |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                   | MW            | Percent       | MW            | Percent       | MW            | Percent       |
| Coal                              | 21,230        | 37.1%         | 83            | 1.9%          | 21,313        | 34.6%         |
| Natural gas                       | 7,617         | 13.3%         | 280           | 6.5%          | 7,897         | 12.8%         |
| Oil                               | 609           | 1.1%          | 956           | 22.0%         | 1,565         | 2.5%          |
| <b>Natural gas/oil</b>            | <b>14,155</b> | <b>24.7%</b>  | <b>0</b>      | <b>0.0%</b>   | <b>14,155</b> | <b>23.0%</b>  |
| <b>Total fossil</b>               | <b>43,611</b> | <b>76.1%</b>  | <b>1,319</b>  | <b>30.4%</b>  | <b>44,930</b> | <b>72.9%</b>  |
| Nuclear                           | 8,319         | 14.5%         | 0             | 0.0%          | 8,319         | 13.5%         |
| Conventional hydro                | 1,410         | 2.5%          | 3,022         | 69.6%         | 4,432         | 7.2%          |
| Solar                             | 189           | 0.3%          | 0             | 0.0%          | 189           | 0.3%          |
| Wind                              | 1,628         | 2.8%          | 0             | 0.0%          | 1,628         | 2.6%          |
| <b>Total carbon-free</b>          | <b>11,545</b> | <b>20.1%</b>  | <b>3,022</b>  | <b>69.6%</b>  | <b>14,567</b> | <b>23.6%</b>  |
| Pumped-storage hydro <sup>4</sup> | 2,140         | 3.7%          | 0             | 0.0%          | 2,140         | 3.5%          |
| <b>Total</b>                      | <b>57,296</b> | <b>100.0%</b> | <b>4,341</b>  | <b>100.0%</b> | <b>61,637</b> | <b>100.0%</b> |

<sup>3</sup> All data based on Duke Energy's ownership share of generating plants. Wind and solar include equity interests in generating assets. Totals may not add up exactly because of rounding.  
<sup>4</sup> Pumped-storage hydro helps meet peak demand and, like other storage technologies, consumes more energy than it produces.

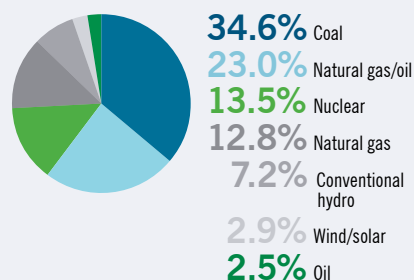
## 2014 Electricity Generated\*



\* Pumped-storage hydro, which totaled -0.3%, consumes more energy than it produces. Totals may not add up exactly because of rounding.

Over one-third of the electricity we generated in 2014 was from carbon-free sources, including nuclear, hydro, wind and solar. Over 25% of our generation was from natural gas, which emits about half as much carbon dioxide as coal when used for electric generation. Duke Energy Renewables sells the electricity and/or RECs it generates to its customers.

## 2014 Generation Capacity\*



\* Pumped-storage hydro, which totaled 3.5%, consumes more energy than it produces. Totals may not add up exactly because of rounding.

Duke Energy has a diverse, increasingly clean generation portfolio.

**Fuels consumed for U.S. electric generation**

Since 2008, use of coal and oil as generation fuels has significantly decreased. These have been replaced primarily by natural gas, mostly because it became a relatively less expensive fuel and we added natural gas generation capacity.

**Water withdrawn and consumed**

Water withdrawn is the total volume removed from a water source, such as a lake or a river. Because of the once-through cooling systems on many of our coal-fired and nuclear plants, about 98 percent of this water is returned to the source and available for other uses. Water consumed is the amount of water removed for use and not returned to the source.

**Emissions from generation**

Emissions levels and intensities depend on many factors, including generation diversity and efficiency, demand for electricity, weather, fuel availability and prices, and emission controls deployed. Since 2005, our U.S. carbon dioxide (CO<sub>2</sub>) emissions decreased by 19%, sulfur dioxide (SO<sub>2</sub>) emissions decreased by 85% and nitrogen oxides (NO<sub>x</sub>) emissions decreased by 64%. Reasons for these decreases include the addition of pollution control equipment, decreased coal generation, increased natural gas generation, and replacement of higher-emitting plants. There is currently no demonstrated commercially available technology to control CO<sub>2</sub> emissions from fossil-fueled generation.

**Fuels Consumed For U.S. Electric Generation<sup>5</sup>**

|   | 2008  | 2012  | 2013  | 2014         |
|---|-------|-------|-------|--------------|
| <b>Coal</b> (million tons)              | 63.1  | 44.2  | 43.6  | <b>44.0</b>  |
| <b>Oil</b> (million gallons)            | 230.6 | 44.6  | 41.2  | <b>53.6</b>  |
| <b>Natural gas</b> (billion cubic feet) | 163.4 | 452.5 | 501.2 | <b>525.3</b> |

<sup>5</sup> All data based on Duke Energy's ownership share of generating plants.

**Water Withdrawn And Consumed (billion gallons)**

|                  | 2010  | 2011  | 2012  | 2013  | 2014         |
|------------------|-------|-------|-------|-------|--------------|
| <b>Withdrawn</b> | 6,100 | 5,900 | 5,700 | 5,665 | <b>5,799</b> |
| <b>Consumed</b>  | 113   | 105   | 100   | 106   | <b>93</b>    |

**Emissions From Generation<sup>6</sup>**

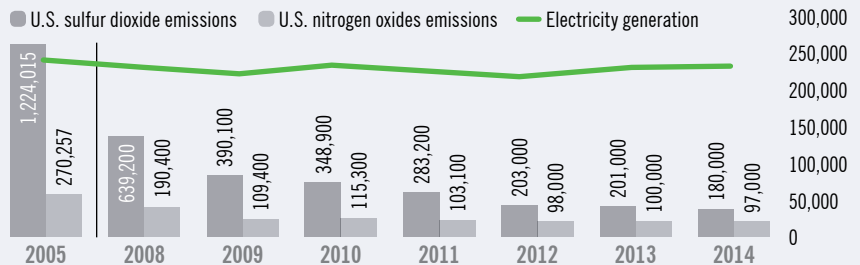
|  | 2008           | 2012           | 2013           | 2014           |
|--|----------------|----------------|----------------|----------------|
| <b>CO<sub>2</sub> emissions</b> (thousand tons) <sup>7</sup>         |                |                |                |                |
| ■ U.S.   | 160,100        | 131,700        | 133,615        | <b>135,289</b> |
| ■ Latin America  | 2,700          | 3,100          | 2,500          | <b>2,265</b>   |
| <b>Total</b>   | <b>162,800</b> | <b>134,800</b> | <b>136,115</b> | <b>137,555</b> |
| <b>Total CO<sub>2</sub> emissions intensity</b> (pounds per net kWh) | 1.34           | 1.08           | 1.05           | <b>1.06</b>    |
| <b>U.S. SO<sub>2</sub> emissions</b> (tons) <sup>8</sup>             | 639,200        | 203,000        | 201,000        | <b>180,000</b> |
| <b>U.S. SO<sub>2</sub> emissions intensity</b> (pounds per net MWh)  | 5.3            | 1.8            | 1.7            | <b>1.5</b>     |
| <b>U.S. NO<sub>x</sub> emissions</b> (tons) <sup>8</sup>             | 190,400        | 98,000         | 100,000        | <b>97,000</b>  |
| <b>U.S. NO<sub>x</sub> emissions intensity</b> (pounds per net MWh)  | 1.6            | 0.8            | 0.8            | <b>0.8</b>     |

<sup>6</sup> Totals may not add up exactly because of rounding.

<sup>7</sup> CO<sub>2</sub> reported from Duke Energy's U.S. electric generation and Duke Energy International operations, and based on ownership share of generating plants. Duke Energy Renewables sells the electricity and/or RECs it generates to its customers.

<sup>8</sup> SO<sub>2</sub> and NO<sub>x</sub> reported from Duke Energy's U.S. electric generation based on ownership share of fossil-fueled plants.

**U.S. Sulfur Dioxide And Nitrogen Oxides Emissions (tons)<sup>9</sup> And U.S. Electricity Generation (Net MWh) (thousands)**



<sup>9</sup> SO<sub>2</sub> and NO<sub>x</sub> reported from Duke Energy's U.S. electric generation based on ownership share of fossil-fueled plants.

## U.S. Toxic Release Inventory (TRI) (thousand pounds)<sup>10</sup>

|                           | 2007           | 2011          | 2012          | 2013          |
|---------------------------|----------------|---------------|---------------|---------------|
| <b>Releases to air</b>    | 97,969         | 27,423        | 20,723        | <b>22,400</b> |
| <b>Releases to water</b>  | 257            | 140           | 133           | <b>131</b>    |
| <b>Releases to land</b>   | 22,052         | 17,490        | 14,297        | <b>12,449</b> |
| <b>Off-site transfers</b> | 155            | 2,876         | 3,100         | <b>2,924</b>  |
| <b>Total</b>              | <b>120,434</b> | <b>47,929</b> | <b>38,253</b> | <b>37,904</b> |

<sup>10</sup> Data pertain to facilities Duke Energy owns or operates and where Duke Energy is the responsible reporting party. Totals may not add up exactly because of rounding.

## Waste

|  | 2010                 | 2011                 | 2012                 | 2013                 | 2014                       |
|--|----------------------|----------------------|----------------------|----------------------|----------------------------|
| <b>U.S. solid waste</b>  |                      |                      |                      |                      |                            |
| • <b>Total generated (tons)</b> <sup>11</sup>  | 38,651 <sup>12</sup> | 43,586 <sup>12</sup> | 46,964 <sup>12</sup> | 84,083 <sup>13</sup> | <b>85,490<sup>13</sup></b> |
| • <b>Percent recycled</b>  | 63%                  | 64%                  | 73%                  | 69%                  | <b>71%</b>                 |
| <b>Hazardous waste generated (tons)</b> <sup>14</sup>                                      | 48                   | 55                   | 36                   | 51                   | <b>48</b>                  |
| <b>Low-level radioactive waste (Class A, B and C) generated (cubic feet)</b> <sup>15</sup> | 129,608              | 78,200               | 84,403               | 88,994               | —                          |

<sup>11</sup> Weights are estimated based on volumes where necessary.

<sup>12</sup> Excludes Duke Energy Progress, Duke Energy Florida, Duke Energy Generation Services, Duke Energy International and large one-time projects.

<sup>13</sup> Excludes Duke Energy International, Duke Energy Renewables and large one-time projects.

<sup>14</sup> Excludes Duke Energy International.

<sup>15</sup> Total of Class A, B, and C waste disposal as reported to the Nuclear Regulatory Commission. Crystal River Unit 3 is not included in these statistics, because it is not part of the operating fleet, and its retirement has been announced. Data for 2014 will be available later in 2015.

## Reportable Oil Spills

|                | 2010   | 2011   | 2012   | 2013  | 2014          |
|----------------|--------|--------|--------|-------|---------------|
| <b>Spills</b>  | 108    | 91     | 48     | 65    | <b>26</b>     |
| <b>Gallons</b> | 28,700 | 20,300 | 10,800 | 4,823 | <b>12,006</b> |

## Environmental Regulatory Citations<sup>16</sup>

|                                  | 2010       | 2011      | 2012       | 2013         | 2014              |
|----------------------------------|------------|-----------|------------|--------------|-------------------|
| <b>Citations</b>                 | 25         | 25        | 16         | 16           | <b>33</b>         |
| <b>Fines/penalties (dollars)</b> | \$ 326,416 | \$ 14,682 | \$ 128,562 | \$ 1,006,935 | <b>\$ 236,058</b> |

<sup>16</sup> Includes international and U.S. federal, state and local citations and fines/penalties.

## U.S. Toxic Release Inventory (TRI)

Duke Energy's TRI releases for 2013 were down nearly 69% from 2007, primarily because of the significant investments we've made in environmental controls for our power plants (data for 2014 will be available in August 2015).

## Waste

We are on track to increase the percentage of solid waste that is recycled from 69% in 2013 to 80% in 2018. (This goal excludes Duke Energy International and Duke Energy Renewables.)

## Reportable oil spills

Oil spills include releases of lubricating oil from generating stations, leaks from transformers, or damage caused by weather or by third parties (typically because of auto accidents).

## Environmental regulatory citations

Fines/penalties were relatively large in 2013 because of the November 2013 settlement agreement addressing golden eagle fatalities at wind power facilities. See the "Migratory Bird Settlement Agreement" article in the 2013 Sustainability Report.