Electric Utilities

The electric utilities sector consists of establishments primarily engaged in generating, transmitting, and/or distributing electric power. Electric generating facilities use a variety of fuels to generate electricity; however, only those that combust coal and/or oil to generate power for distribution in commerce must report to TRI. This sector reported the third largest total disposal or other releases of any industry sector in TRI for 2012 (see Figure 29), including the largest on-site air emissions, which represented over 25% of air emissions from all industries.

Quick Facts for 2012

Number of TRI Facilities: 582
Facilities Reporting Newly Implemented Source Reduction Activities in 2012: 23

Total Disposal or Other Releases: 519.3 million lb
- On-site: 454.4 million lb
  - Air: 192.8 million lb
  - Water: 3.0 million lb
  - Land: 258.6 million lb
- Off-site: 64.9 million lb

Production-Related Waste Managed: 1,594.1 million lb
- Recycled: 7.9 million lb
- Energy Recovery: 3.1 million lb
- Treated: 1,064.1 million lb
- Disposed of or Otherwise Released: 519.1 million lb
The electric utilities sector’s releases decreased by 52% from 2003 to 2012, including a 16% decrease from 2011 to 2012. This decrease is driven by a 73% decrease in on-site air releases from 2003 to 2012, including a 65-million-pound decrease from 2011 to 2012.

Production-related waste managed has decreased 19% from peak levels in 2005, coinciding with a 28% reduction from peak 2005 levels in net production (in terms of electricity generated using coal and oil fuels), represented by the black solid line in Figure 30. The recent production decrease is driven by the industry’s transition to natural gas, which exempts many electric utilities from TRI reporting. While the overall ratio of production-related waste managed per gigawatt-hour produced has not significantly changed, the ways in which the sector manages this waste have changed considerably.

![Figure 30. Production-Related Waste Managed, 2003-2012 Electric Utilities](image)

In 2012, two-thirds of production-related waste managed was treated, while slightly less than one-third was released. This is in contrast to 2003, when the opposite was the case—almost two-thirds of the waste was released and one-third was treated. This trend is in large part due to an increase in the number of scrubbers at electric utilities that treat (or destroy) acid gases that would otherwise be on-site air releases. The releases per gigawatt-hour produced have dramatically decreased, offset by an increase in quantities treated per gigawatt-hour produced.

In the electric utilities sector, 4% of facilities reported having initiated practices in 2012 to reduce their toxic chemical use and waste generation through source reduction activities. The most commonly reported types of source reduction activities for the sector were good operating practices and process modifications. For example, one electric generating facility reported reducing ammonia used in its selective catalytic reactor to control nitrogen oxides (NOx) emissions by optimizing reaction conditions and replacing ammonia injection control valves. TRI’s Pollution Prevention Search Tool can help you learn more about pollution prevention opportunities in this sector.