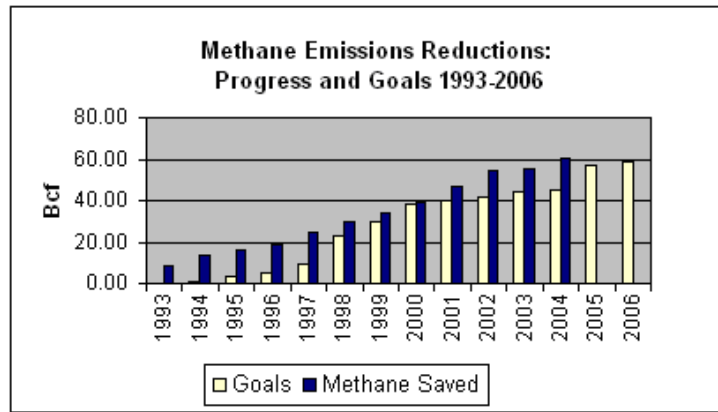




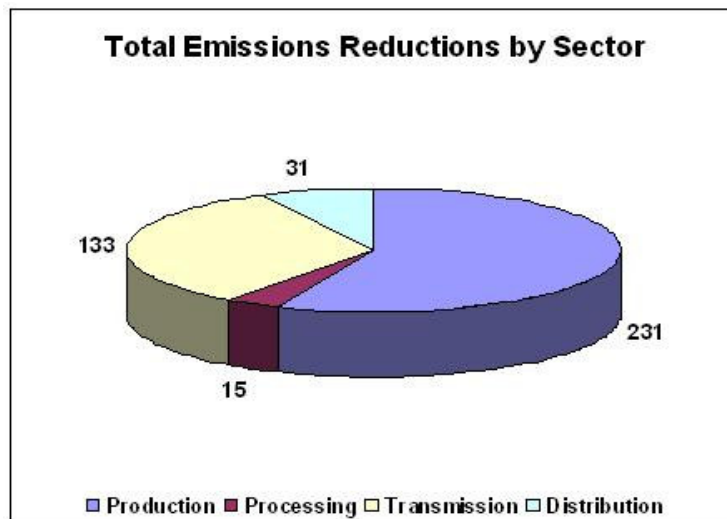
EPA Natural Gas STAR Accomplishments 2004

By working together to prevent gas losses, EPA and the natural gas industry are successfully protecting the environment and improving profitability. Participation in Natural Gas STAR cuts across all of the major industry sectors, including gas production, processing, transmission and distribution. As of 2004, the companies participating in Natural Gas STAR represent 56% of the natural gas industry in the U.S. Today, the program has over 110 partner companies and is endorsed by nearly 20 major industry trade associations.

Since the Program began in 1993, Natural Gas STAR partners have eliminated more than 400 billion cubic feet (Bcf) of methane emissions through the implementation of the Program's core Best Management Practices (BMPs), as well other activities identified by partner companies (referred to as Partner Reported Opportunities - or PROs) (see charts below). This is the equivalent of removing nearly 30 million cars from the road for one year or planting more than 36 million acres of trees. At the same time, partner companies have saved over \$1 billion by keeping more gas in their systems for sale in the market.

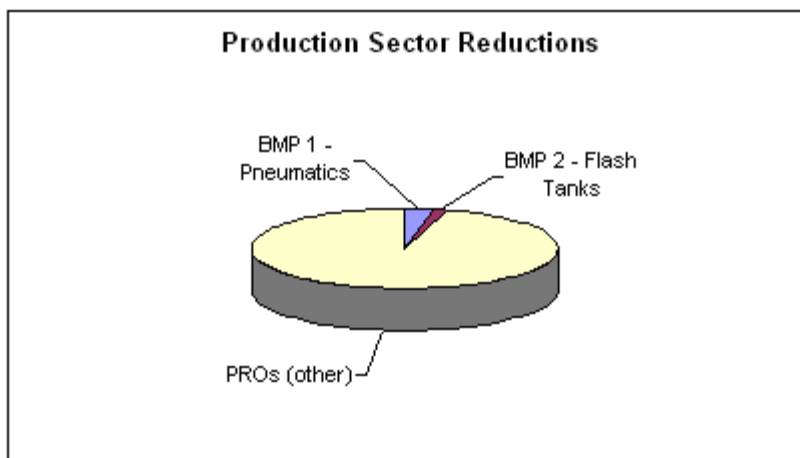


The following pie chart shows the breakdown of reported emissions reductions (in Bcf) by industry sector:



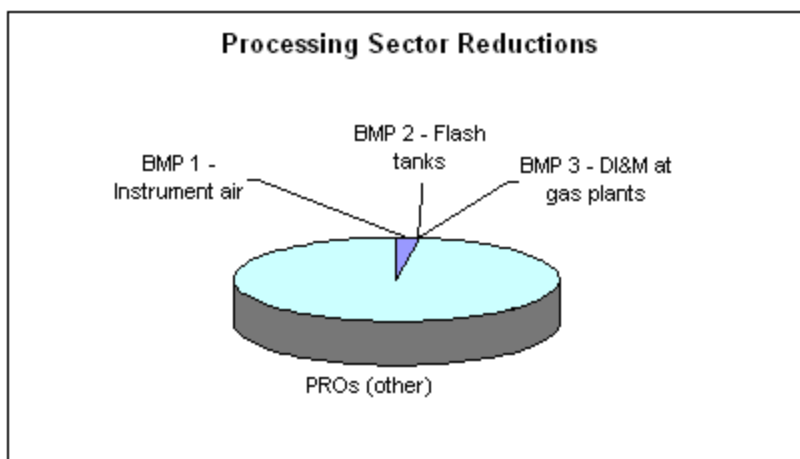
Production sector partners reported nearly 32 Bcf of methane emissions reductions in 2004 and a total of 231 Bcf since 1990. The figure below shows that most of the reductions reported by this sector are from PROs, with relatively small percentages attributable to the core BMPs: replacing high-bleed pneumatic devices and installing flash tank separators. Top PROs reported by production sector partners in 2004 included:

- Perform green completions
- Install smart lift automated production systems on gas wells
- Install vapor recovery units (VRUs)
- Install plunger lifts
- Install instrument air



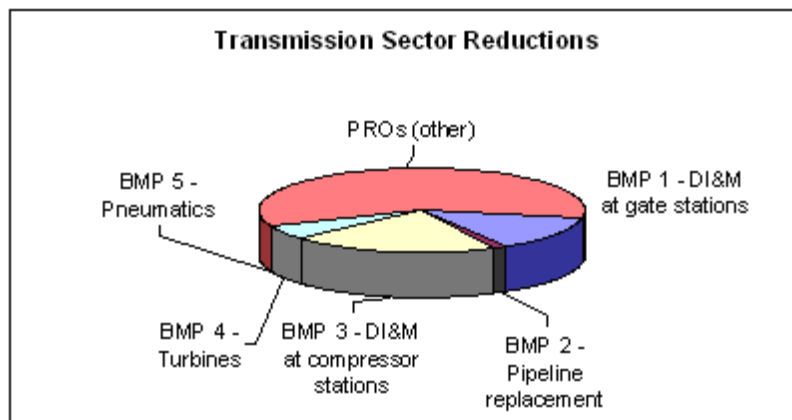
Gathering and Processing sector partners reported 2.2 Bcf of methane emissions reductions in 2004 and a total of 15 Bcf since 1990. The figure below shows that most of the reductions reported by this sector are from PROs, with relatively small percentages attributable to the core BMPs: converting to instrument air, installing flash tank separators, and directed inspection and maintenance (DI&M) at gas processing plants. Top PROs reported by processing sector partners in 2004 included:

- Conduct helicopter leak surveys
- Conduct infrared leak surveys
- Replace glycol dehydration units with methanol injection
- Install electric compressors
- Use hot taps for in-service pipeline connections



Transmission sector partners reported 21 Bcf of reductions in 2004 and a total of 133 Bcf since 1993. The figure below shows that most of the reductions reported by this sector are from PROs, with Directed Inspection and Maintenance (DI&M) at compressor stations, DI&M at gate stations, and installation of turbines contributing 21, 14 and 6 percent respectively. Reductions from pipeline replacement and replacement of high-bleed pneumatics contribute less than five percent each. Top PROs reported by transmission sector partners in 2004 included:

- Use fixed/portable compressors for pipeline pumpdown
- Use of composite wraps
- Install electric compressors
- Use hot taps for in-service pipeline connections
- Replace wet gas seals with dry seals



Distribution sector partners reported more than 4 Bcf of reductions in 2004 and a total of 31 Bcf since 1993. The figure below shows that most of the reductions reported by this sector are from Directed Inspection and Maintenance (DI&M) at gate stations, PROs, and pipeline replacement. Reductions from DI&M at compressor stations, turbine installations, and replacement of high-bleed pneumatics contribute less than five percent each. Top PROs reported by distribution sector partners in 2004 included:

- Lower purge pressure for shutdown
- Reduce/downgrade system pressure (manual)
- Use hot taps for in-service pipeline connections
- Inject blowdown gas into low pressure mains

