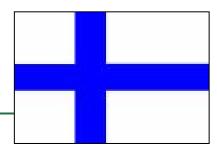
11 Finland



11.1 Summary of Coal Industry

11.1.1 ROLE OF COAL IN FINLAND

Finland is not a producer of coal and imports all of its coal for domestic energy consumption. Approximately 75 percent of coal consumption is used for maintaining the electricity and heating sectors. It should be noted that annual domestic coal consumption varies due to the hydrological condition of Finland (IEA, 2007). Finland has no reported coal reserves nor does the country produce (i.e., extract) coal (Table 11-1).

Table 11-1. Finland's Coal Reserves and Production

Indicator	Anthracite & Bituminous (million tonnes)	Sub- bituminous & Lignite (million tonnes)	Total (million tonnes)	Global Rank (# and %)
Estimated Proved Coal Reserves (2011)	0	0	0	N/A (0%)
Annual Coal Production (2012)	0	0	0	N/A (0%)

Source: EIA (2014)



Figure 11-1. Location of Finland's Coal Reserves

Source: CIA World Factbook (2014)

11.1.2 **STAKEHOLDERS**

Since no coal reserves and/or production exist, there are currently no coal mine methane (CMM) stakeholders in Finland.

11.1.3 STATUS OF COAL AND THE COAL MINING INDUSTRY

Finland's mineral industry includes (but is not limited to) the mining of gold, nickel, cobalt, copper, zinc, diamonds, phosphate rock, wollastonite, and talc (USGS, 2013). Finland does not presently have any identified coal reserves; therefore, no coal mining occurs in Finland.

Overview of CMM Emissions and Development 11.2 **Potential**

The Global Methane Initiative (GMI) International CMM Projects Database currently identifies no CMM recovery projects for Finland, in operation or development (GMI, 2014).

11.2.1 CMM EMISSIONS FROM OPERATING MINES

There are no operating coal mines in Finland.

11.2.2 CMM EMISSIONS FROM ABANDONED COAL MINES

Finland has no abandoned coal mines.



11.2.3 CBM FROM VIRGIN COAL SEAMS

There are no commercial coal bed methane development projects in Finland at this time.

11.3 Opportunities and Challenges to Greater CMM Recovery and Use

Table 11-2 summarizes Finland's climate change mitigation commitment. Finland is an Annex I Party to the Kyoto Protocol. Finland has an emissions reduction target of 6 percent below the 1990 levels for 2008-2012.

Table 11-2. Finland's Climate Change Mitigation Commitment

Agreement	Signature	Ratification
UNFCCC	June 4, 1992	May 3, 1994
Kyoto Protocol	April 29, 1998	May 31, 2002

Source: UNFCCC (2014)

Finland's National Strategy for Adaptation to Climate Change was adopted in 2005 as an independent element of the broader National Energy and Climate Strategy which was outlined in 2005, finalized in 2008, and subsequently updated in 2013. None of these documents address CMM (EEA, 2014).

11.3.1 Market and Infrastructure Factors

Finland joined the Global Methane Initiative (formerly the Methane to Markets Partnership) in 2008 and is working with stakeholders to recover and utilize methane produced by Finland's 33 landfills as well as its wastewater treatment facilities. Finland is also providing funding support for other international projects in countries such as Honduras and Nicaragua (USEPA, 2008). Finland currently sits on the GMI Agriculture, Municipal Solid Waste, and Municipal Wastewater Subcommittees.

11.3.2 REGULATORY INFORMATION

The *Mining Act of 1965* previously provided the legal framework for mining operations in Finland. In late 2008, a working group was formed by the Finnish government to revise the outdated Act. The new Mining Act entered into force in July 2011 and supersedes the previous 1965 Act. The new Act includes provisions concerning the rights and obligations of parties engaged in ore prospecting, mining, and gold panning—both during operations and as termination measures are taken (e.g., aftercare). While securing the preconditions for mining and ore prospecting more effectively than before, the new Act takes account of environmental issues, citizens' and landowners' rights, and municipalities' opportunities to influence decision-making as well as reconciles various public and private (i.e., competing) interests (MEE, 2011).

11.4 Profiles of Individual Mines

There are no coal mines in Finland.



11.5 References

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