Anders Hallberg (Geological Survey of Sweden), 18 April 2012
Update by Pasi Eilu (Geological Survey of Finland), 8 April 2019,
Helge Reginiussen (Geological Survey of Sweden), 6 December 2022

Commodity	**Antimony (Sb)**	**Data source**
Significance for the EU (2023)	*Critical, not strategic*	
Uses of the commodity	Main uses: *Flame retardants 43 %* *Lead-acid batteries 32 %* Minor uses: *Lead alloys 14 %, Plastics (use as catalyst in the production of PET and for heat stabilisers) 6 %, Glass and ceramics (5 %). Pigments, lubricants, and ammunition.* Future uses: *Semiconductor industry. Cheaper alternative to Indium-Tin-Oxide compounds for LCD screens. Continues to be important, possibly increase, in flame retardants. Use in car batteries may decrease if lead battery use decreases.*	Latunussa et al. (2020)
Resources and potential in Nordic countries	Finland: *Known resources: Orogenic gold-antimony deposits in western Finland contain 2,555 t Sb.* Greenland: *Known resources: 3,780 t Sb. Several Sb occurrences in central East Greenland associated with tungsten.* Norway: *Several silver and sulphide occurrences in the Caledonides are locally enriched in antimony, but without quantitative data, as yet.* Sweden: *Known resources: 19,885 t Sb. The Rakkejaur deposit has 17Mt @ 599 ppm Sb. Additional potential exists in the Skellefte district and surroundings.*	Lauri et al. (2018), Eilu et al (2021), FODD (2022), Rosa et al. (2023)
Anthropogenic resources and potential in Nordic countries	*Recycling of lead-acid batteries. Possibly fly ash from combustion, and flame retardant materials.*	Sternbeck et al. (2002)
Main deposit types in Nordic countries	*Finland: orogenic gold deposits: Kalliosalo* *Greenland: hydrothermal veins: North Margeries Dal* *Norway: Metasomatic Pb-Zn deposit: Melandsgruvene. Orogenic silver deposits: Svenningdal. VMS deposits: Bleikvassli, Småvatnan, Sulitjelma* *Sweden: massive sulphide deposits, Rakkejaur, Renström. Volcanic exhalative: Rockliden*	Eilu et al. (2021), FODD (2022), Rosa et a. (2023)
Main global deposit types	*Orogenic antimony-gold deposits, carbonate replacement deposits, epithermal gold-antimony deposits, VMS deposits*	Goldfarb et al. (2017), Monecke et al. (2017)
Global production (2022)	*110,000 t (mine production)*	USGS (2023)

Nordic production (2021)	*No mine production*	
Main producing countries (2022)	*China 55 %, Russia 18 %, Tajikistan 16 %, Australia 3.6 %, Burma 3.6 % (mine production)*	USGS (2023)
Technological challenges in production	*Difficulties in separating antimony from copper in ore from complex massive sulphides.*	Awe (2010)
Recycling	Present: *Car battery recycling: all Sb is recovered from Pb batteries. End-of-life recycling at 28 % in the EU. Availability of secondary antimony is almost entirely dependent on the extent of lead recycling and the market conditions for lead and lead-acid battery scrap. Antimony used in the manufacture of plastics and flame retardants is generally not recovered because antimony is dispersed in these products.* Future: *Recovery from burnt plastic waste ash – currently, such recovery does not take place*	Schwarz-Schampera (2014), Latunussa et al. (2020), USGS (2023)

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