OECD Environmental Performance Reviews

SWITZERLAND

2017

STATISTICAL ANNEXES

OECD

http://oe.cd/epr-switzerland

Energy supply per unit of GDP, 2015
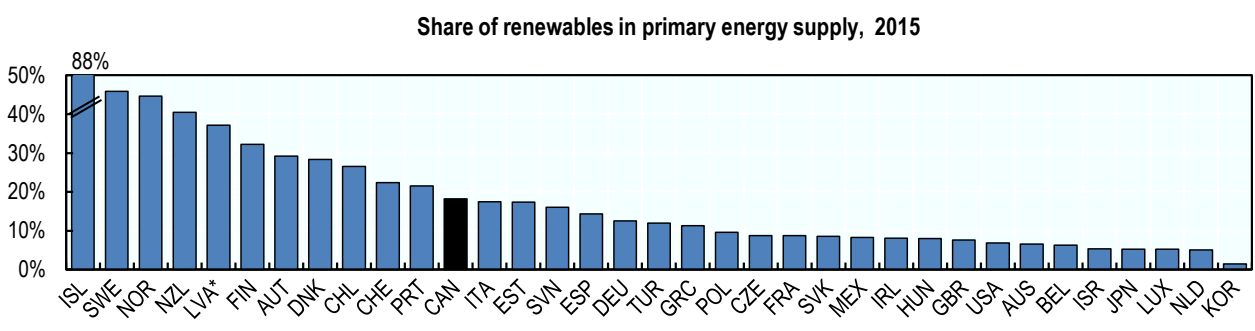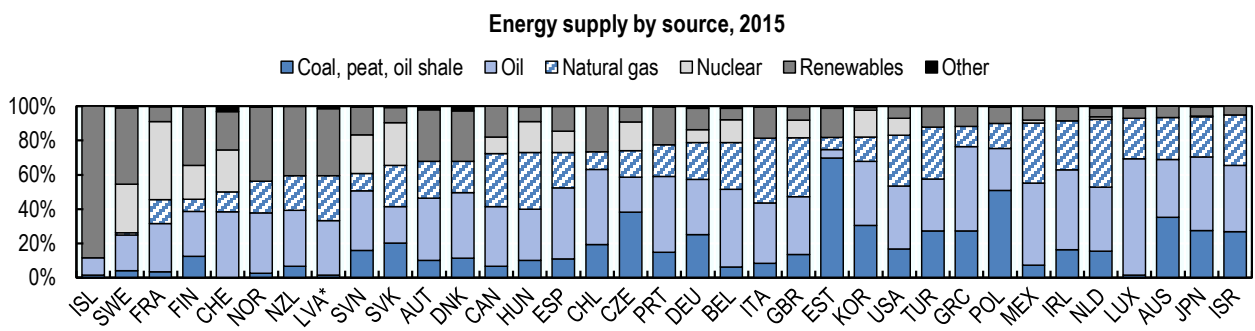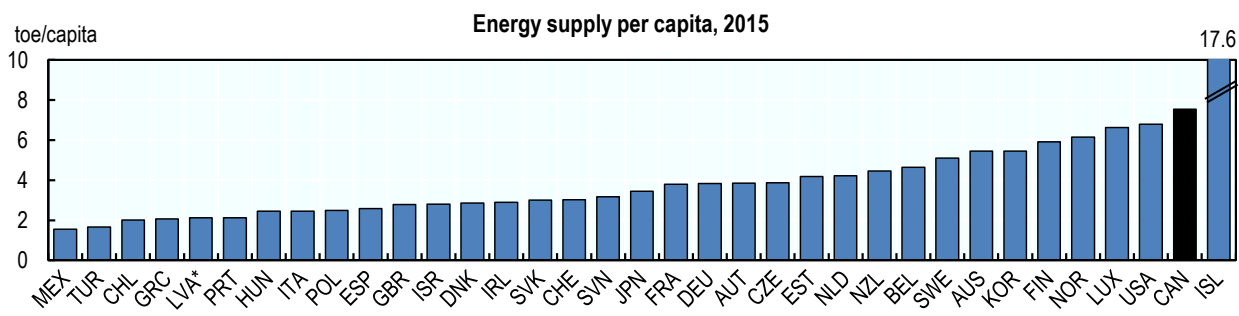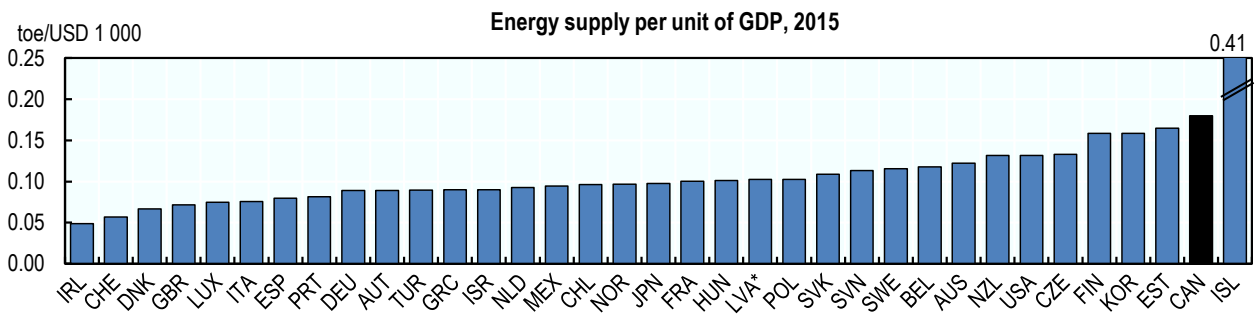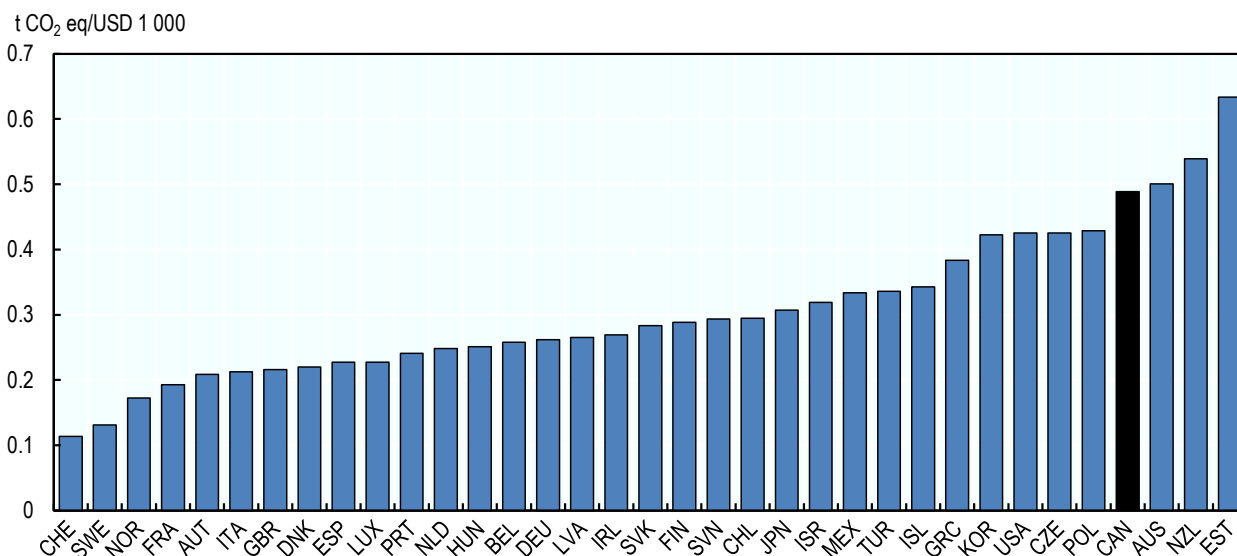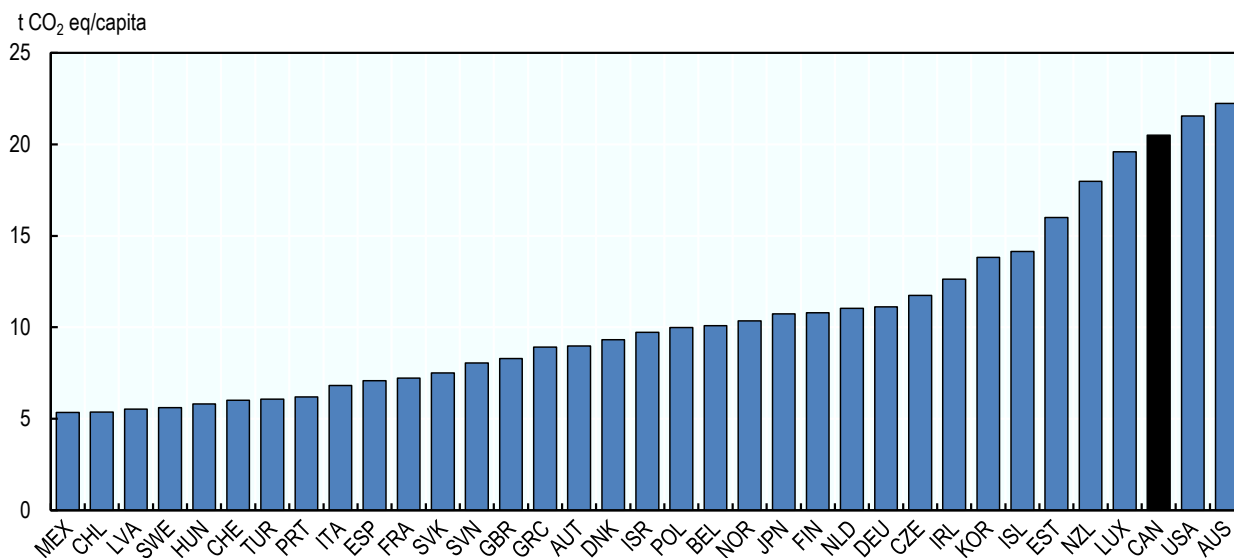
toe/USD 1 000

0.41

0.25
0.20
0.15
0.10
0.05
0.00

IRL CHE DNK GBR LUX ITA ESP PRT DEU AUT TUR GRC ISR NLD MEX CHL NOR JPN FRA HUN LVA* POL SVK SVN SWE BEL AUS NZL USA CZE FIN KOR EST CAN ISL

Energy supply per capita, 2015

toe/capita

17.6

10
8
6
4
2
0

MEX TUR CHL GRC LVA* PRT HUN ITA POL ESP GBR ISR DNK IRL SVK CHE SVN JPN FRA DEU AUT CZE EST NLD NZL BEL SWE AUS KOR FIN NOR LUX USA CAN ISL

Energy supply by source, 2015

■ Coal, peat, oil shale　▨ Oil　▨ Natural gas　▨ Nuclear　▨ Renewables　■ Other

100%
80%
60%
40%
20%
0%

ISL SWE FRA FIN CHE NOR NZL LVA* SVN SVK AUT DNK CAN HUN ESP CHL CZE PRT DEU BEL ITA GBR EST KOR USA TUR GRC POL MEX IRL NLD LUX AUS JPN ISR

Share of renewables in primary energy supply, 2015

88%

50%
40%
30%
20%
10%
0%

ISL SWE NOR NZL LVA* FIN AUT DNK CHL CHE PRT CAN ITA EST SVN ESP DEU TUR GRC POL CZE FRA SVK MEX IRL HUN GBR USA AUS BEL ISR JPN LUX NLD KOR

Share of renewables in electricity production, 2015

100%
80%
60%
40%
20%
0%

ISL NOR NZL AUT CAN SWE CHE DNK LVA* PRT FIN CHL ITA ESP TUR LUX DEU SVN GRC IRL GBR SVK BEL JPN FRA MEX EST POL AUS USA NLD CZE HUN ISR KOR

GHG emissions per unit of GDP, 2014

t CO$_2$ eq/USD 1 000

0.7
0.6
0.5
0.4
0.3
0.2
0.1
0

CHE SWE NOR FRA AUT ITA GBR DNK ESP LUX PRT NLD HUN BEL DEU LVA IRL SVK FIN SVN CHL JPN ISR MEX TUR ISL GRC KOR USA CZE POL CAN AUS NZL EST

GHG emissions per capita, 2014

t CO$_2$ eq/capita

25
20
15
10
5
0

MEX CHL LVA SWE HUN CHE TUR PRT ITA ESP FRA SVK SVN GBR GRC AUT DNK ISR POL BEL NOR JPN FIN NLD DEU CZE IRL KOR ISL EST NZL LUX CAN USA AUS

Change in total GHG emissions, 2000-14
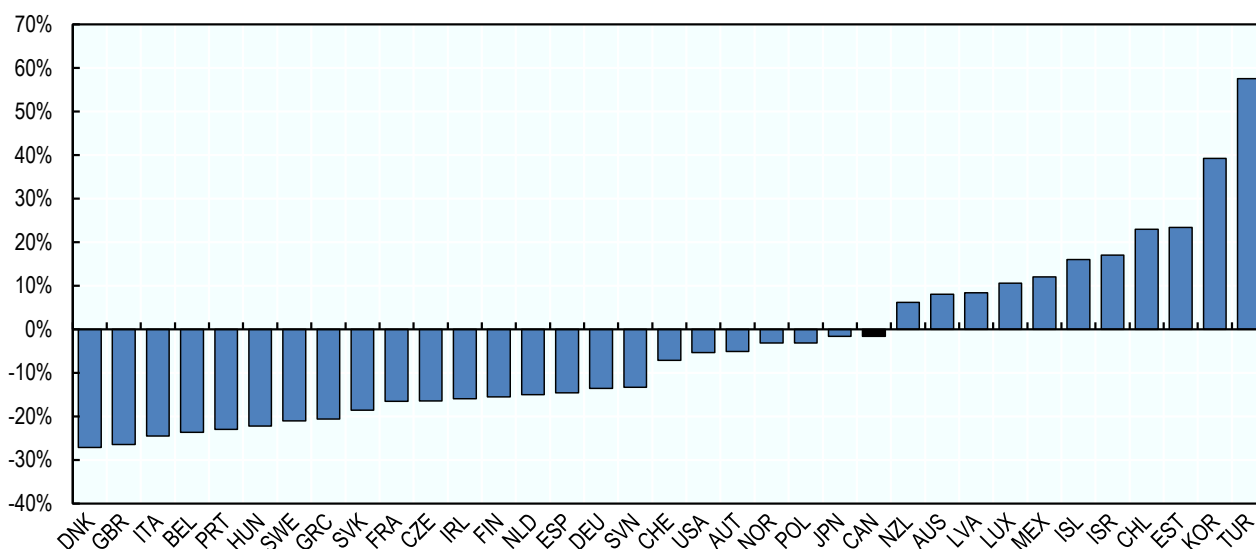
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%

DNK GBR ITA BEL PRT HUN SWE GRC SVK FRA CZE IRL FIN NLD ESP DEU SVN CHE USA AUT NOR POL JPN CAN NZL AUS LVA LUX MEX ISL ISR CHL EST KOR TUR
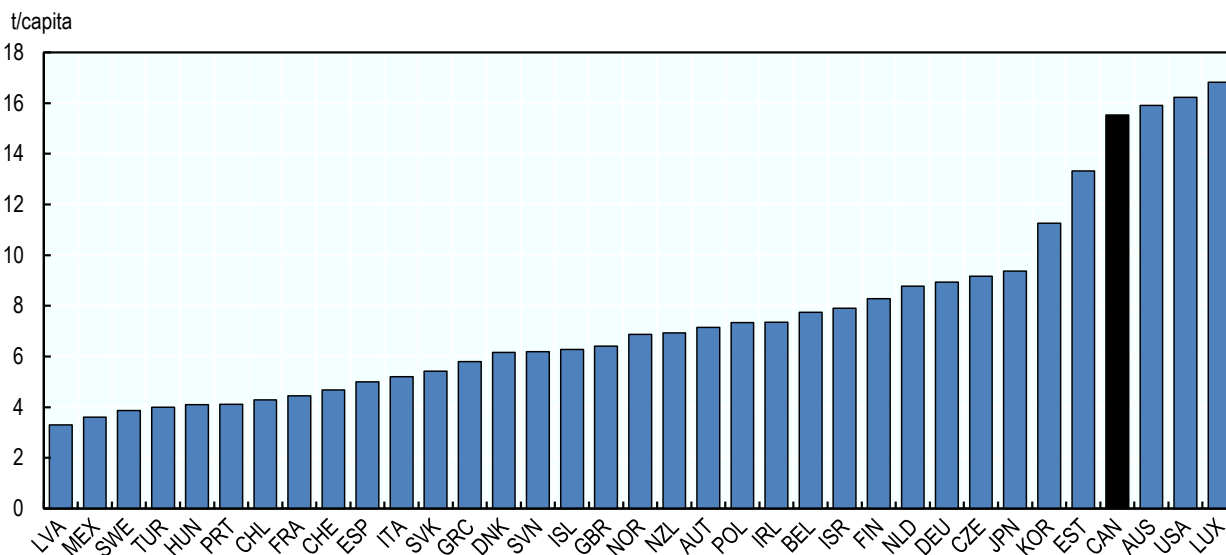
Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. GHG emissions excluding emissions/removals from land use, land-use change and forestry (LULUCF). KOR: 2013 data. MEX: data include emissions or removals from land-use change and forestry (LUCF). GDP at 2010 prices and purchasing power parities.
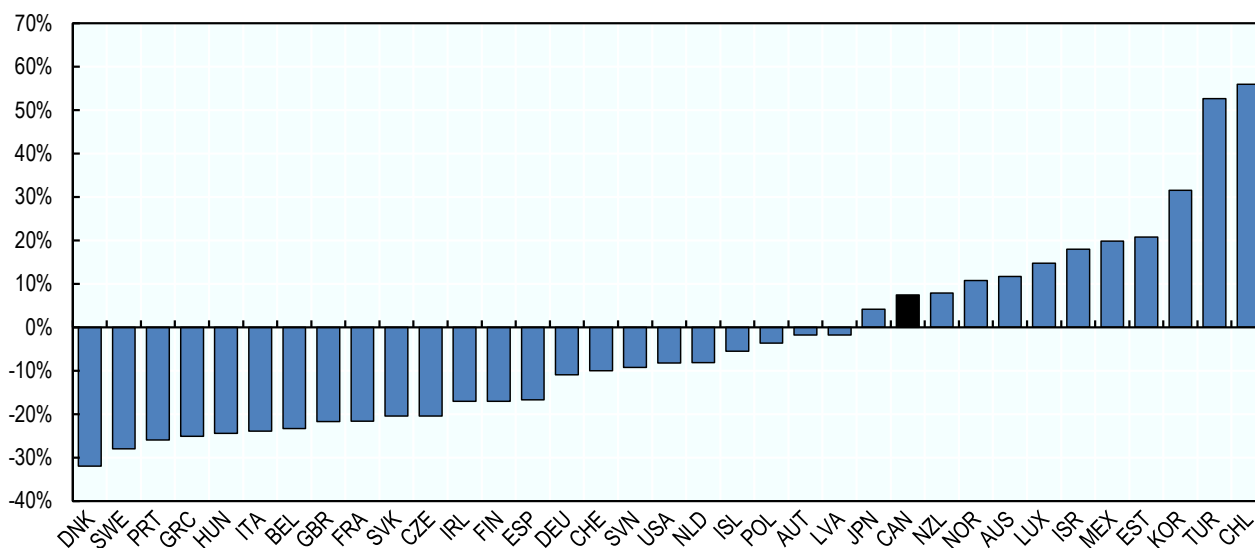*Source*: OECD (2016), "Greenhouse gas emissions by source", *OECD Environment Statistics* (database).

CO$_2$ emissions per unit of GDP, 2014

t/USD 1 000

CHE SWE NOR FRA DNK ISL IRL LVA PRT ESP ITA GBR AUT HUN LUX NLD BEL SVK CHL NZL DEU TUR FIN MEX SVN GRC ISR JPN POL USA CZE KOR AUS CAN EST

CO$_2$ emissions per capita, 2014

t/capita

LVA MEX SWE TUR HUN PRT CHL FRA CHE ESP ITA SVK GRC DNK SVN ISL GBR NOR NZL AUT POL IRL BEL ISR FIN NLD DEU CZE JPN KOR EST CAN AUS USA LUX
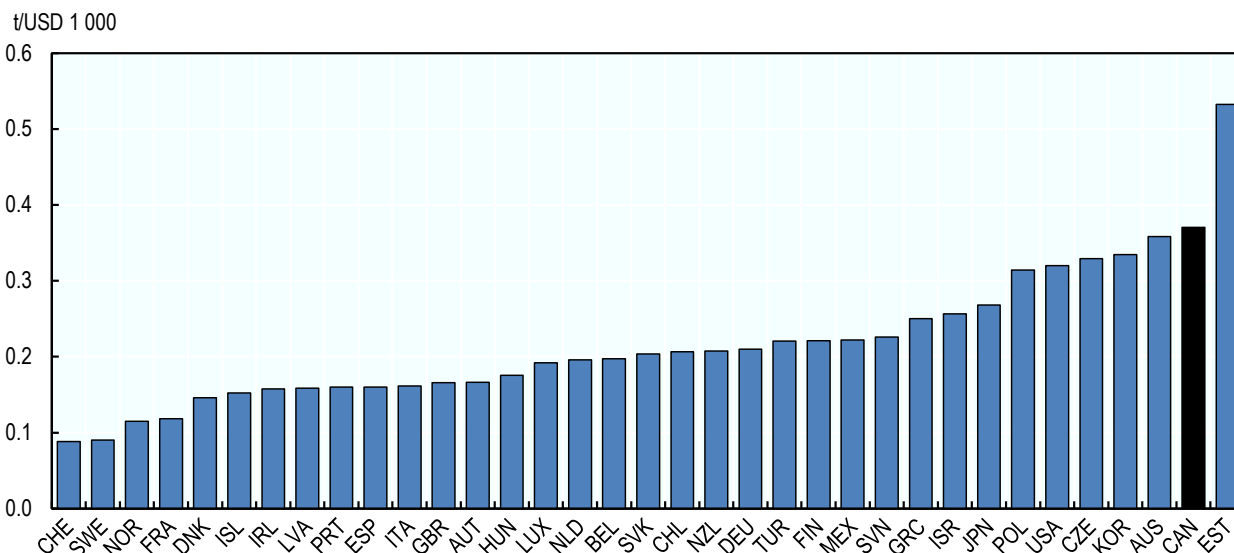
Change in total CO$_2$ emissions, 2000-14

DNK SWE PRT GRC HUN ITA BEL GBR FRA SVK CZE IRL FIN ESP DEU CHE SVN USA NLD ISL POL AUT LVA JPN CAN NZL NOR AUS LUX ISR MEX EST KOR TUR CHL
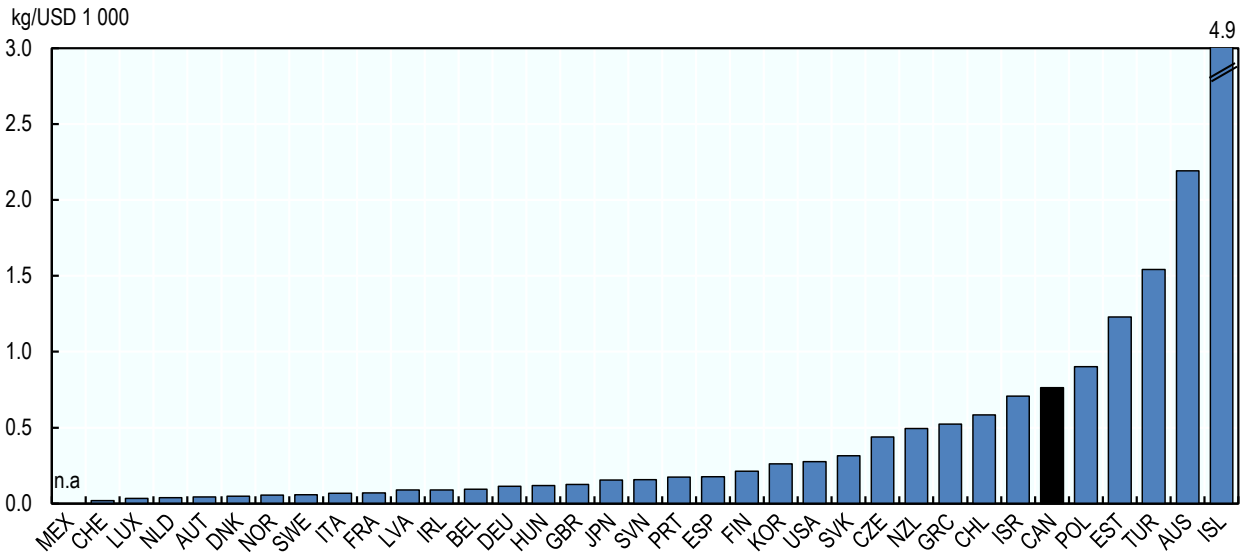
Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates.
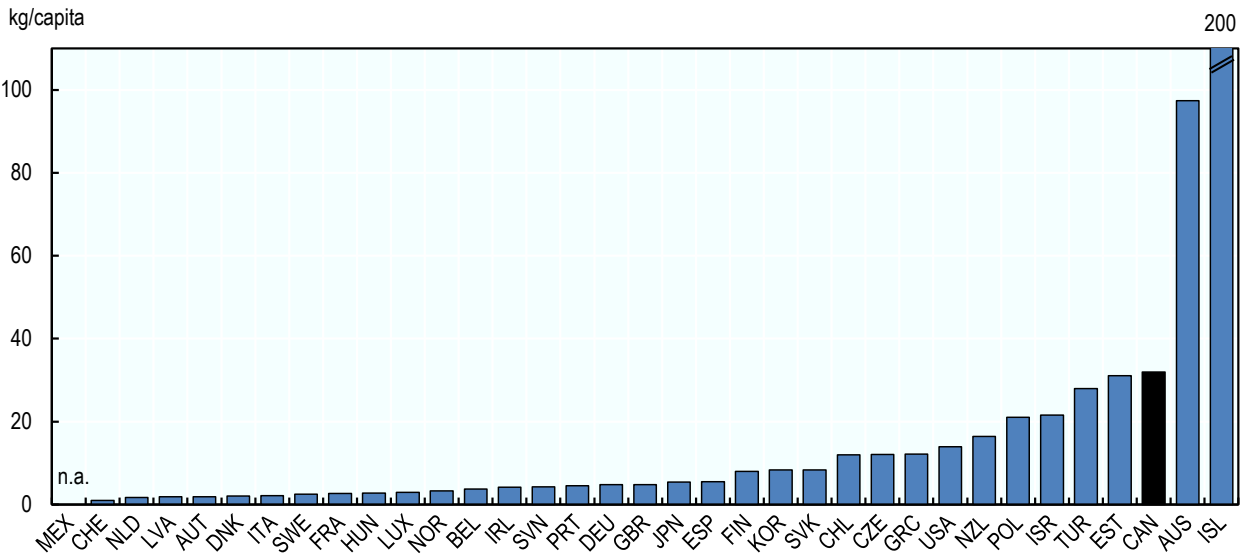CO$_2$ emissions from energy use only; excluding international marine and aviation bunkers; sectoral approach. GDP at 2010 prices and purchasing power parities.
Sources: IEA (2016), IEA CO$_2$ Emissions from Fuel Combustion Statistics (database); OECD (2016) OECD National Accounts (database; OECD (2016) "Labour Force Statistics: Population projections", OECD Employment and Labour Market Statistics (database).
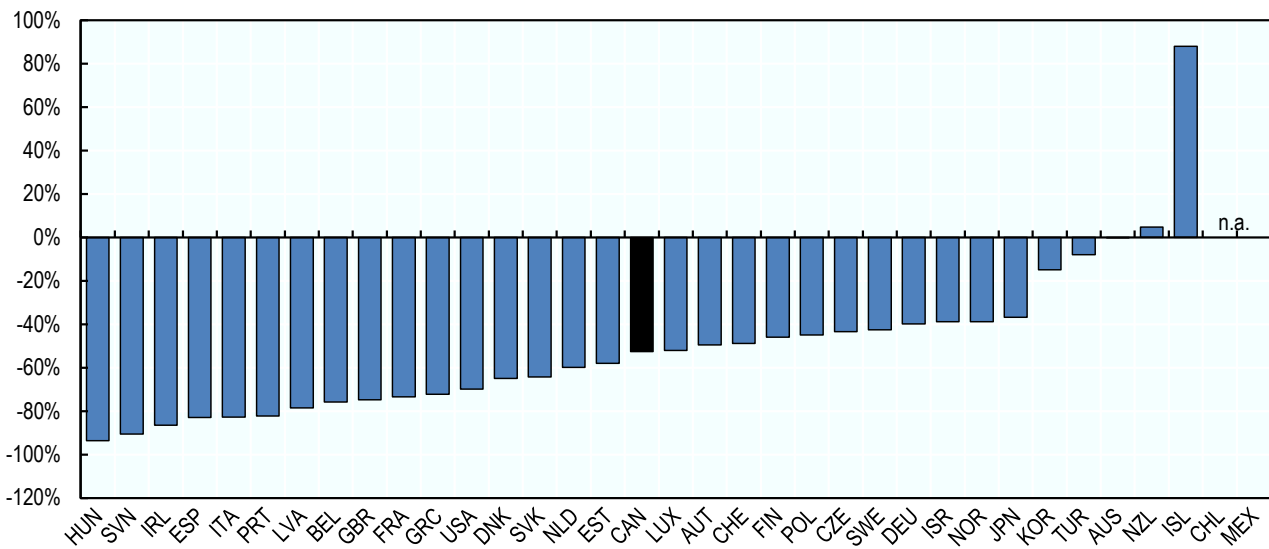
SO$_x$ emissions per unit of GDP, 2014

kg/USD 1 000

4.9

n.a

MEX CHE LUX NLD AUT DNK NOR SWE ITA FRA LVA IRL BEL DEU HUN GBR JPN SVN PRT ESP FIN KOR USA SVK CZE NZL GRC CHL ISR CAN POL EST TUR AUS ISL

SO$_x$ emissions per capita, 2014

kg/capita

200

n.a.

MEX CHE NLD LVA AUT DNK ITA SWE FRA HUN LUX NOR BEL IRL SVN PRT DEU GBR JPN ESP FIN KOR SVK CHL CZE GRC USA NZL POL ISR TUR EST CAN AUS ISL

Change in total SO$_x$ emissions, 2000-14

n.a.

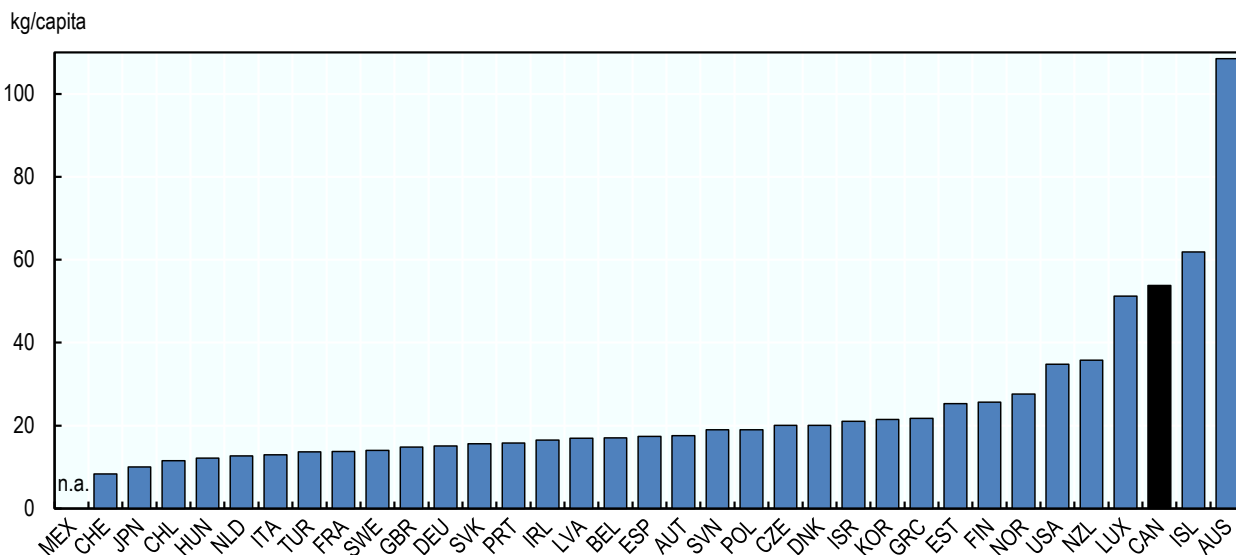HUN SVN IRL ESP ITA PRT LVA BEL GBR FRA GRC USA DNK SVK NLD EST CAN LUX AUT CHE FIN POL CZE SWE DEU ISR NOR JPN KOR TUR AUS NZL ISL CHL MEX

Sources: OECD (2016), "Air emissions by source", *OECD Environment Statistics* (database).

NO$_x$ emissions per unit of GDP, 2014

kg/USD1 000

MEX: n.a., CHE, NLD, JPN, SWE, IRL, DEU, FRA, GBR, ITA, AUT, BEL, NOR, DNK, HUN, ESP, CHL, SVK, LUX, PRT, KOR, FIN, USA, ISR, SVN, CZE, TUR, LVA, POL, GRC, EST, NZL, CAN, ISL, AUS

NO$_x$ emissions per capita, 2014

kg/capita

MEX: n.a., CHE, JPN, CHL, HUN, NLD, ITA, TUR, FRA, SWE, GBR, DEU, SVK, PRT, IRL, LVA, BEL, ESP, AUT, SVN, POL, CZE, DNK, ISR, KOR, GRC, EST, FIN, NOR, USA, NZL, LUX, CAN, ISL, AUS
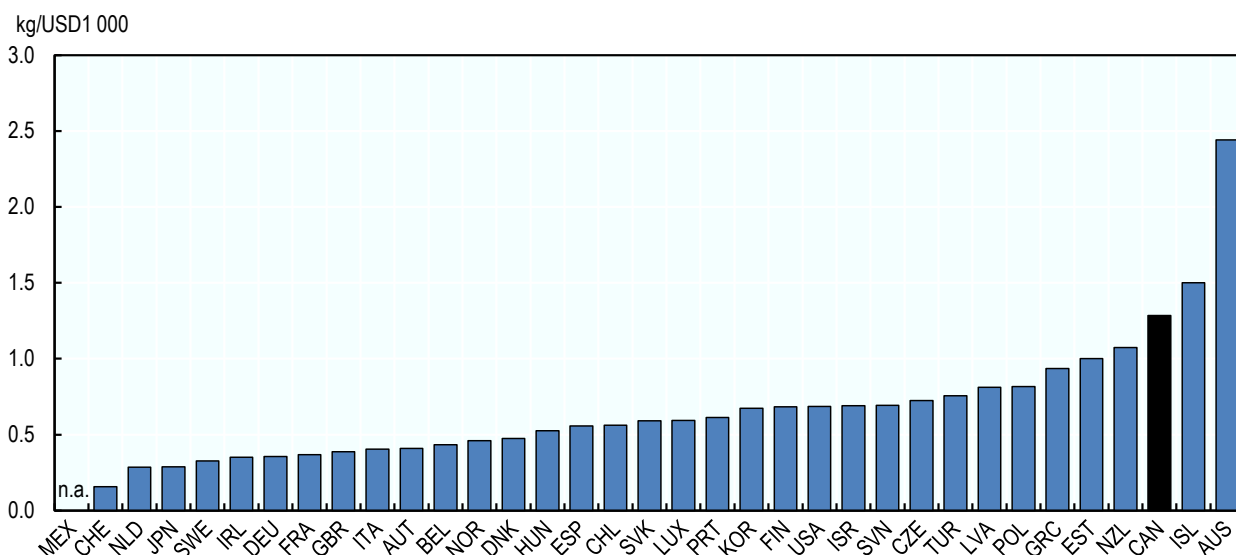
Change in total NO$_x$ emissions, 2000-14
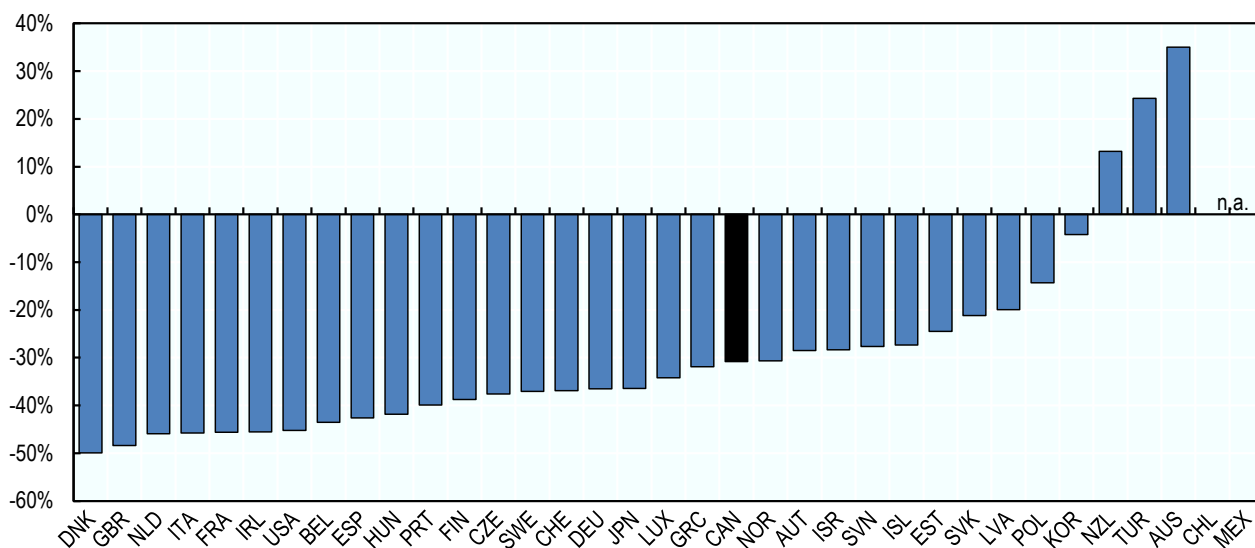
DNK, GBR, NLD, ITA, FRA, IRL, USA, BEL, ESP, HUN, PRT, FIN, CZE, SWE, CHE, DEU, JPN, LUX, GRC, CAN, NOR, AUT, ISR, SVN, ISL, EST, SVK, LVA, POL, KOR, NZL, TUR, AUS, CHL, MEX: n.a.
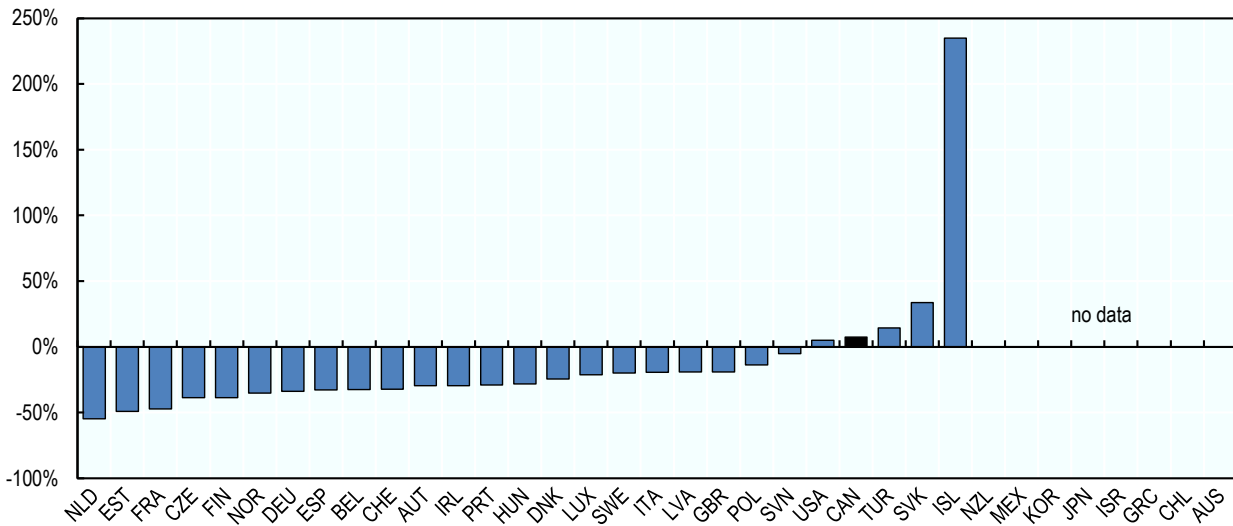
Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. GDP at 2010 prices and purchasing power parities.
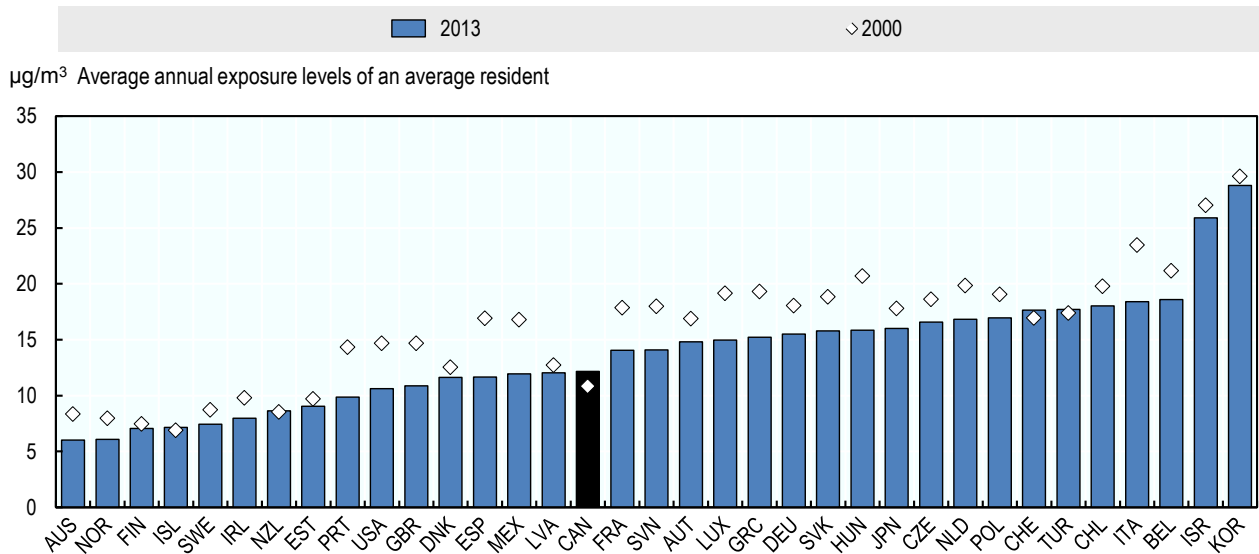*Sources*: OECD (2016), "Air emissions by source", *OECD Environment Statistics* (database).

PM$_{2.5}$ emissions per capita, 2014

kg/capita
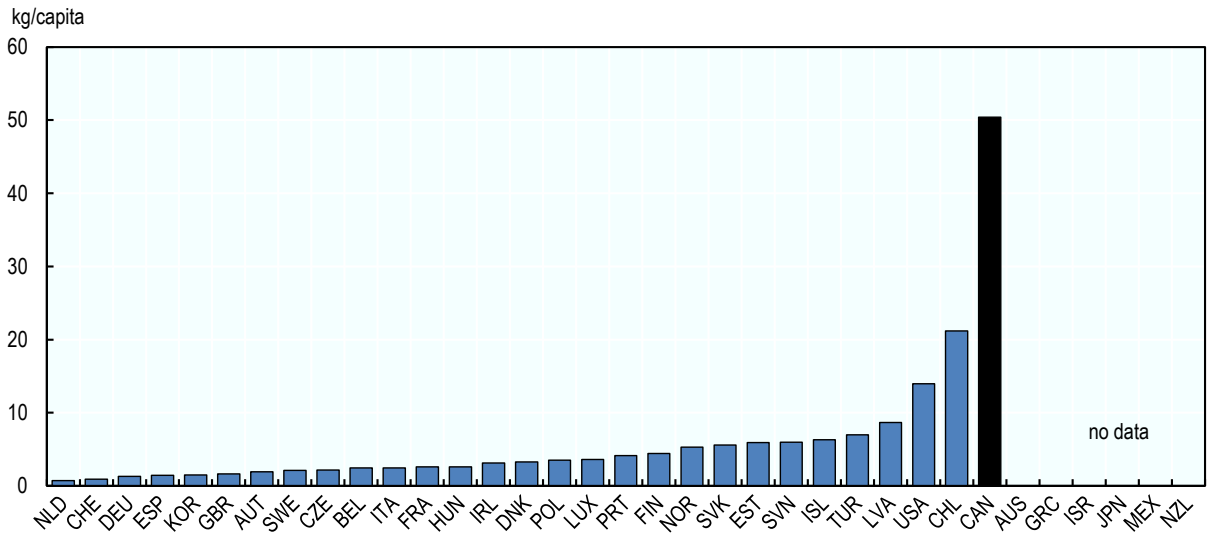
Change in total PM$_{2.5}$ emissions, 2000-14

Average annual population exposure to air pollution (PM$_{2.5}$), 2000 and 2013

◻ 2013   ◇ 2000

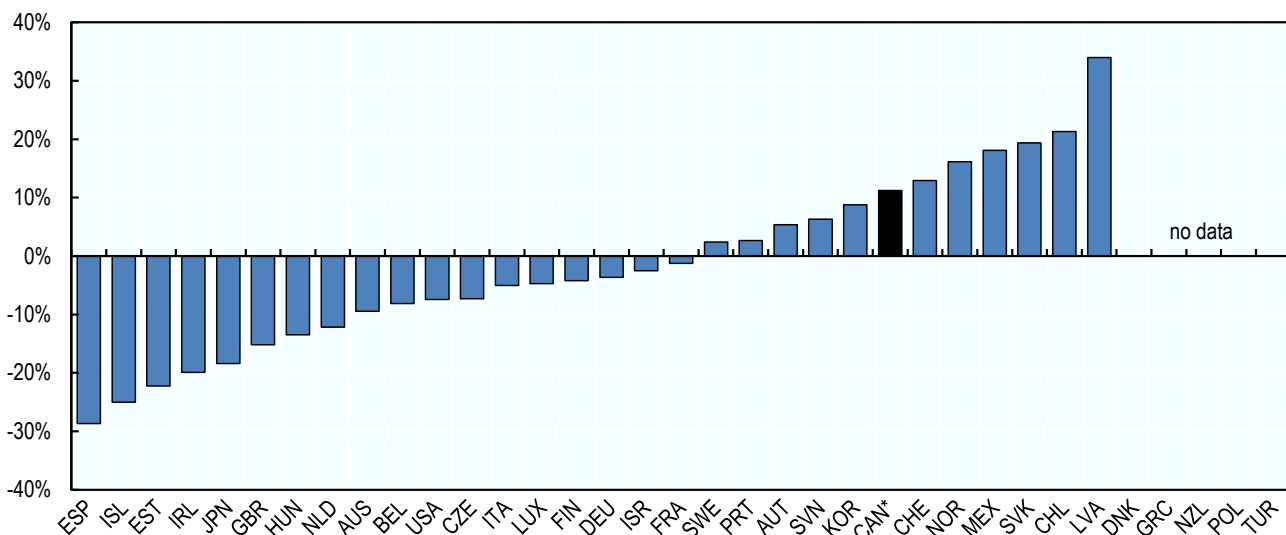µg/m^3 Average annual exposure levels of an average resident

Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. Population exposure to air pollution: estimates based on satellite observations and chemical transport models, calibrated against ground-based measurements.
Source: OECD (2016), "Air emissions by source", *OECD Environment Statistics* (database); OECD (2016), "Exposure to air pollution", *OECD Environment Statistics* (database).
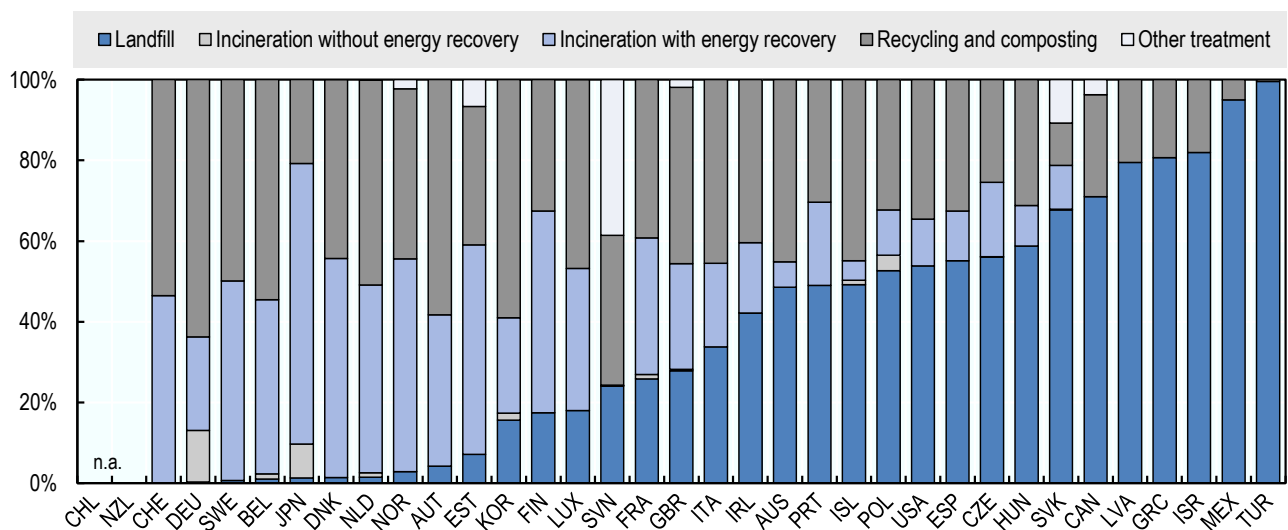
Municipal waste generation per capita, 2014

kg/capita

POL CZE SVK ISL JPN CHL EST MEX KOR LVA HUN TUR CAN* NOR SVN BEL ESP SWE PRT FIN ITA GBR GRC FRA NLD AUT IRL ISR DEU LUX AUS NZL USA CHE DNK
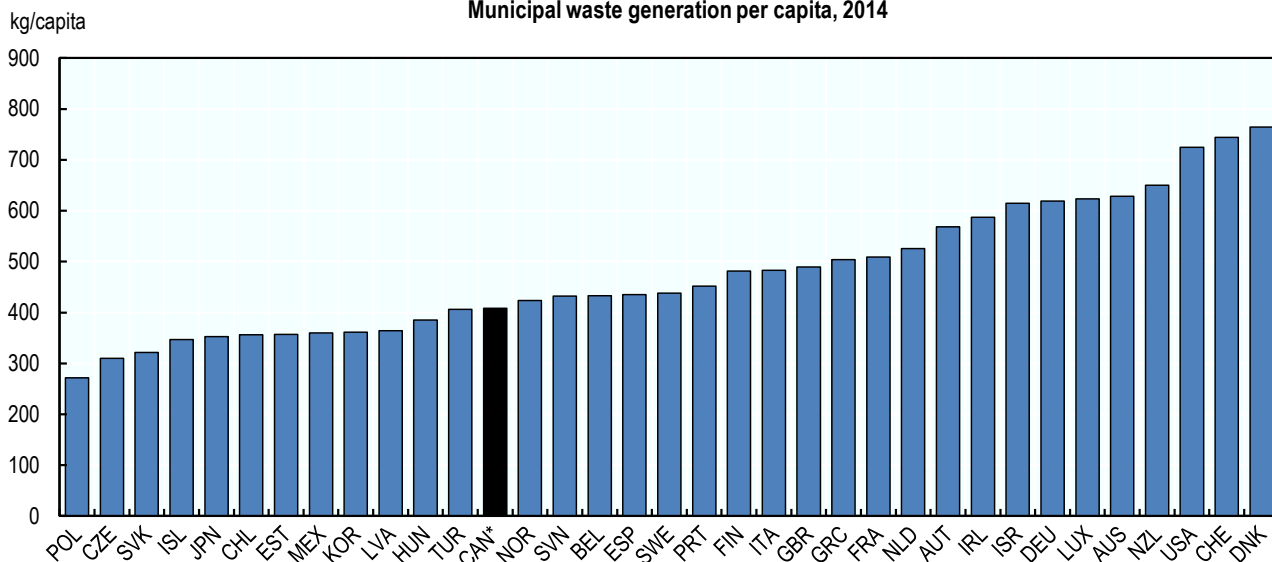
Change in municipal waste generation per capita, 2000-2014

no data

ESP ISL EST IRL JPN GBR HUN NLD AUS BEL USA CZE ITA LUX FIN DEU ISR FRA SWE PRT AUT SVN KOR CAN* CHE NOR MEX SVK CHL LVA DNK GRC NZL POL TUR

Municipal waste management, by type of treatment, 2014

■ Landfill □ Incineration without energy recovery ■ Incineration with energy recovery ■ Recycling and composting □ Other treatment

n.a.

CHL NZL CHE DEU SWE BEL JPN DNK NLD NOR AUT EST KOR FIN LUX SVN FRA GBR ITA IRL AUS PRT ISL POL USA ESP CZE HUN SVK CAN LVA GRC ISR MEX TUR
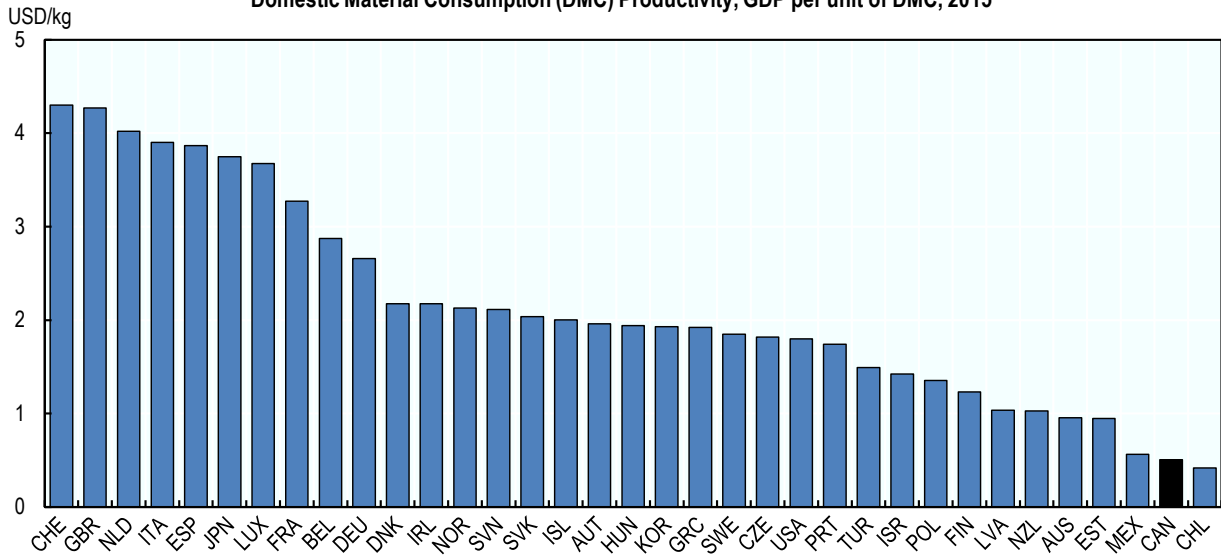
* Household waste.
Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. Household and similar waste collected by or for municipalities, originating mainly from households and small businesses. Includes bulky waste and separate collection. CAN: data include construction and demolition waste.
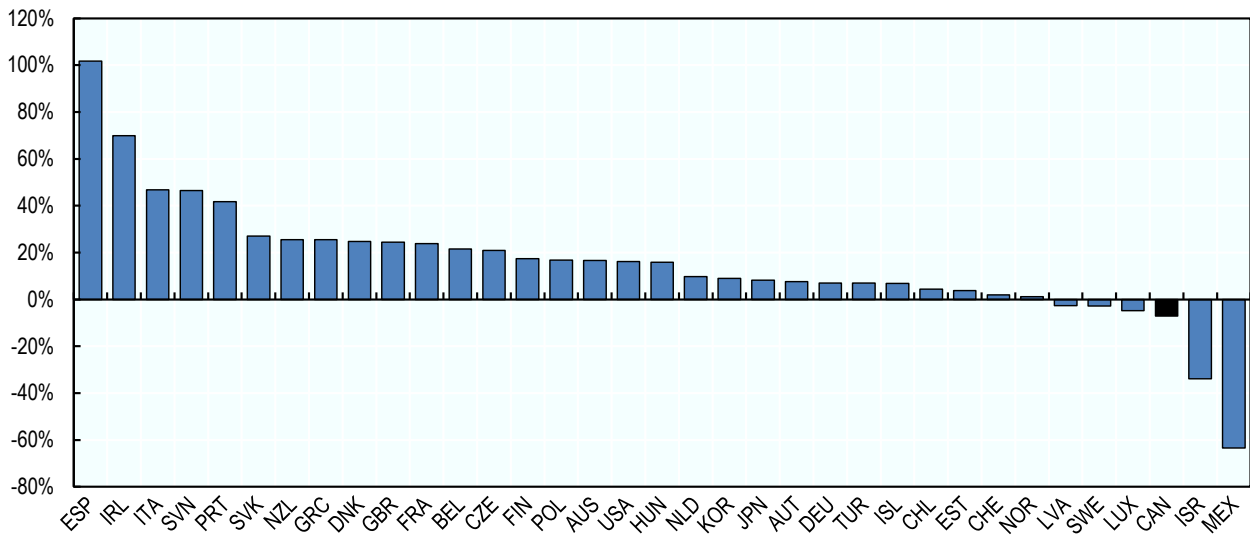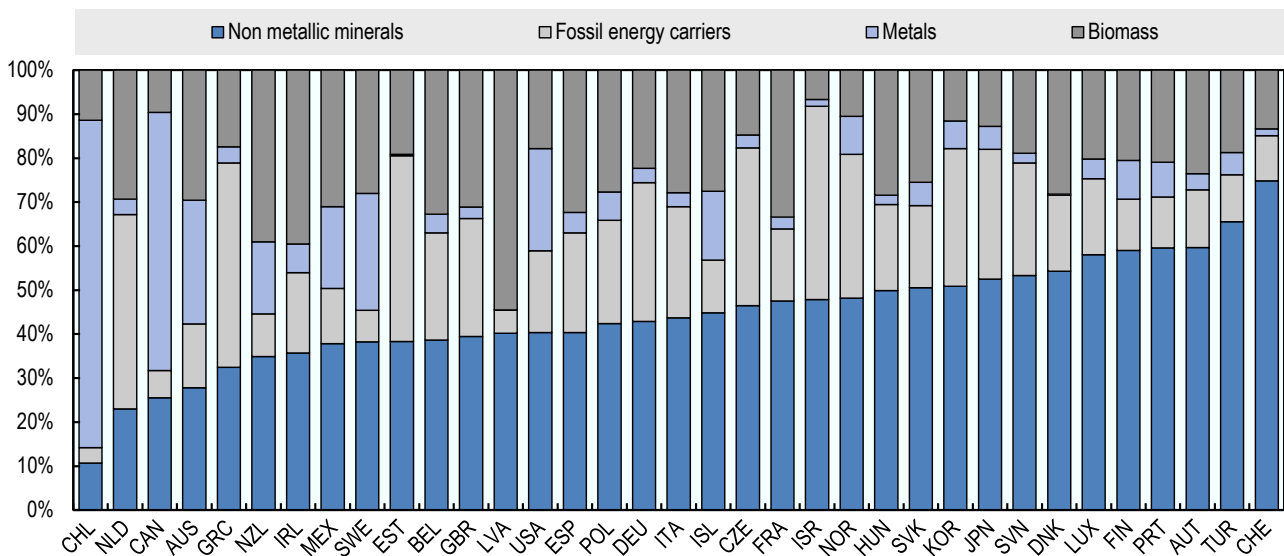*Source*: OECD (2016), "Municipal waste", *OECD Environment Statistics* (database).

Domestic Material Consumption (DMC) Productivity, GDP per unit of DMC, 2015

USD/kg

CHE GBR NLD ITA ESP JPN LUX FRA BEL DEU DNK IRL NOR SVN SVK ISL AUT HUN KOR GRC SWE CZE USA PRT TUR ISR POL FIN LVA NZL AUS EST MEX CAN CHL

Change in DMC productivity, 2008-15

ESP IRL ITA SVN PRT SVK NZL GRC DNK GBR FRA BEL CZE FIN POL AUS USA HUN NLD KOR JPN AUT DEU TUR ISL CHL EST CHE NOR LVA SWE LUX CAN ISR MEX

DMC by material category, 2015

☐ Non metallic minerals   ☐ Fossil energy carriers   ☐ Metals   ☐ Biomass

CHL NLD CAN AUS GRC NZL IRL MEX SWE EST BEL GBR LVA USA ESP POL DEU ITA ISL CZE FRA ISR NOR HUN SVK KOR JPN SVN DNK LUX FIN PRT AUT TUR CHE
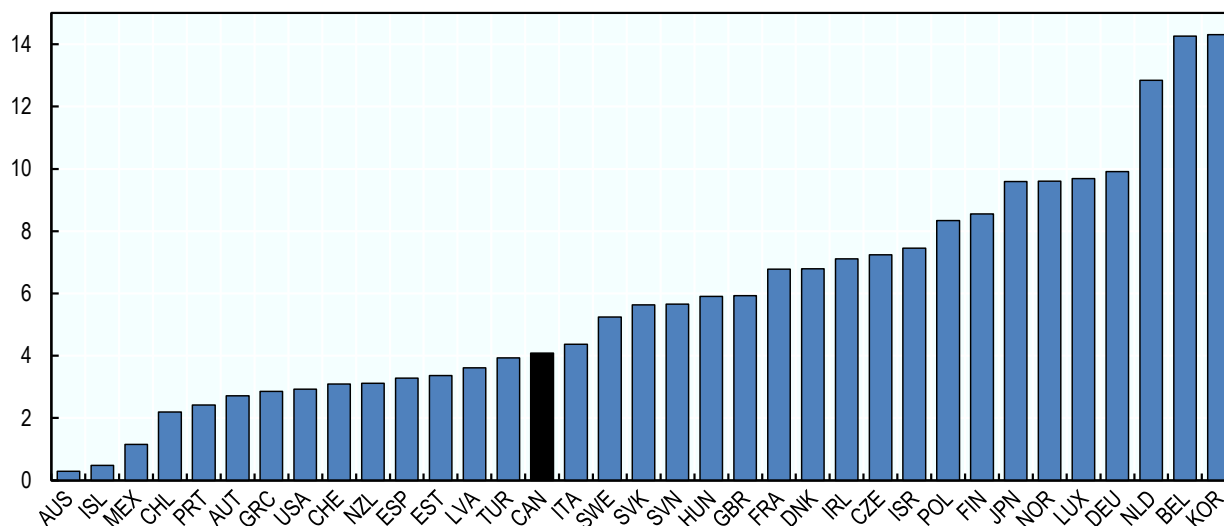
Notes: KOR: 2013 data for DMC productivity, 2010 data for DMC breakdown. Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. Domestic material consumption (DMC) equals the sum of domestic extraction of raw materials used by an economy and their physical trade balance (imports minus exports of raw materials and manufactured products). DMC productivity designates the amount of GDP generated per unit of materials used. GDP at 2010 prices and purchasing power parities. It should be born in mind that the data should be interpreted with caution and that the time series presented here may change in future as work on methodologies for Material Flow accounting progresses.

Source: Eurostat (2016), *Material flows and resource productivity* (database); OECD (2016), "Material resources", *OECD Environment Statistics* (database).
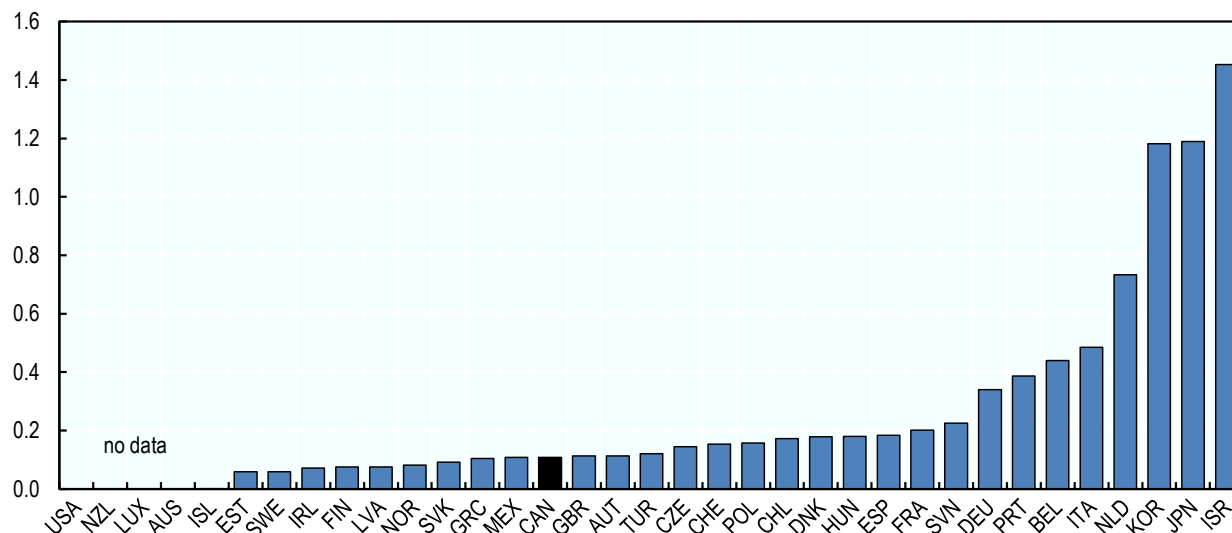
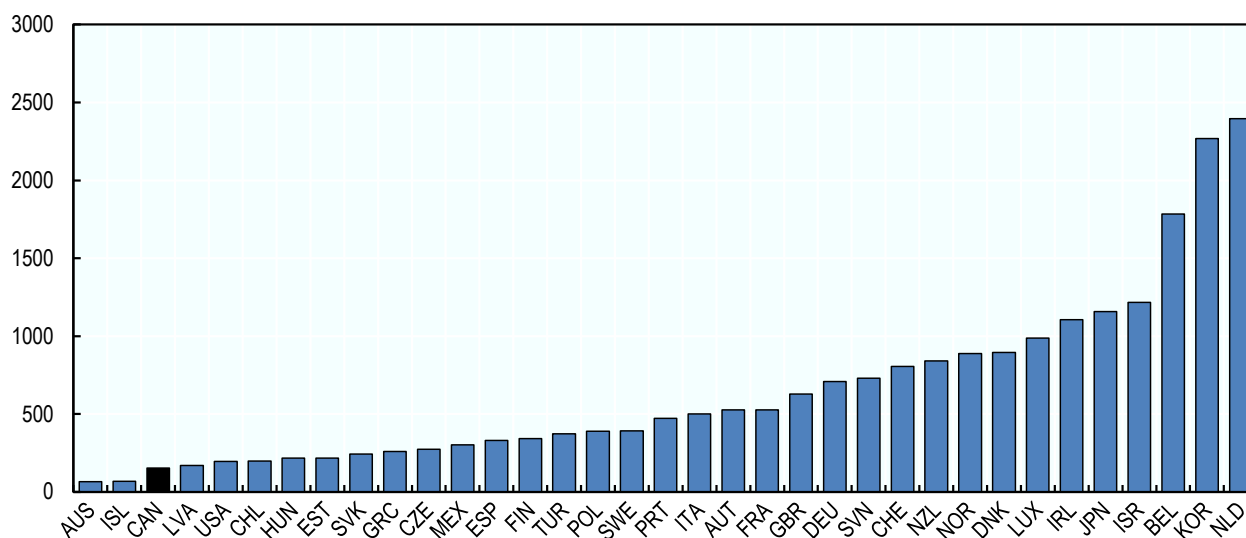## Apparent consumption of nitrogenous fertilisers, 2011-13

t/km² agricultural land

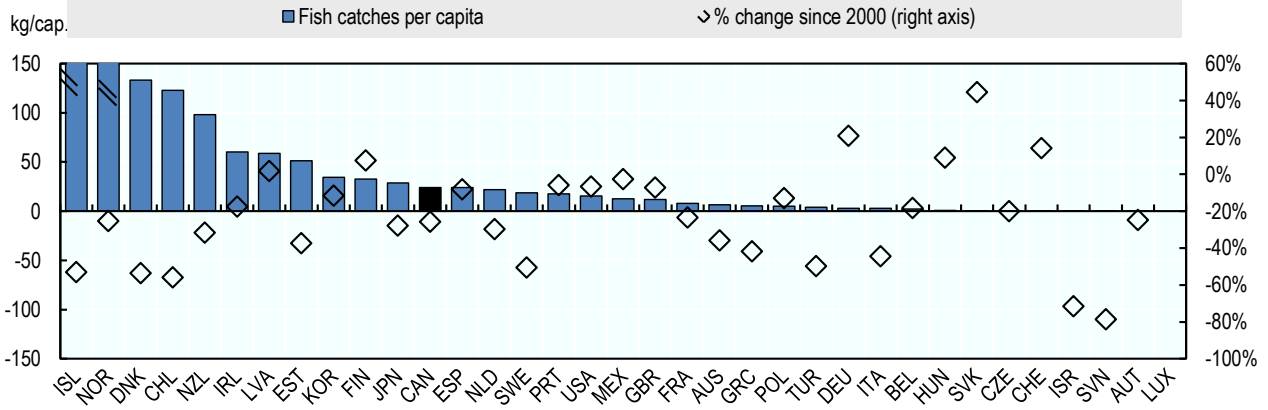## Pesticides sales, 2010-13

t/km² agricultural land

Livestock density, 2013
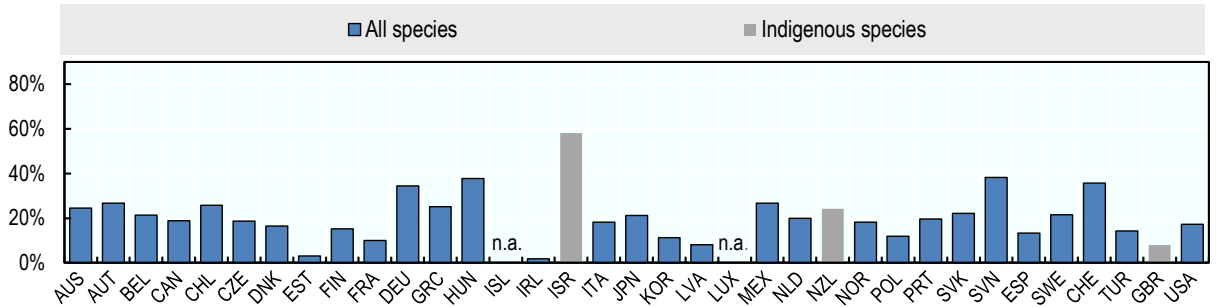
Head of sheep eq./km² agr. land

Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. Conversion coefficients used to convert livestock heads in sheep equivalent: 1 for sheep and goats, 6 for cattle and buffaloes, 4.8 for equines,1 for pigs, and 0.06 for poultry birds.
Sources: FAO (2016), *FAOSTAT* (database); OECD (2016), *Environmental Performance of Agriculture* (database)
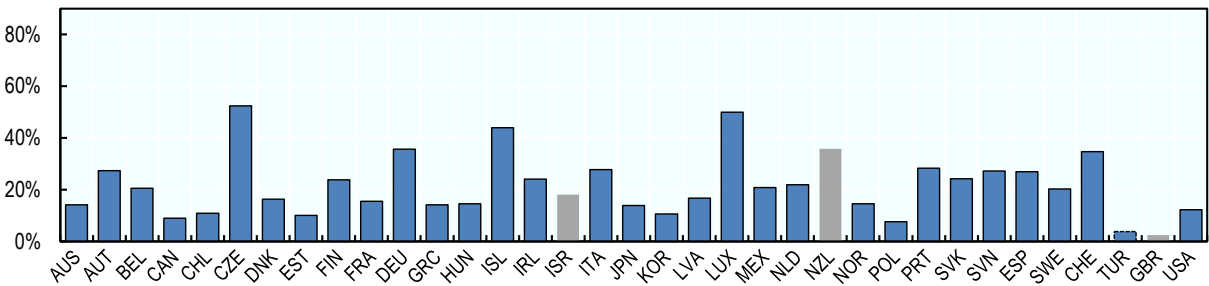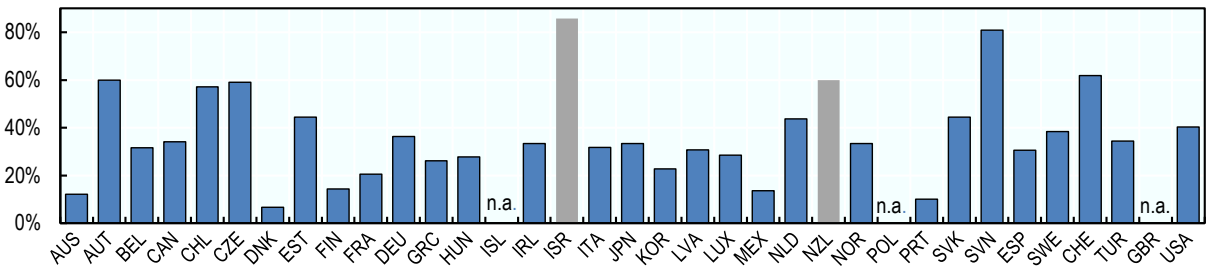
Total fish catches per capita, 2014

kg/cap.
■ Fish catches per capita   ↘ % change since 2000 (right axis)

ISL NOR DNK CHL NZL IRL LVA EST KOR FIN JPN CAN ESP NLD SWE PRT USA MEX GBR FRA AUS GRC POL TUR DEU ITA BEL HUN SVK CZE CHE ISR SVN AUT LUX

Threatened species as percentage of known species, late 2000s
Mammals

■ All species   ■ Indigenous species

AUS AUT BEL CAN CHL CZE DNK EST FIN FRA DEU GRC HUN ISL IRL ISR ITA JPN KOR LVA LUX MEX NLD NZL NOR POL PRT SVK SVN ESP SWE CHE TUR GBR USA

Birds

AUS AUT BEL CAN CHL CZE DNK EST FIN FRA DEU GRC HUN ISL IRL ISR ITA JPN KOR LVA LUX MEX NLD NZL NOR POL PRT SVK SVN ESP SWE CHE TUR GBR USA

Amphibians

AUS AUT BEL CAN CHL CZE DNK EST FIN FRA DEU GRC HUN ISL IRL ISR ITA JPN KOR LVA LUX MEX NLD NZL NOR POL PRT SVK SVN ESP SWE CHE TUR GBR USA

Vascular plants

AUS AUT BEL CAN CHL CZE DNK EST FIN FRA DEU GRC HUN ISL IRL ISR ITA JPN KOR LVA LUX MEX NLD NZL NOR POL PRT SVK SVN ESP SWE CHE TUR GBR USA

Notes: Fish data excludes aquaculture and excludes whales, seals and other aquatic mammals, aquatic plants and other miscellaneous aquatic animal products. IUCN categories critically endangered, endangered and vulnerable in % of known species. Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates.
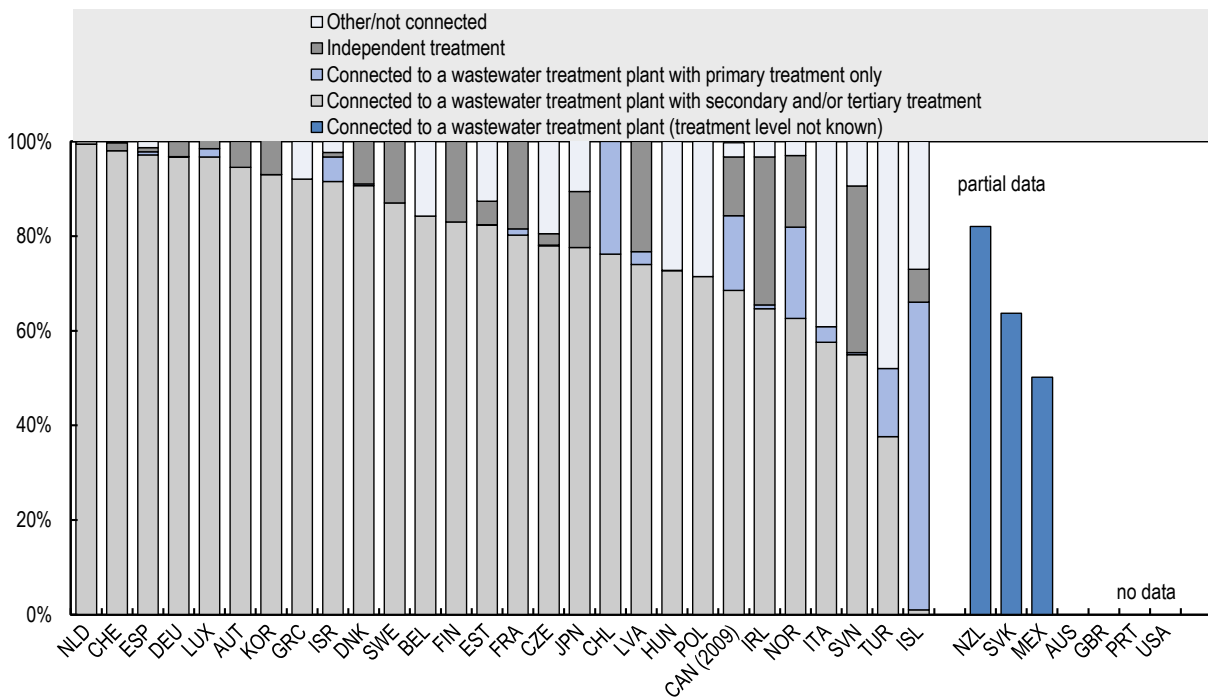*Source*: FAO (2016), *FAOSTAT* (database); OECD (2016), "Threatened species", *OECD Environment Statistics* (database).

Gross freshwater abstraction per capita, 2014

m³/capita/year
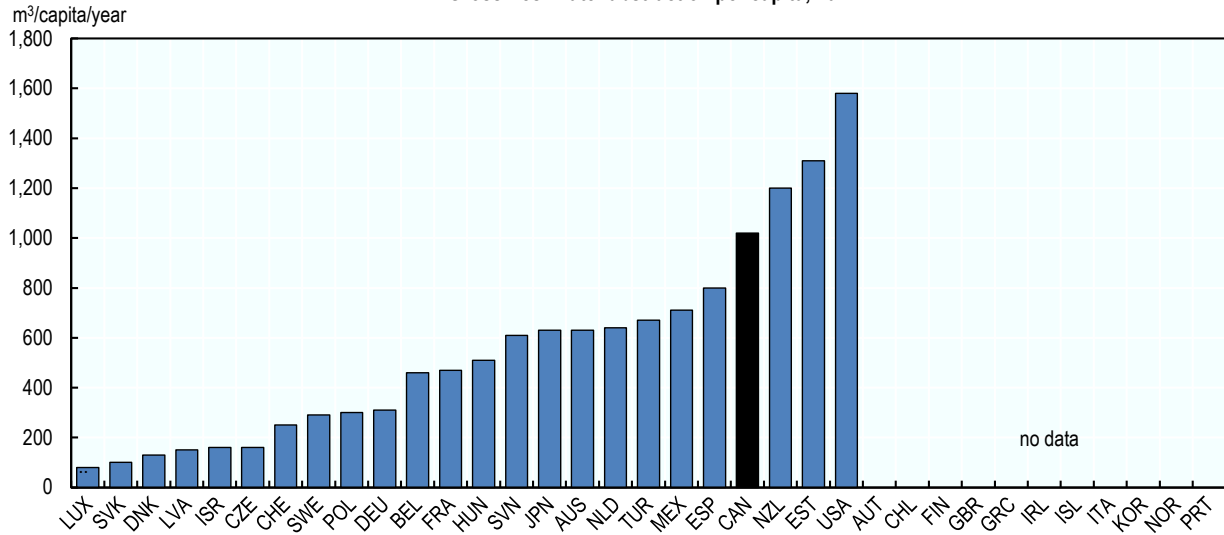
Gross freshwater abstraction as percentage of renewable resources, 2014
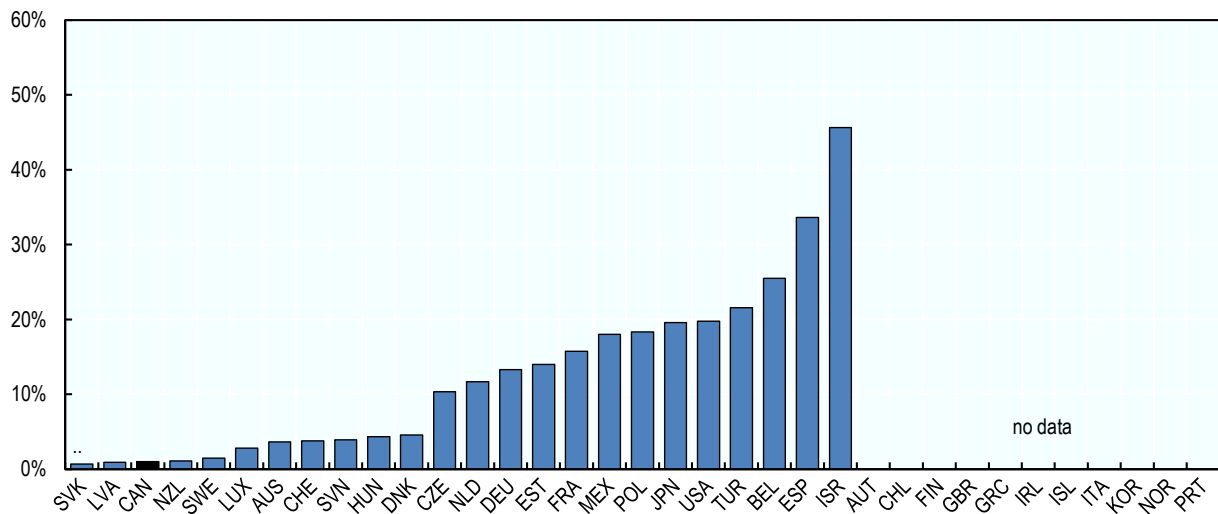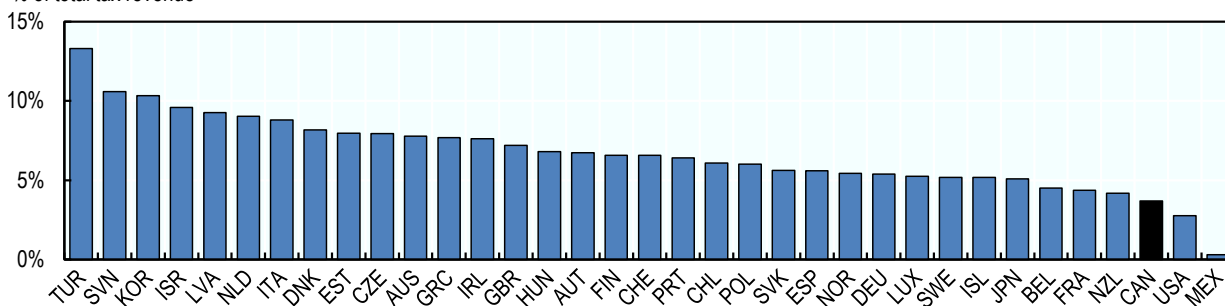

Population connected to public wastewater treatment, 2014

☐ Other/not connected
▨ Independent treatment
▨ Connected to a wastewater treatment plant with primary treatment only
▨ Connected to a wastewater treatment plant with secondary and/or tertiary treatment
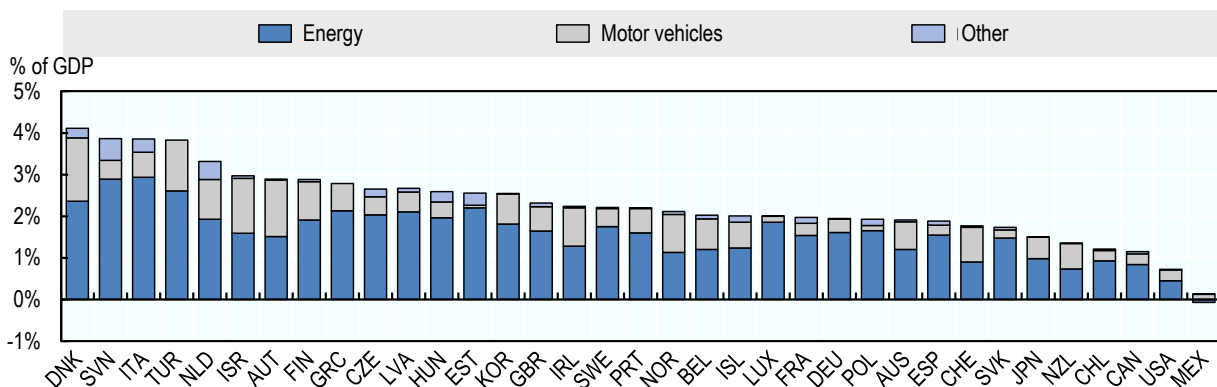▨ Connected to a wastewater treatment plant (treatment level not known)

Notes: Data refer to the indicated year or to the latest available year. They include provisional figures and estimates. Freshwater abstraction: for some countries, data refer to water permits and not to actual abstractions. Wastewater treatment: "other" includes connected without treatment, not connected or independent treatment (where there is no data for independent treatment).
Source: OECD (2016), "Water: Freshwater Abstractions", *OECD Environment Statistics* (database); OECD (2016), "Water: Wastewater treatment", *OECD Environment Statistics* (database).

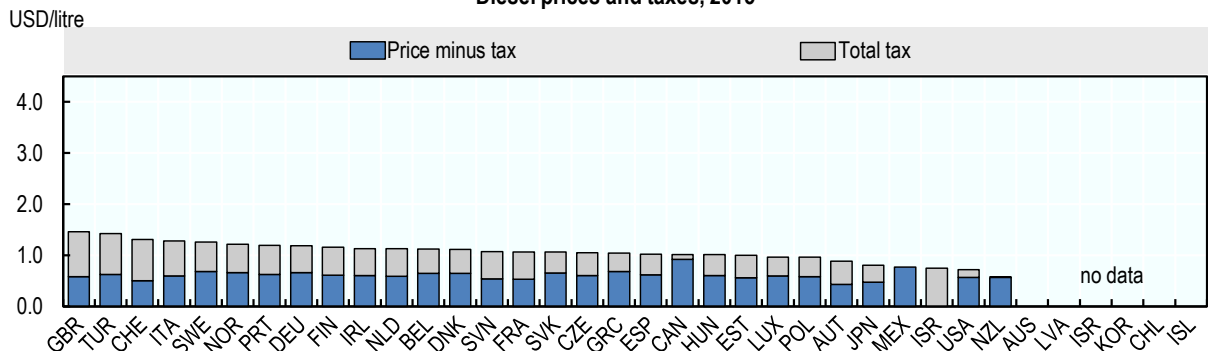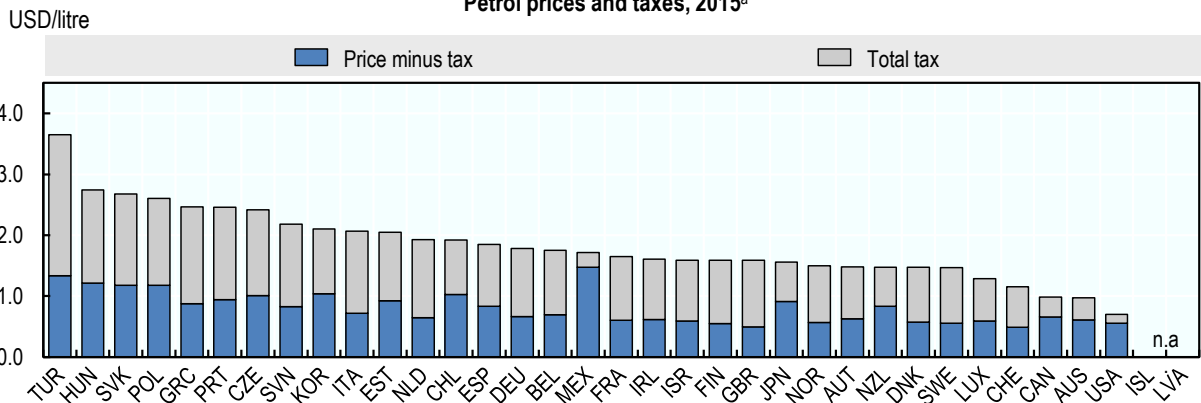## Environmentally related tax revenue, 2014

% of total tax revenue

Countries (left to right): TUR, SVN, KOR, ISR, LVA, NLD, ITA, DNK, EST, CZE, AUS, GRC, IRL, GBR, HUN, AUT, FIN, CHE, PRT, CHL, POL, SVK, ESP, NOR, DEU, LUX, SWE, ISL, JPN, BEL, FRA, NZL, CAN, USA, MEX

Composition of environmentally related tax revenue by tax base, 2014

Legend: ■ Energy ■ Motor vehicles ■ Other

% of GDP

Countries (left to right): DNK, SVN, ITA, TUR, NLD, ISR, AUT, FIN, GRC, CZE, LVA, HUN, EST, KOR, GBR, IRL, SWE, PRT, NOR, BEL, ISL, LUX, FRA, DEU, POL, AUS, ESP, CHE, SVK, JPN, NZL, CHL, CAN, USA, MEX

Diesel prices and taxes, 2015[a]

USD/litre

Legend: ■ Price minus tax ■ Total tax

Countries (left to right): GBR, TUR, CHE, ITA, SWE, NOR, PRT, DEU, FIN, IRL, NLD, BEL, DNK, SVN, FRA, SVK, CZE, GRC, ESP, CAN, HUN, EST, LUX, POL, AUT, JPN, MEX, ISR, USA, NZL, AUS, LVA, ISR, KOR, CHL, ISL

no data

Petrol prices and taxes, 2015[a]

USD/litre

Legend: ■ Price minus tax ■ Total tax

Countries (left to right): TUR, HUN, SVK, POL, GRC, PRT, CZE, SVN, KOR, ITA, EST, NLD, CHL, ESP, DEU, BEL, MEX, FRA, IRL, ISR, FIN, GBR, JPN, NOR, AUT, NZL, DNK, SWE, LUX, CHE, CAN, AUS, USA, ISL, LVA

n.a

Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates.
*a)* Diesel: automotive diesel for commercial use, current USD; petrol: unleaded premium (RON 95), except Japan (unleaded regular), USD at current prices and purchasing power parities.
Source: IEA (2016), *IEA Energy Prices and Taxes Statistics* (database); OECD (2016), "Environmental policy instruments*", OECD Environment Statistics* (database).
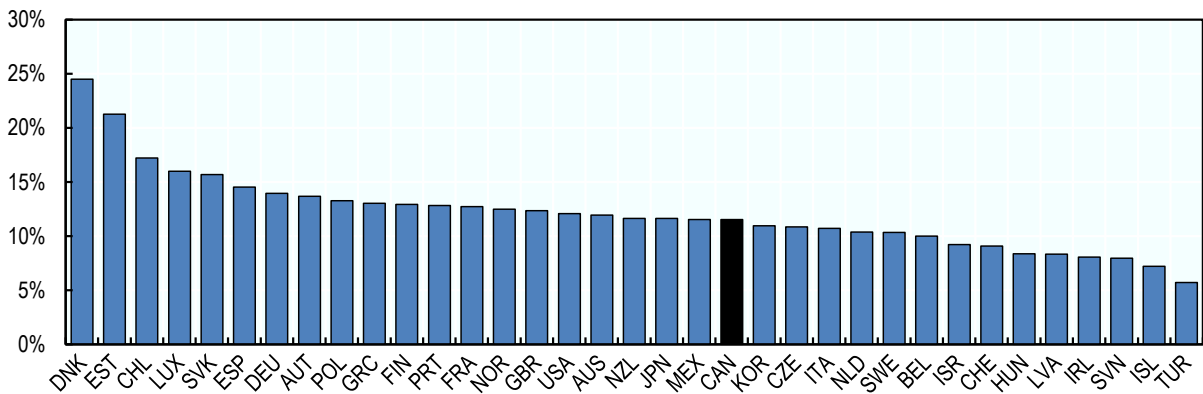
Environment-related R&D budgets, percentage of total government R&D budgets, 2015[a]
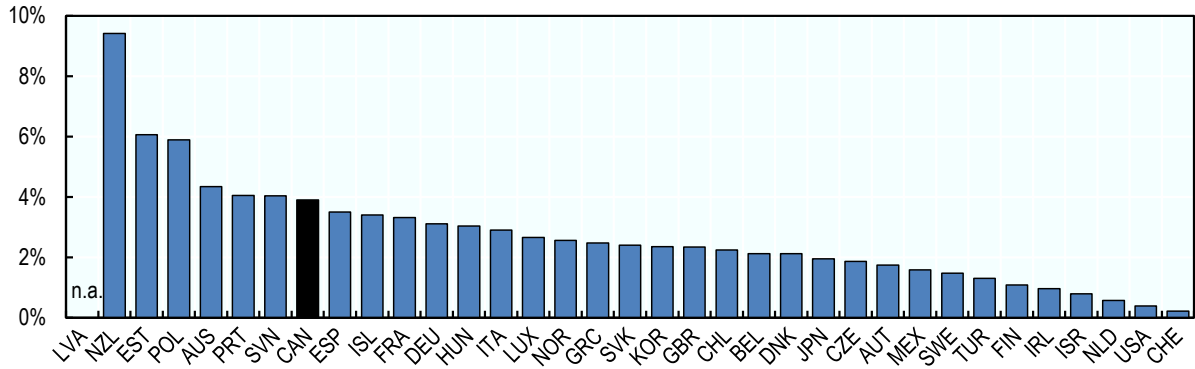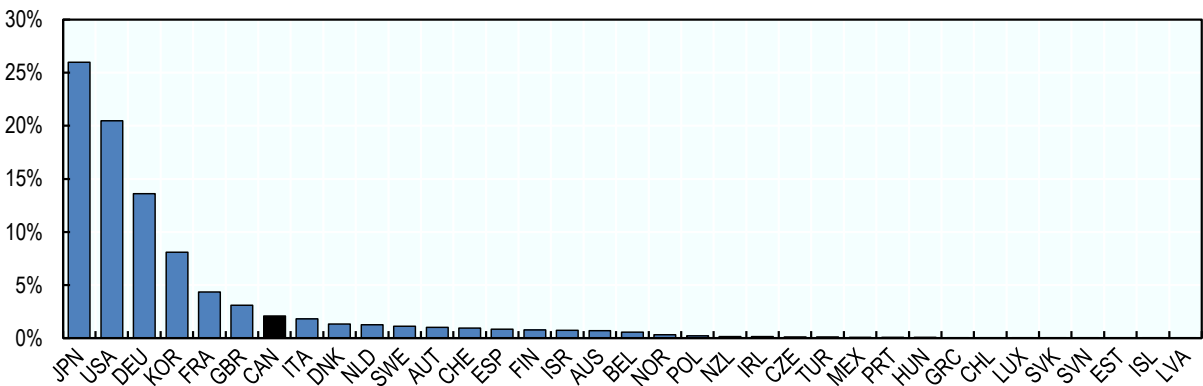

Public RD&D budgets for renewables and energy efficiency, percentage of total public energy RD&D, 2013[b]
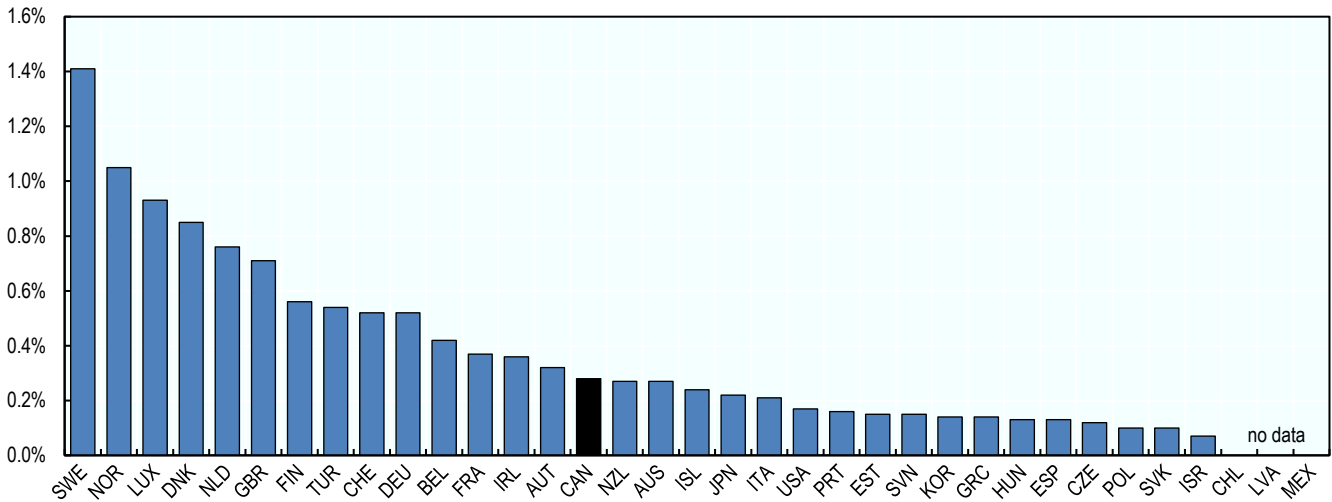
■ Renewables   ■ Energy efficiency

no data
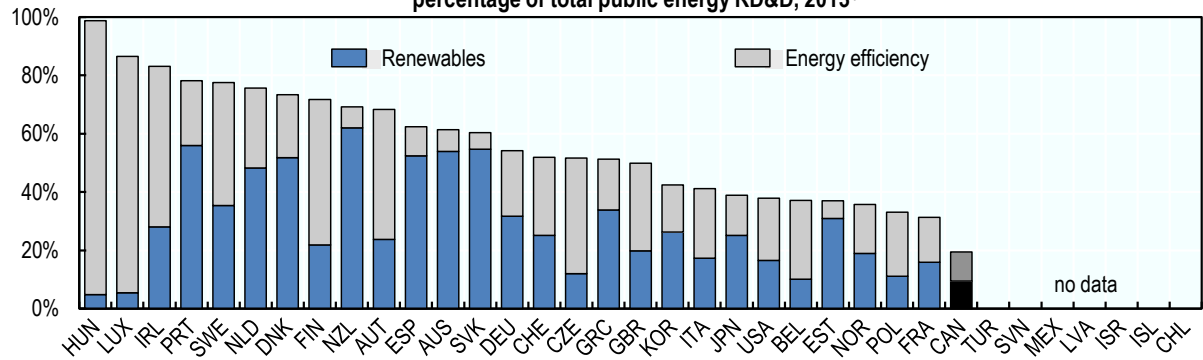
Patent applications for environment-related technologies, percentage of all technologies, 2010-12[c]
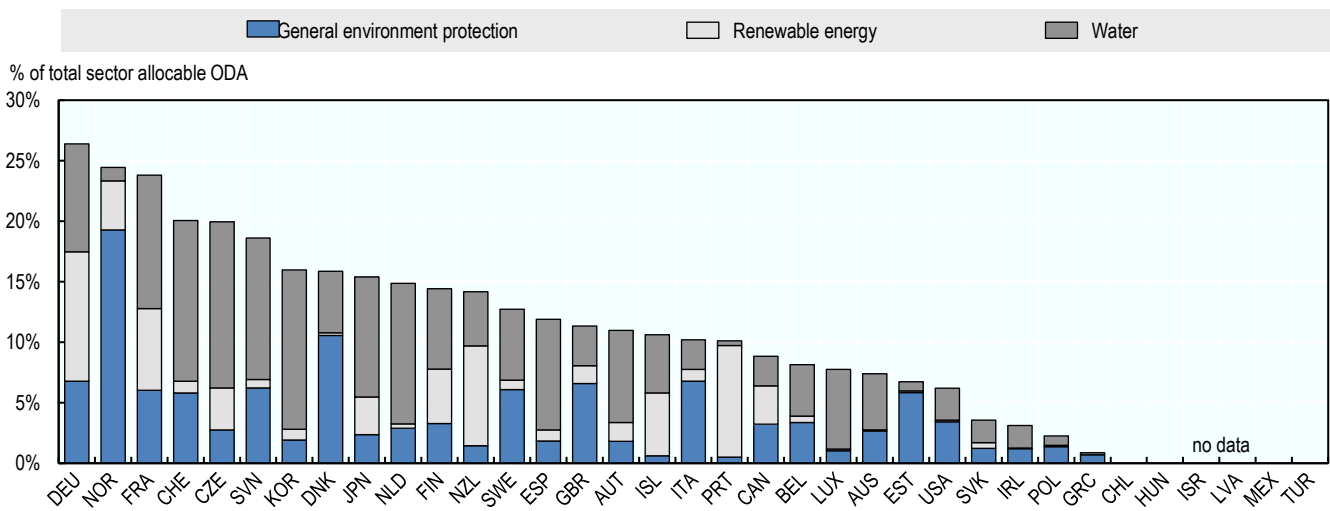

Patent applications for environment-related technologies, percentage of world total, 2010-12[c]
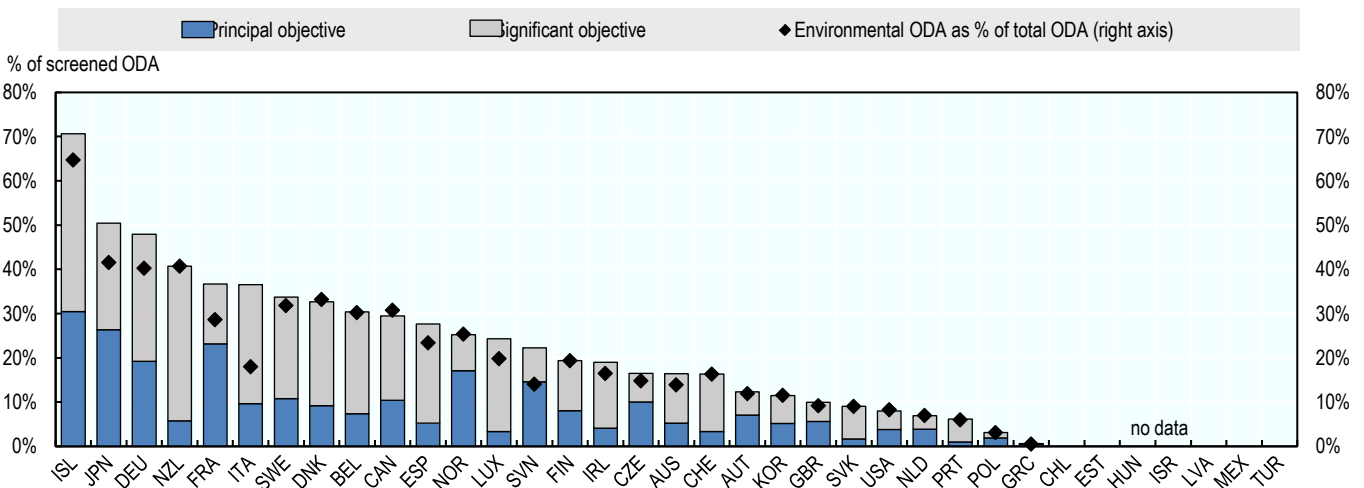
Net ODA disbursements as percentage of gross national income, 2015

Bilateral ODA commitments to the environment, renewable energy and water sectors, average 2012-14ᵃ

General environment protection   Renewable energy   Water

% of total sector allocable ODA

Bilateral ODA commitments targeting the environment, average 2012-14ᵇ

Principal objective   Significant objective   ◆ Environmental ODA as % of total ODA (right axis)

% of screened ODA

Notes: Data refer to the indicated year or to the latest available year. They may include provisional figures and estimates. CHL, EST, HUN, ISR, LVA, MEX, and TUR are not members of the OECD Development Assistance Committee and report on a voluntary basis, thus data maybe not always be available, or may be partial.
a) Renewable energy includes power generation/renewable sources; hydroelectric power plants; geothermal, solar, wind and ocean energy; biofuel-fired power plants.
b) Activities are classified as "principal" when environment protection is a primary objective and "significant" when it is an important but secondary objective.
   In comparing data across countries it should be noted that the coverage ratio of the environmental policy objective (i.e. the proportion of aid which is screened against the environment policy marker) varies considerably among countries; low coverage rates can significantly increase the shares of environment-focused aid.
Source: OECD (2016),*OECD International Development Statistics* (database).