



JRC SCIENCE FOR POLICY REPORT

# Fossil CO<sub>2</sub> emissions of all world countries

*2018 Report*

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## **Abstract**

The Emissions Database for Global Atmospheric Research (EDGAR) provides time series of CO<sub>2</sub> emissions for all world countries from 1970 until 2017. In this report, fossil CO<sub>2</sub> emissions are presented for the period 1990-2017 as well as the per capita and per GDP trends.

## Foreword

184 countries have now ratified the Paris Agreement, recognising that tackling climate change will require a truly global effort. All parties currently need to implement the nationally determined contributions that they pledged ahead of the Paris conference in 2015. Three years have gone by since then and the world is anxiously expecting global greenhouse gas emissions to peak as soon as possible, and then to steeply decline. In order to stand a realistic chance to keep global mean temperature to below 1.5° Celsius, the IPCC in its recent special report is very clear, global carbon emissions must reach net zero by 2050.

In order to prepare the world for where we collectively and each of us nationally needs to go, we must know where we are today, and where we are heading to. Knowing the evolution of greenhouse gas emissions will help us to define the steps needed to reduce them. Over time, it will also allow the world to assess the progress made in the fight against climate change. The landmark Paris Agreement explicitly acknowledged this need for increased transparency and created a basis for this years Talanoa dialogue and subsequent global stocktakes every five years, starting in 2023.

The unique Emissions Database for Global Atmospheric Research (EDGAR) brings together the estimates of historic greenhouse gas emission profiles of all countries showing the scale of the global challenge ahead of us. It does so in a transparent manner with a common methodology across all countries and types of gasses. For years already, it has been a yardstick for the international scientific community. EDGAR data allows examining the drivers of emissions and solutions to address them. EDGAR has increasingly become an essential tool for policymakers, stakeholders and even citizens allowing for a participatory and inclusive debate on how we are going to take the battle against climate change forward together.

The European Union pays careful attention to global trends. In addition, Member States carry out projections assessing how actions and policies taken over the past fifteen years have impacted today's and are likely to shape future emission trends. These are captured in our annual EU climate action progress report.

Using the EDGAR database that scientists are gathering in a comparable manner will enable us to swiftly design the right policies and actions in order to bend the global emissions curve down as quickly as possible, and in an efficient and fair manner.

**Artur Runge-Metzger**

Director Climate strategy, Governance and Emissions from Non-trading sectors  
DG Climate Action  
European Commission

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This booklet was established with input from many colleagues, gathered over several years. International Energy Agency (IEA) energy use statistics are a fundamental building block of the EDGAR database and the authors would like to thank IEA (R. Quadrelli, F. Mattion) for the continuing collaboration. The authors would also like to thank United States Geological Survey (USGS) (H. van Oss, L. Apodaca, L. Corathers), International Fertiliser Association (IFA) (M. Prud'homme, S. Marcel), oil and gas company BP plc and Global Gas Flaring Reduction Partnership (GGFR)/(U.S. National Oceanic and Atmospheric Administration (NOAA) for the provision of data. The authors are grateful to the Directorate-General for Climate Action (DG CLIMA) (T. van Ierland, A. M. Danila, O. Gippner) for the review and guidance. An extra thanks to the colleagues, J. Wilson, G. Janssens-Maenhout, A. Uihlein and G. Oreggioni for the thorough review and proof-reading.

## Executive summary

### Policy context

Part of the Paris Agreement is the transparency framework to be implemented bottom-up based on the national greenhouse gas (GHG) emission inventories reported to the United Nations Framework Convention on Climate Change (UNFCCC) by all Parties. In addition, 5-yearly Global Stocktakes are planned from 2023 onwards to monitor emission trends and the efforts of the individual Parties. Reported inventories, however neither cover the entire globe, nor a long enough time period. The European Commission's in-house Emissions Database for Global Atmospheric Research (EDGAR) estimates anthropogenic greenhouse gas emissions on a country by country basis thereby contributing to enhanced transparency and completing the global picture with time series for each country. Fossil CO<sub>2</sub> emissions from 1970 to 2017 are included in the latest version of EDGAR, EDGARv5.0. These data provide scientific estimates of fossil CO<sub>2</sub> emissions for the different Parties and support the role of the European Commission in the climate negotiations at the 24<sup>th</sup> Conference of Parties (COP24).

### Key conclusions

A comprehensive database has been updated and further developed for fossil CO<sub>2</sub> (1) to provide anthropogenic emission time series from 1970 until 2017, based on recent energy and product statistics. All human activities, except, biomass/biofuel combustion (short cycle carbon) in power, industry, buildings, transport and agriculture sectors, and large-scale biomass burning and land use, land-use change and forestry are included and the IPCC sectorial classification is used. A consistent bottom-up emissions calculation methodology (2) is applied to all countries, so that the inventories of different countries can be compared, considering their respective levels of detail or data limitations. For developing countries with less robust and systematic statistical data infrastructures and experience in reporting their fossil fuel emissions inventories, EDGAR can provide information and help to comply with their future inventory requirements. This database provides the emission trends for all countries and can contribute to the comprehensive picture needed for the UNFCCC's Global Stocktake of 2023.

(1) CO<sub>2</sub> emissions from fossil fuel combustion: coal, oil and gas. However, in this study the fossil CO<sub>2</sub> emissions include sources from fossil fuel use (combustion, flaring), industrial processes (cement, steel, chemicals and urea) and product use; please note that in the analysis presented in this report no short cycle carbon CO<sub>2</sub> is included in any sector.

(2) International activity data, principally energy balance statistics of IEA (2017) for 1970-2015 were used to estimate CO<sub>2</sub> from fossil fuel consumption. These emissions are extended until 2017 using a Fast Track approach based on BP statistics for total coal, oil and gas consumption by country and assuming unchanged sectorial fuel consumption patterns from the IEA data for 2015, with a consequent increase in uncertainty in the resulting values for these last two years. Further details on the Fast Track methodology are provided in Annex I.

The global GHG emissions trend has increased since the beginning of the 21<sup>st</sup> century in comparison to the three previous decades, mainly due to the increase in CO<sub>2</sub> emissions from China and other countries with emerging economies. Even though the overall uncertainty of global emissions has increased because of the increasing share of CO<sub>2</sub> emissions from emerging economies, for Europe the uncertainty has decreased because of progress in inventory compilation e.g. decreasing share of less known emitting sectors. The dataset shows that global anthropogenic fossil CO<sub>2</sub> emissions increased by 0.4% in 2016 compared to 2015 and a further 1.2% in 2017 compared to 2016 reaching 37.1 Gt CO<sub>2</sub>. The increase in 2016 can be largely attributed to 2016 being a leap year. While fossil CO<sub>2</sub> emissions from the United States fell by 0.8% in 2017 compared to 2016, emissions from China and the European Union (EU28) increased by 0.9% and 1.1% respectively. EU28 emissions reached 3.5 Gt CO<sub>2</sub> in 2017, but overall have fallen 0.9% over the past 5 years and are 19.5% lower than in 1990. Since 2015, the EU28 share of global fossil CO<sub>2</sub> emissions has remained constant at 9.6% equivalent to 7 tonnes CO<sub>2</sub>/cap/yr.

The uncertainty in EDGAR's total national CO<sub>2</sub> emissions from fossil fuel use and other non-combustion sources is estimated at about 5% for most OECD countries and in the range of 10% for Russia, China and most other non-OECD countries. Our estimated emissions changes may be accurate to within  $\pm 0.5\%$  (Olivier et al., 2016); thus, this must be considered when using these data for any kind of analysis.

### **Main findings**

In 2017, China, the United States, the EU28, India, Russia and Japan - the world's largest CO<sub>2</sub> emitters - accounted for 51% of the population, 65% of global Gross Domestic Product as reported by World Bank (2018), 63% of the total primary energy supply and emitted 68% of total global fossil CO<sub>2</sub>. Emissions from these five countries and EU28 show different trends in 2017 compared to 2016: emissions from the United States decreased by 0.8%, while they increased by 1.1% in the EU28 and Russia, 0.9% in China, 3.5% in India and 0.1% in Japan. Trends vary between countries with more than 1% share in total global fossil CO<sub>2</sub> emissions, showing decreases of 0.1% in Australia, 0.3% in Germany, 2.8% in Mexico and 1.9% in South Africa and increases of 0.2% in Brazil, 2.7% in Canada, 4.7% in Indonesia, 5.7% in Iran, 3.5% in Korea, 1.5% in Saudi Arabia and 11% in Turkey. Emissions from international transport, aviation and shipping, increased with respect to 2016 by 1.1% and 1.3%, respectively, contributing to a further 3.3% to the total global fossil CO<sub>2</sub> emissions.



## **Related and future JRC/EDGAR work**

EDGAR is a comprehensive global emissions inventory database, which includes both GHG and air pollutant emissions for all world countries. It provides support to policy makers and the scientific community by contributing to the development of the independent verification system of GHG emissions. Fossil CO<sub>2</sub>, short-cycle CO<sub>2</sub> emissions and other GHG emissions are updated regularly; next year, fossil CO<sub>2</sub> emissions will be updated until 2018, and CH<sub>4</sub> and N<sub>2</sub>O until 2015. The framework and experience in compiling emissions inventories is shared and compared within the international emissions community of the Global Emissions Initiative (GEIA). In addition, EDGAR supports the IPCC Task Force on National Greenhouse Gas Inventories, compiling and refining guidelines for national GHG emission inventories. Moreover, EDGAR reaches out to developing regions with training support and knowledge databases to visualise emission hot spots.

## **Quick guide**

Fossil CO<sub>2</sub> emissions from all anthropogenic sectors are presented for all world countries. These emissions were calculated bottom-up using international statistics for the activity data (such as fuel consumption, cement production etc.), which are available for all major fossil CO<sub>2</sub> sources, and IPCC (2006) values for the emission factors. For the emissions from fossil fuel combustion and fuel transformation, fuel consumption statistics for 1970-2015 were used from the International Energy Agency (IEA, 2017). Given the absence of sectorial fuel consumption data, CO<sub>2</sub> emissions for 2016 and 2017 were estimated by using a Fast Track approach with BP statistics for total coal, oil and gas by country; emissions were projected by using BP fuel increase rate with reference to the last available year of emissions quantified with robust activity data from IEA. For CO<sub>2</sub> emissions, the uncertainty is generally low (below 10%). It must be noted that when the Fast Track is used for the emission estimations for 2016 and 2017, uncertainties may be higher for a specific sector and country due to the assumptions behind this methodology.

## **Introduction**

### **Scope**

In December 2015, the Paris Agreement brought “all nations into a common cause to undertake ambitious efforts to combat climate change” and required all Parties to put forward their best efforts through “nationally determined contributions”. Acknowledging the need to ensure environmental integrity it creates a transparency framework and plans 5-yearly Global Stocktakes from 2023 onwards. The Emissions Database for Global Atmospheric Research (EDGAR) database is a unique geographically resolved global database that estimates global emissions of CO<sub>2</sub> and other greenhouse gases. As such, it can contribute to the efforts to increase transparency. This report gives an overview of country-by-country fossil CO<sub>2</sub> emissions from 1990-2017, as estimated by EDGAR. While much information on energy-related activities is produced annually (including 2017), comparable updates are not available for agricultural activities. As such, the fossil CO<sub>2</sub> emissions are updated each year, while the overall greenhouse gas time series are updated in EDGAR every two/three years.

### **Overview**

Trends in fossil CO<sub>2</sub> emissions of global and major emitting countries and EU28 from 1990 to 2017 are presented, and a fact sheet with CO<sub>2</sub> emission time series is given for every country. Details on the bottom-up methodology applied for the EDGAR emission compilations are then reported together with the data sources and references used. Finally, concluding remarks are also provided.

## EDGAR's Global Fossil CO<sub>2</sub> Emissions from 1990 until 2017

The Emissions Database for Global Atmospheric Research supports policy making in the area of climate, energy and air pollution with independent in-house datasets on emissions of anthropogenic activities and has established a complete inventory of greenhouse gases and air pollutants under the version EDGAR v4.3.2 for the period 1970-2012.

In EDGAR, fossil CO<sub>2</sub> emissions are updated annually. The EDGARv5.0 version includes CO<sub>2</sub> emissions time series from 1970 to 2017. Figure 1 illustrates global total annual emissions of fossil CO<sub>2</sub> in Gt CO<sub>2</sub>/yr. Figure 2 shows the total annual fossil CO<sub>2</sub> emissions for the EU28 and large emitting countries, and per capita CO<sub>2</sub> emissions (in tonnes CO<sub>2</sub>/cap/yr) are represented in Figure 3. Fuel consumption data from IEA (2017) is used for 1970-2015 and as previously mentioned a Fast Track (FT) approach is used to update emissions for 2016-2017, since IEA statistical data are not yet available for these years. This FT update estimates fossil (and carbonate) CO<sub>2</sub> emissions based on the most recent statistics; activity datasets used are based on latest country level statistical information from the oil and gas company BP plc, United States Geological Survey (USGS), World Steel Association (worldsteel), Global Gas Flaring Reduction Partnership (GGFR)/U.S. National Oceanic and Atmospheric Administration (NOAA) and International Fertiliser Association (IFA). The resulting fossil CO<sub>2</sub> emissions include all anthropogenic emissions from fossil fuel combustion and production, and from processes such as cement, steel, liming, chemicals and ammonia production, and urea production and consumption.

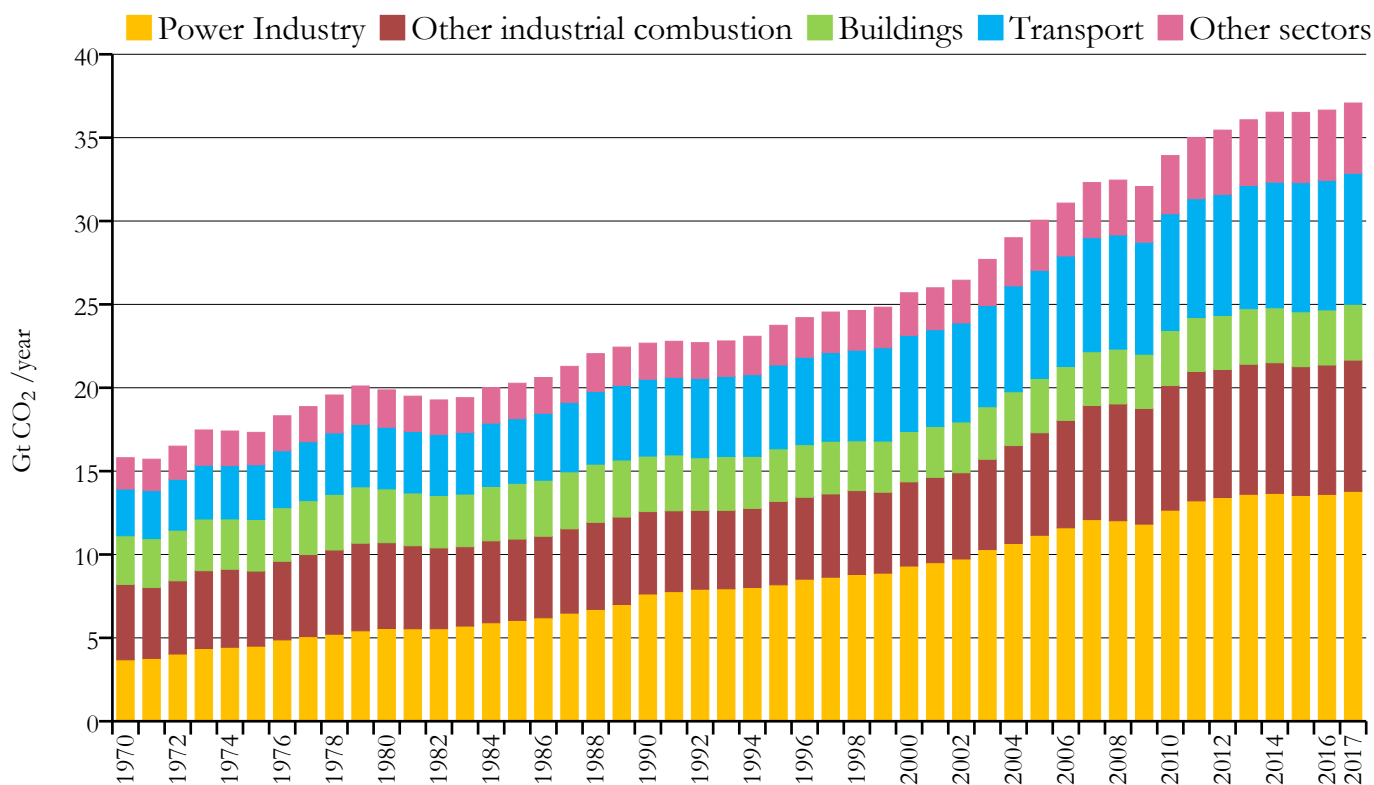
For the previous version (EDGARv4.3.2), the long-term historic data was based on IEA (2014) energy statistics for 1970-2012 while this version is based on IEA (2017), which provide statistics until 2015.

In this report, fossil CO<sub>2</sub> emissions from 1990 to 2017 for the major emitting countries and regions are briefly discussed, as well as the per GDP and per capita trends. Additional analyses can be found in the companion publication “Trends in Global CO<sub>2</sub> and Total Greenhouse Gas Emissions – 2018 Report” by Olivier et al. (2018). The uncertainty in fossil CO<sub>2</sub> emissions is relatively small (below 5% for industrialised countries and below 10-15% for developing countries); however, the uncertainties may be higher for the years 2016 and 2017 for which we used the Fast Track methodology to estimate the CO<sub>2</sub> emissions.

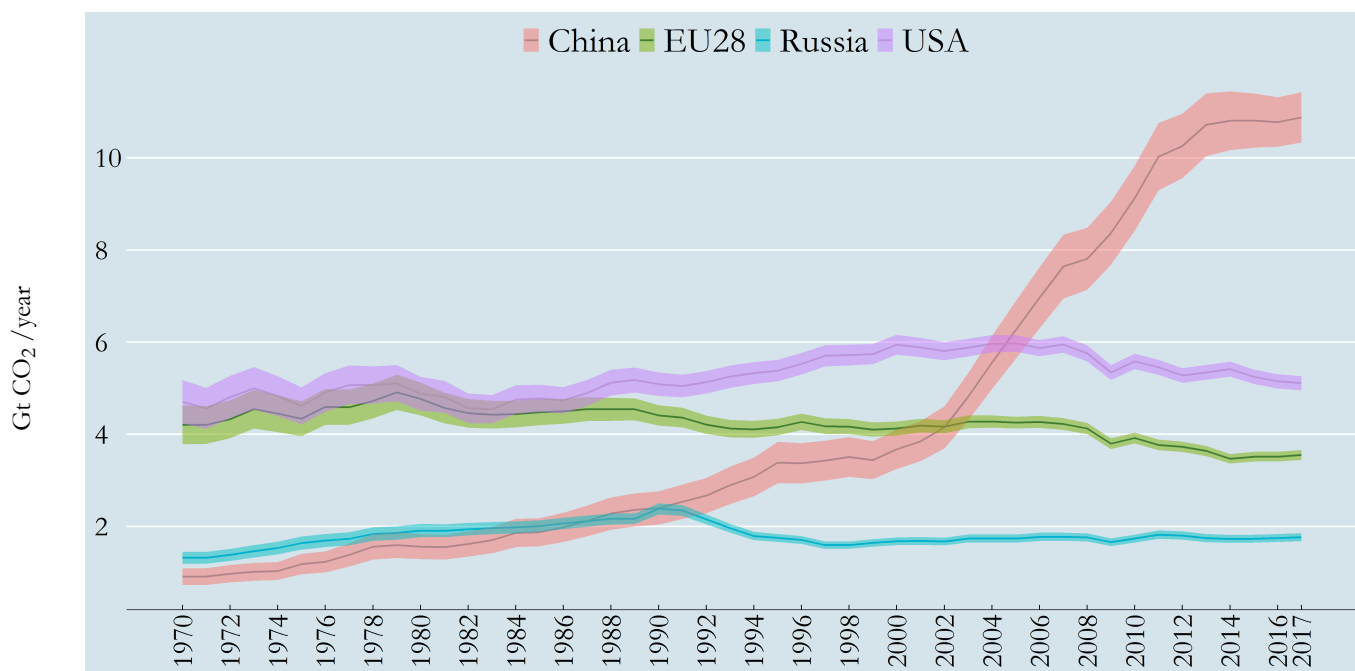
**Global** fossil CO<sub>2</sub> emissions in 2017 increased by 1.2% to a total of 37.1 Gt CO<sub>2</sub>, after two years of essentially no growth (0.0% in 2015 and 0.4% in 2016). Much of the 0.4% increase in 2016 compared to 2015 was due to 2016 being a leap year. Fossil CO<sub>2</sub> emissions in China and the European Union (with shares of 29% and 9.6% of the global total) increased by 0.9% and 1.1%, respectively. Fossil CO<sub>2</sub> emissions in the United States (with 14% share of global total) fell by 0.8%.

Besides the United States, the largest reductions are seen for Ukraine (0.6% share) with -9.4%, Mexico (1.4% share) with -2.8%, and South Africa (1.3% share) with -1.9%. Besides China and the European Union, the largest increases are observed for India (6.6% share of global total) with +3.5%, Turkey (1.2% share) with +11%, and Iran (1.8% share) with 5.7%, with smaller increases seen from Canada and Indonesia.

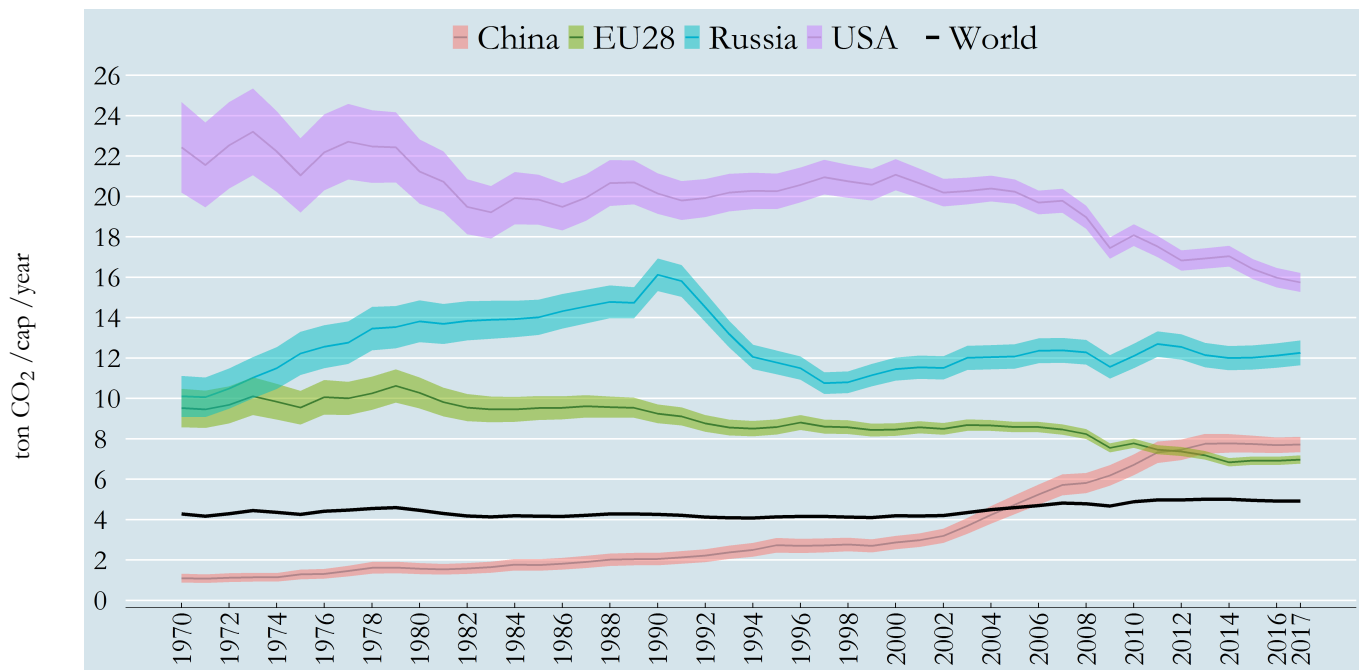
**Figure 1.** Total global annual emissions of fossil CO<sub>2</sub> in Gt CO<sub>2</sub>/yr by sector. The fossil CO<sub>2</sub> emissions include sources from fossil fuel use, industrial processes and product use (combustion, flaring, cement, steel, chemicals and urea).



**Figure 2.** Total annual emissions of fossil CO<sub>2</sub> in Gt CO<sub>2</sub>/yr for the EU28 and large emitting countries with uncertainty (in coloured bands).



**Figure 3.** Per capita CO<sub>2</sub> emissions (in tonnes CO<sub>2</sub>/cap/yr) from fossil fuel use, industrial processes and product use for the EU28 and large emitting countries with uncertainty (in coloured bands) and for the world average.



**EU28** total fossil CO<sub>2</sub> emissions have decreased over the past two decades, such that emissions in 2017 are 19.5% less than in 1990 and 16.5% less than in 2005. Since 2015, the EU share of the global total has remained constant at 9.6%. In 2017 the EU28 emitted 3.5 Gt CO<sub>2</sub>, corresponding to 7 tonnes CO<sub>2</sub>/cap/yr. This was obtained by an increase of 1.3% in 2015 compared to 2014, stalling in 2016 compared to 2015 and again a 1.1% increase in 2017 compared to 2016. As mentioned, these growth rates are however within the uncertainty range. CO<sub>2</sub> emissions from fossil fuel combustion in the power industry increased by 1.2% whereas cement and lime production emissions increased by 3.4% for the same period. The largest contributor in 2017 was Germany with 22.4%, followed by the United Kingdom (10.7%), Italy (10.2%), France (9.5%) and Poland (9%). The EU28 CO<sub>2</sub> emissions estimated by EDGARv5.0 agree with the EU28 inventory submitted to UNFCCC (2018a) within 2% and have approximately 1% difference in the CO<sub>2</sub> trend. However, the inventories for the countries that were part of the Former Soviet Union or part of Former Yugoslavia before gaining independence, have been modelled based on IEA (2014), assuming representative shares for these countries with economies in transition and are subject to larger uncertainties. This is of particular relevance for the early 1990s. In EU28, the shares of coal, oil and gas in the Total Primary Energy Supply (3) (TPES) were 13%, 31% and 23% respectively; the 1.1% increase in CO<sub>2</sub> emissions from fossil fuel combustion in 2017 is the result of a 4% increase for natural gas, a 1.6% increase for oil partially offset by a fall of 2.2% for coal. According to BP (2018), the largest increases in gas and oil consumption were in Germany, Italy, the Netherlands, Spain and France, and the largest decreases in coal consumption in Germany and Poland.

(3) Total Primary Energy Supply, is the total amount of energy consumption of a country (or the world), including traditional biofuels. It is calculated as in BP (2018) using a substitution method for nuclear, hydropower and other non-biomass renewable energy and assuming 38% conversion efficiency in all cases (IEA, 2017; BP2018).

**China's** fossil CO<sub>2</sub> emissions, after three years of low or zero growth, increased again in 2017 by 0.9% to 10.9 Gt CO<sub>2</sub>. Equivalent per capita CO<sub>2</sub> emissions of 7.7 tonnes CO<sub>2</sub>/cap/yr are 10% higher than the European average of 7.0 tonnes CO<sub>2</sub>/cap/yr, while per GDP CO<sub>2</sub> emissions are about 500 kg CO<sub>2</sub> /1000 USD(PPP)/yr the highest of the top-30 emitting countries. This resulted mainly from increases in oil and gas consumption of 3.6% and 14.8%, respectively, whereas coal consumption increased only slightly by 0.2%. Since 2012 the TPES (i.e. consumption) in China has increased by 9%, while Gross Domestic Product (GDP) on PPP basis grew by 40% in that period (about 8% per year). Power generation increased with 5.9% in 2017, half of which was due to a 4.7% increase in coal power and another one-third of the total increase was due to the continued fast increase of wind and solar power by 30% in 2017, whereas nuclear power production increased by 16.4%.

The **United States** fossil CO<sub>2</sub> emissions continued to decline in 2017 by 0.8% to 5.1 Gt, mainly due to a 2.5% decrease in coal power and also a 1.4% decrease in natural gas consumption. After peaking in 2005, CO<sub>2</sub> emissions are 14.5% less in 2017 compared to 2005, whereas the population has increased by 10% over this period. Total CO<sub>2</sub> emissions decreased by about 3.1% in 2015 and 1.9% in 2016, mainly because of decreases of coal consumption in power generation (BP, 2018). In 2017, the decrease in CO<sub>2</sub>/GDP/yr was 5.5%, the same as the 5-year average. The CO<sub>2</sub>/cap/yr has decreased by 1.5%. The continuing decline in CO<sub>2</sub> emissions since 2015 has mostly been due to substitution of coal by gas and the incorporation of renewable power plants.

**India's** fossil CO<sub>2</sub> emissions continued to increase to 2.5 Gt CO<sub>2</sub> in 2017, 3.5% more than in 2016. However, this annual increase is below the average annual increase of 4.3% per year for the period 2013–2017. India's emissions already surpassed those of Russia in 2010. With a share of 6.6% of total global CO<sub>2</sub> emissions, India is the fourth largest emitting economy after China, the United States and the EU28. However, India's per capita emissions of 1.8 tonnes CO<sub>2</sub>/cap/yr are around four times lower than the average per capita emissions of China and the EU28, more than eight times lower than the average per capita emissions of the United States and lower even than average per capita emissions in many developing countries. A major contribution to India's growing emissions is the 4% increase in TPES, 42.6% of which is supplied by coal. Annual coal consumption, mostly domestically produced, increased by 4.5% whereas annual oil consumption increased by 2.3% (with a 24.3% share of TPES), according to BP (2018).

**Russia's** fossil CO<sub>2</sub> emissions increased by 1.1% to about 1.8 Gt, which corresponds to 19.3 Mt of CO<sub>2</sub> increase, while GDP increased by 1.5% compared to 2016. Russia's share of global CO<sub>2</sub> emissions fell to 4.8% in 2017 (it was 5.2% in 2011), making Russia the fifth largest emitter after China, the United States, EU28 and India. The increase in CO<sub>2</sub> emissions in 2017 was mainly due to an increase in the consumption of coal by 3.5%, natural gas by 1.1% and oil consumption by 0.3% (BP, 2018). Russian per capita emissions of 12.3 tonnes CO<sub>2</sub>/cap/yr are higher than those of China (by 60%), EU28 (by 76%) and Japan (by 18%) and 22% lower than those of the United States.

After the 1.2% reduction in emissions in 2016, **Japan** saw a marginal increase in fossil CO<sub>2</sub> emissions in 2017 by less than 0.1%. Japanese fossil CO<sub>2</sub> emissions accounted for 1.3 Gt CO<sub>2</sub> in 2017, representing 3.6% of global CO<sub>2</sub> emissions. Higher GDP growth of 1.7% in 2017, compared with 0.9% in 2016, underpins the slight increase. Similarly, after falling for three years, TPES in 2017 was 1.4% higher than in 2016; the contribution from oil to total TPES fell from 40.2% in 2016 to 38.9% in 2017 while nuclear energy and renewables increased from 0.9% to 1.5% and from 3.9% to 4.8% respectively; oil consumption fell by 1.6% and coal consumption increased by 1.4% (BP, 2018). Japan's per capita emissions of 10.4 tonnes CO<sub>2</sub>/cap/yr are of the same order of magnitude as those of the Netherlands (10.3%) and slightly higher than those of Germany (9.7%).

## Conclusions

The Emissions Inventory for Global Atmospheric Research (EDGAR) is a comprehensive database of anthropogenic emission time series from 1970 until 2017 for CO<sub>2</sub> and until 2012 for other GHGs. A bottom-up emission calculation methodology is applied consistently to all countries, demonstrating that consistent inventories can be developed for all countries within the limitations of the quality of the available statistical data. Although most of Annex I countries (mostly industrialised countries) have a good statistical data infrastructure and regular reporting system to the UNFCCC, EDGAR can provide useful information for countries with less developed statistical data infrastructure for their future emission inventory requirements. In particular, the time series of EDGARv5.0 can provide the emissions trend information for non-Annex I countries that will be needed for the UNFCCC's Global Stocktake in 2023. EDGARv5.0 provides an important input to the analysis of global CO<sub>2</sub> trends with its 47-year time series.

Since the beginning of the 21<sup>st</sup> century GHG emissions have increased compared to the three decades before, mainly driven by the increase in CO<sub>2</sub> emissions from countries with emerging economies. EDGARv5.0 shows that global fossil CO<sub>2</sub> emissions from anthropogenic activities, excluding biomass burning and the land use, land-use change and forestry sector have, after stagnation in 2015, slightly increased by 0.4% in 2016 and by 1.2% in 2017 reaching a total of 37.1 Gt CO<sub>2</sub> in 2017. The increase in 2016 compared to 2015 is mainly due to the extra day in the leap year of 2016. For the two largest emitting countries and the EU28 it was observed that, with respect to 2016, CO<sub>2</sub> emissions in the United States was reduced by 0.8% in 2017, while in China the emissions increased by 0.9% and in the EU28 increased by 1.1%. Overall, EU28 emissions have decreased over the past two decades, reaching in 2017 a total of 3.5 Gt CO<sub>2</sub>, representing reduction levels of 19.5% compared to 1990 and 16.5% compared to 2005. This yields since 2015 a constant EU share of the global total of 9.6% and an average 7 tonnes CO<sub>2</sub>/cap/yr.

The purpose of the EDGAR database is to provide useful information to policy makers and the scientific community involved in field of GHG emissions and budget, in the compilation of national inventories, the UNFCCC Global Stocktake, the analysis of co-benefits between air pollution and GHG emission mitigation strategies, the interpretation of satellite data and the understanding of emission uncertainties.



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## List of abbreviations and definitions

AR4	Fourth Assessment Report of IPCC
BP	BP plc (oil and gas company; formerly British Petroleum Company plc)
cap	capita (head)
CCA	China Cement Association
CCRI	China Cement Research Institute
CH <sub>4</sub>	Methane, greenhouse gas with GWP-100 = 25 under AR4
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> eq	CO <sub>2</sub> equivalent (using the GWP-100 metric of AR4)
DG CLIMA	Directorate General Climate Action, European Commission
EC	European Commission
EDGAR	Emissions Database for Global Atmospheric Research
EIA	Energy Information Administration (of the U.S.)
EU28	European Union with 28 Member States
FT	Fast Track
GDP	Gross domestic product
GGFR	Global Gas Flaring Reduction Partnership of the World Bank
GHG	Greenhouse Gas
Gt	Gigatonnes (1000 megatonnes = 10 <sup>9</sup> metric tonnes)
GWP-100	Global Warming Potential over a 100 years period
IEA	International Energy Agency of the OECD (Paris)
IFA	International Fertiliser Association
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
JRC	Joint Research Centre of the European Commission
kUSD	1000 US Dollar GDP
LULUCF	Land use, land-use change and forestry
Mt	Megatonnes (10 <sup>6</sup> tonnes or 1 tera gramme) mass of a given (greenhouse gas) substance
NBSC	National Bureau of Statistics of China
NOAA	U.S. National Oceanic and Atmospheric Administration
N <sub>2</sub> O	Nitrous oxide, greenhouse gas with GWP-100 = 298 under AR4
n/a	Not Available
OECD	Organisation for Economic Co-operation and Development
PBL	Netherlands Environmental Assessment Agency
PPP	Purchasing Power Parity
t	tonnes (1 tonne or 1 mega gramme) mass of a given (greenhouse gas) substance
TPES	Total Primary Energy Supply
UNFCCC	United Nations Framework Convention on Climate Change
UNPD	United Nations Population Division
USD	U.S. Dollar
USGS	United States Geological Survey
worldsteel	World Steel Association

## Annexes

### Annex 1: Bottom-up Methodology for the Emissions Compilation

The basis for the fossil CO<sub>2</sub> time series presented in this report is EDGARv5.0, which covers the period 1970-2017. Emissions of other GHGs, such as CH<sub>4</sub> and N<sub>2</sub>O are provided in EDGARv4.3.2 database for the period 1970-2012 (Janssens-Maenhout et al., 2017; Janssens-Maenhout et al., 2018, in review). In EDGAR, emissions per country and compound are calculated on an annual basis and sector wise by multiplying the country-specific activity and technology mix data by country-specific emission factors and reduction factors for installed abatement system for each sector. For the greenhouse gas emission factors, the default values recommended in the IPCC 2006 guidelines were used: global values for CO<sub>2</sub> from fuel combustion, and where recommended, region-specific values were applied for other sources.

EDGARv5.0 uses international activity data, mainly energy balance statistics of IEA (2017) for 1970-2015 to estimate CO<sub>2</sub> from fossil fuel consumption. These emissions are extended (FT approach) to 2016 and 2017 using BP statistics. The respective sectoral breakdowns of emissions for 2015 are extrapolated to 2016 and 2017. Updates for 2016 and 2017 for cement, lime, ammonia and ferroalloys production are based on USGS statistics, urea production and consumption are based on IFA statistics, associated gas used from flaring from GGFR/NOAA, steel production from world steel and cement clinker production from UNFCCC (2018b). For the other sectors with lower contributions to the global CO<sub>2</sub> emissions, the time series in EDGARv4.3.2 have been extended for the period 2013-2017 using proxy data and relative changes in activity data compared to 2012, reported in recent data sources.

**For energy:** detailed IEA (2017) activity data are used to calculate CO<sub>2</sub> emissions for the period 1970-2015. The recent trends in coal, oil and natural gas consumption reported in the BP Review of World Energy (BP, 2018) are used to calculate the relative changes for 2016 and 2017. For oil consumption, BP figures were corrected for road biofuel use (fuel ethanol and biodiesel) which are included in the BP oil consumption data for road transport. For the change in international transport, we apply the reported change in oil consumption per country according to BP for the historically most contributing countries to global marine and aviation fuel sales.

**For the fugitive emissions:** the CO<sub>2</sub> emissions from coke production for 2015 to 2017 follow the same relative change as reported for the crude steel production of world steel (2017). CO<sub>2</sub> flared at oil and gas extraction for 1994 onwards was based on the total amount of gas flared derived from satellite observation of the intensity of flaring lights per country (GGFR/NOAA, 2018).

**For the metal industry:** the largest contribution is from blast furnaces, which in addition to the CO<sub>2</sub> emissions from blast furnace gas combustion accounted for under the energy sector, emit also CO<sub>2</sub> from the coke/coal input as reducing agent and limestone used in for iron and steel production. Here the crude steel production statistics reported by World Steel Association (worldsteel, 2017) are used as input to calculate CO<sub>2</sub> emissions. Ferro-alloys production data from USGS (2016, 2017) are used to update the activity data in EDGARv5.0 for the years 2010-2015, which further are updated for 2016 and 2017 by using the pig iron production trends.

**For non-metallic minerals:** CO<sub>2</sub> emissions from carbonates used in cement clinker production are based on reported or estimated cement clinker production. Cement production was calculated from cement production reported by the USGS (2018), except for China in 2017 (NBSC, 2018). Next, the clinker-to-cement ratio is based on the clinker production data until 2016 from UNFCCC (2018) for so-called Annex I countries and for China from the China Cement Almanac (CCA, 2015) and from 2011 onwards from the China Cement Research Institute (CCRI, 2018). For four other countries (India, Brazil, Egypt and Thailand), we used clinker production ratios from the Cement Sustainability Initiative database “Getting the Numbers Right” of the World Business Council for Sustainable Development (WBCSD, 2018). The changes in the lime production from USGS (2018) are applied to extrapolate CO<sub>2</sub> emissions from all other carbonate uses (glass production etc.). For the feedstock use for chemicals production, ammonia production from USGS (2018) is used, except for urea consumption and production, where data are provided by the International Fertiliser Industry Association (IFA, 2018). It is assumed that small soil liming emissions follow the gross ammonia production trend.

**For the other sources:** indirect CO<sub>2</sub> emissions from consumption of lubricants and paraffin waxes and solvent use, as well as the other relatively very small emissions of waste incineration, underground coal fires (mainly in China and India) and oil and gas fires (1992, in Kuwait) are based on EDGAR v4.3.2 and extrapolated under a zero growth assumption. Substantial updates have been performed for solid waste (Canada), flaring and solvents.

**For the countries belonging to “Other Africa (4)”, “Other Non-OECD Asia (5)” and “Other Non-OECD Americas (6)” in the IEA classification:** the share of CO<sub>2</sub> emissions from all these countries in global total is very small e.g. in 2015, according to IEA, this was about 0.25%. IEA provides only aggregated activity data for these three groups of countries. Compared to the previous EDGAR version (v4.3.2), in EDGARv5.0 a new methodology was developed to allocate the activity data from IEA (2017) to each single country by using splitting factors derived from US EIA (2018) country specific data on fuel consumption of coal, oil and natural gas. Together with the IEA (2017) updates, this newly developed methodology mostly explains the differences between CO<sub>2</sub> time series for these countries in EDGAR v4.3.2 and v5.0 versions. Consequently, the uncertainties in CO<sub>2</sub> emission estimations for these countries are larger than for other countries, in particular for the sectorial subdivision; additional reliable data and information are needed to improve the activity data allocation for them.

(4) Includes Botswana (until 1980); Burkina Faso; Burundi; Cape Verde; Central African Republic; Chad; Comoros; Djibouti; Equatorial Guinea; Gambia; Guinea; Guinea-Bissau; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Namibia (until 1990); Niger (until 1999) Réunion; Rwanda; Sao Tome and Principe; Seychelles; Sierra Leone; Somalia; Swaziland; and Uganda.

(5) Includes Afghanistan; Bhutan; Cambodia (until 1994); Cook Islands; East Timor; Fiji; French Polynesia; Kiribati; Lao People’s Democratic Republic; Macau, China; Maldives; Mongolia (until 1984); New Caledonia; Palau (from 1994); Papua New Guinea; Samoa; Solomon Islands; Tonga and Vanuatu.

(6) Includes Antigua and Barbuda; Aruba; Bahamas; Barbados; Belize; Bermuda; British Virgin Islands; Cayman Islands; Dominica; Falk-land Islands (Malvinas); French Guiana; Grenada; Guadeloupe; Guyana; Martinique; Montserrat; Puerto Rico (for natural gas and electricity); Saba (from 2012); Saint Eustatius (from 2012); Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Sint Maarten (from 2012); Suriname (until 1999); and the Turks and Caicos Islands.

## Annex 2: A closer look country by country

For each country, a fact sheet is provided with timeseries of fossil CO<sub>2</sub> emissions from all anthropogenic activities except land use, land-use change, forestry and large scale biomass burning.

The upper panel of the fact sheet includes the fossil CO<sub>2</sub> annual totals from 1990 until 2017 per sector, the fossil CO<sub>2</sub> per capita and per GDP (GDP is Gross Domestic Product in US Dollar expressed in 2011 Purchasing Power Parity). An overview table with total emissions by country for the years 1990, 2005, 2017 is reported, together with per capita, per GDP emissions and population data. The bottom panel of each fact sheet shows the changes in emissions by sector in 2017 compared to 1990 and 2005 levels.

Along with the summary of the CO<sub>2</sub> emission timeseries for each country (the top of the page), a graphical visualisation aids the interpretation of the CO<sub>2</sub> emissions change over time (lower half of the page). The graphs compare CO<sub>2</sub> emissions for 2017 with the emission levels of two key years: 1990 (base year for national green-house gases inventory) and 2005, when the Kyoto Protocol came into effect. Emissions stalling, rising or dampening for the year 2017 are expressed in term of % change with respect to these two years, for sectors specified as follow:

### Legend of the sectors:



Power Industry - Power and heat generation plants (public & autoproducers)



Other industrial combustion - Combustion for industrial manufacturing and fuel production




Buildings – Small scale non-industrial stationary combustion




Transport – Mobile combustion (road & rail & ship & aviation)



Other sectors – Industrial process emissions & agriculture & waste

 indicates a reduction in 2017 emissions by the amount expressed by the percentage value (in green)

 indicates growth in 2017 emissions by the amount expressed by the percentage value (in red)

 In the cases where 2017 emissions have reduced or have grown by less than 5% with respect to the reference year, or have stalled, a horizontal orange arrow is shown. Also in this case the amount is expressed by the percentage value (in orange)

An “n/a” is used to indicate either a sector missing throughout the timeseries (meaning that no data are reported for that sector) or that no data are available for both the reference year and for 2017. Finally, in the instances when emissions from a specific sector have been reported for the reference year but not for 2017 a decreasing green arrow is shown without the associated percentage value (as for example [Power industry, Albania]; on the opposite, when emissions from a specific sector have been reported for 2017 year but not for the reference year, a rising red arrow is shown without the associated percentage value (as for example [Other industrial combustion, Malta]).

Country-specific fossil CO<sub>2</sub> emission timeseries can be downloaded at the following website: <http://edgar.jrc.ec.europa.eu/overview.php?v=booklet2018>.



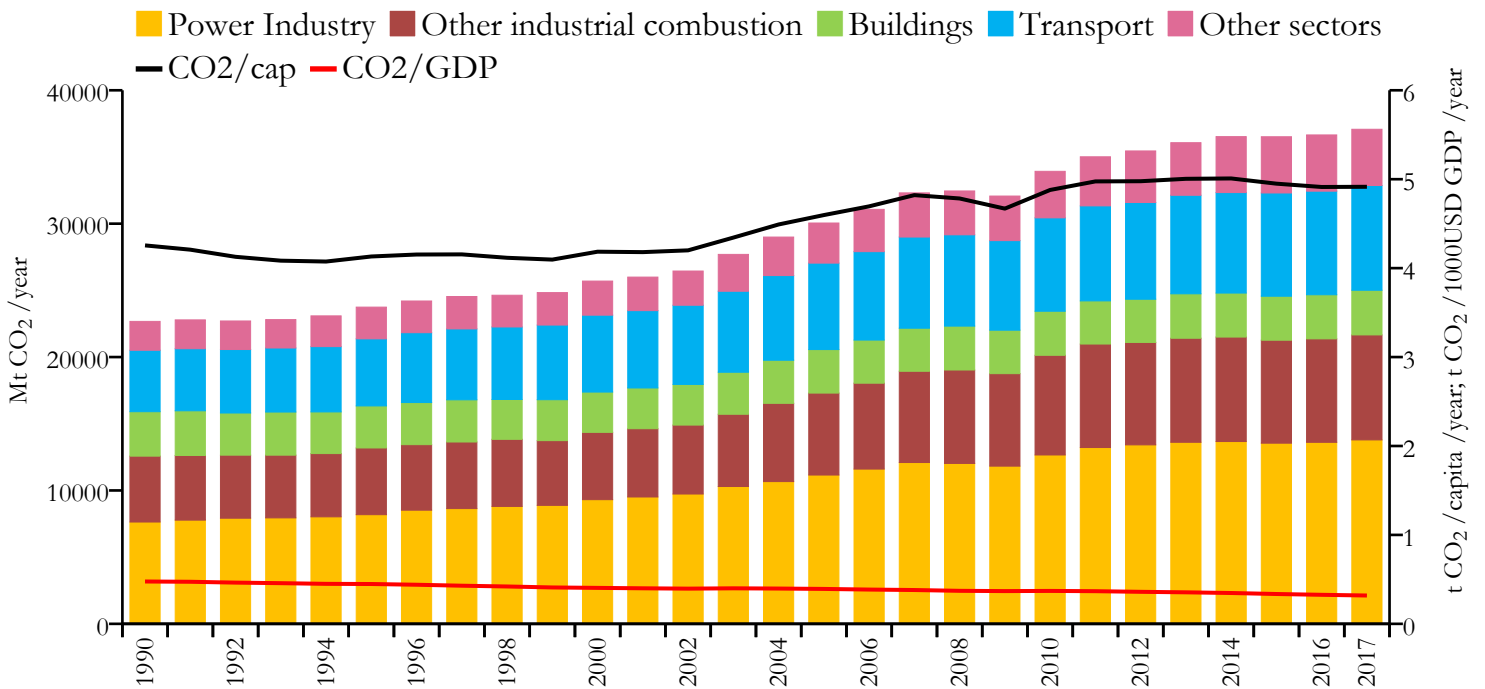
### **Annex 3: Fossil CO<sub>2</sub> emissions for the world and the EU28**

Global totals for all countries, including international shipping and aviation, followed by the international transport sector (shipping and aviation).

Total EU28 emissions from Member States: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.



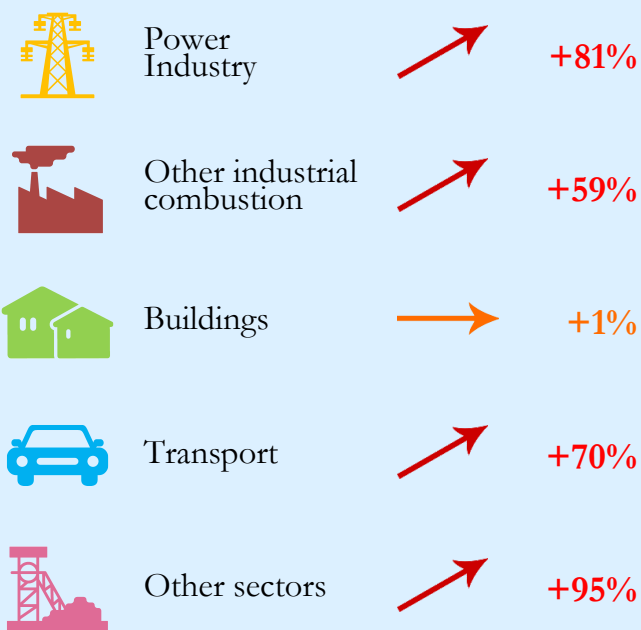
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	37077.404	4.915	0.319	7544050418
2005	30049.809	4.597	0.393	6537351977
1990	22674.116	4.256	0.476	5327961360



### 2017 vs 1990



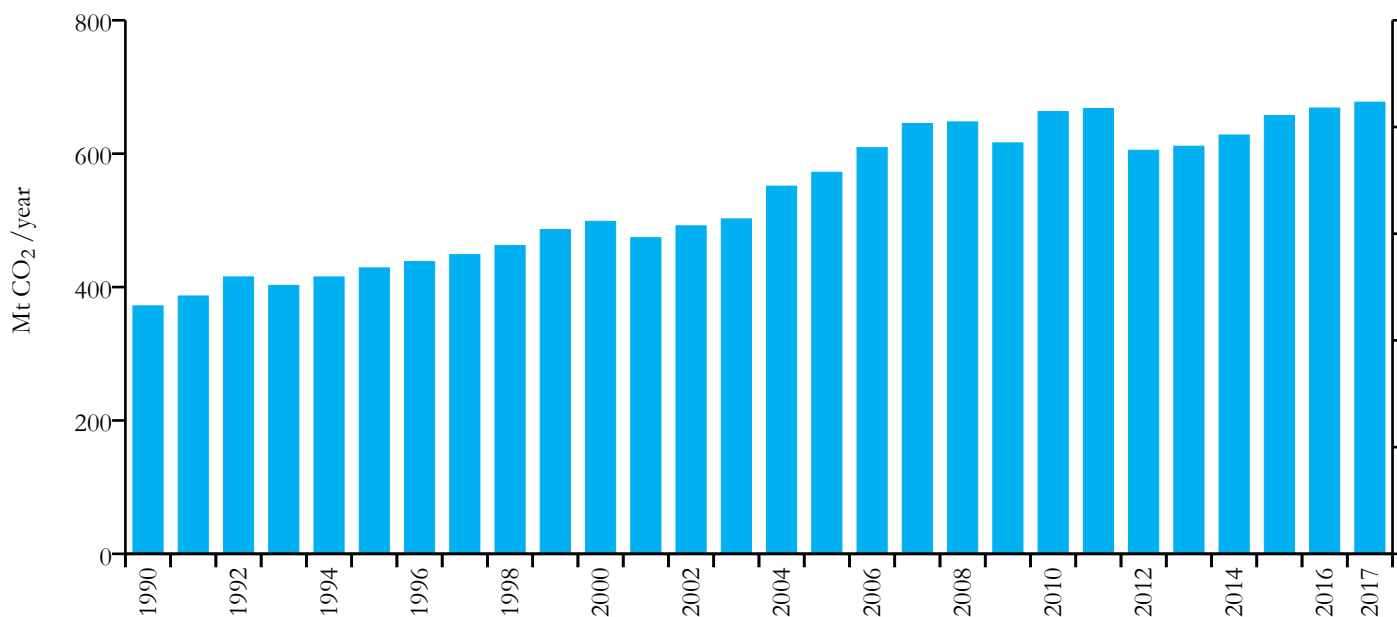
### 2017 vs 2005



# International Shipping

## Fossil CO<sub>2</sub> emissions by sector

■ Power Industry 
 ■ Other industrial combustion 
 ■ Buildings 
 ■ Transport 
 ■ Other sectors



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	677.248	n/a	n/a	n/a
2005	572.169	n/a	n/a	n/a
1990	371.804	n/a	n/a	n/a



### 2017 vs 1990



Power Industry

n/a



Other industrial combustion

n/a



Buildings

n/a



Transport



+82%



Other sectors

n/a

### 2017 vs 2005



Power Industry

n/a



Other industrial combustion

n/a



Buildings

n/a



Transport



+18%



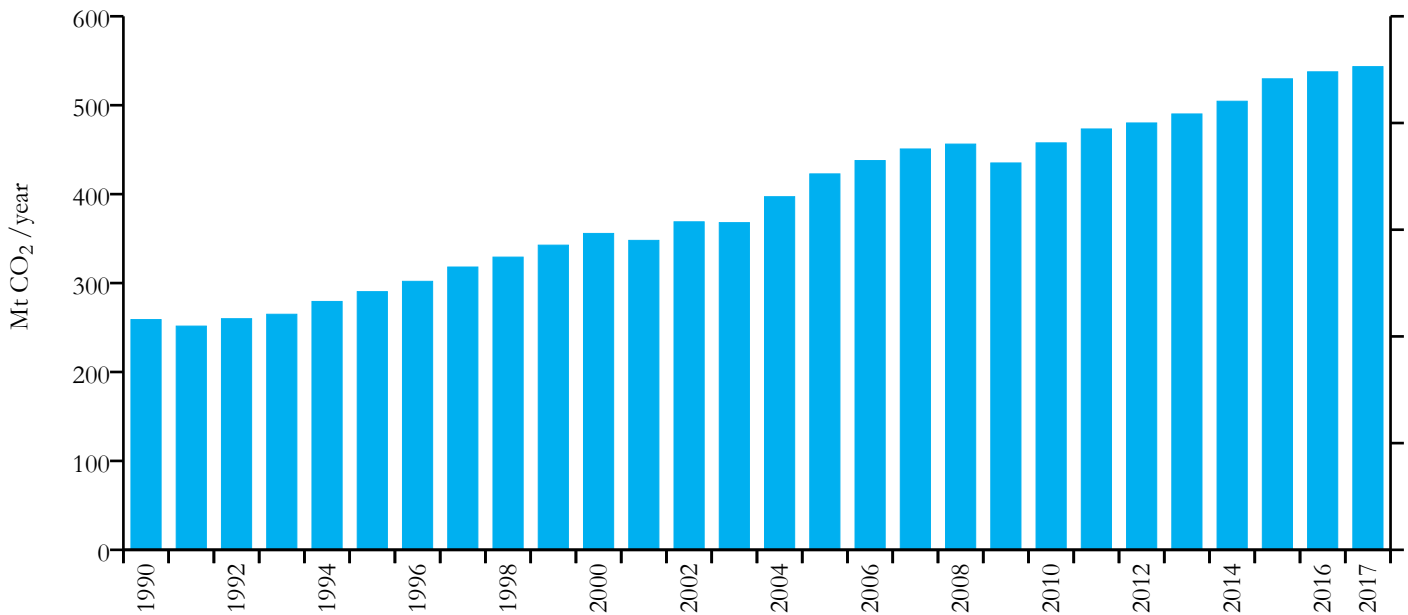
Other sectors

n/a

# International Aviation

## Fossil CO<sub>2</sub> emissions by sector







■ Power Industry 
 ■ Other industrial combustion 
 ■ Buildings 
 ■ Transport 
 ■ Other sectors









Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	543.381	n/a	n/a	n/a
2005	422.777	n/a	n/a	n/a
1990	258.941	n/a	n/a	n/a



### 2017 vs 1990

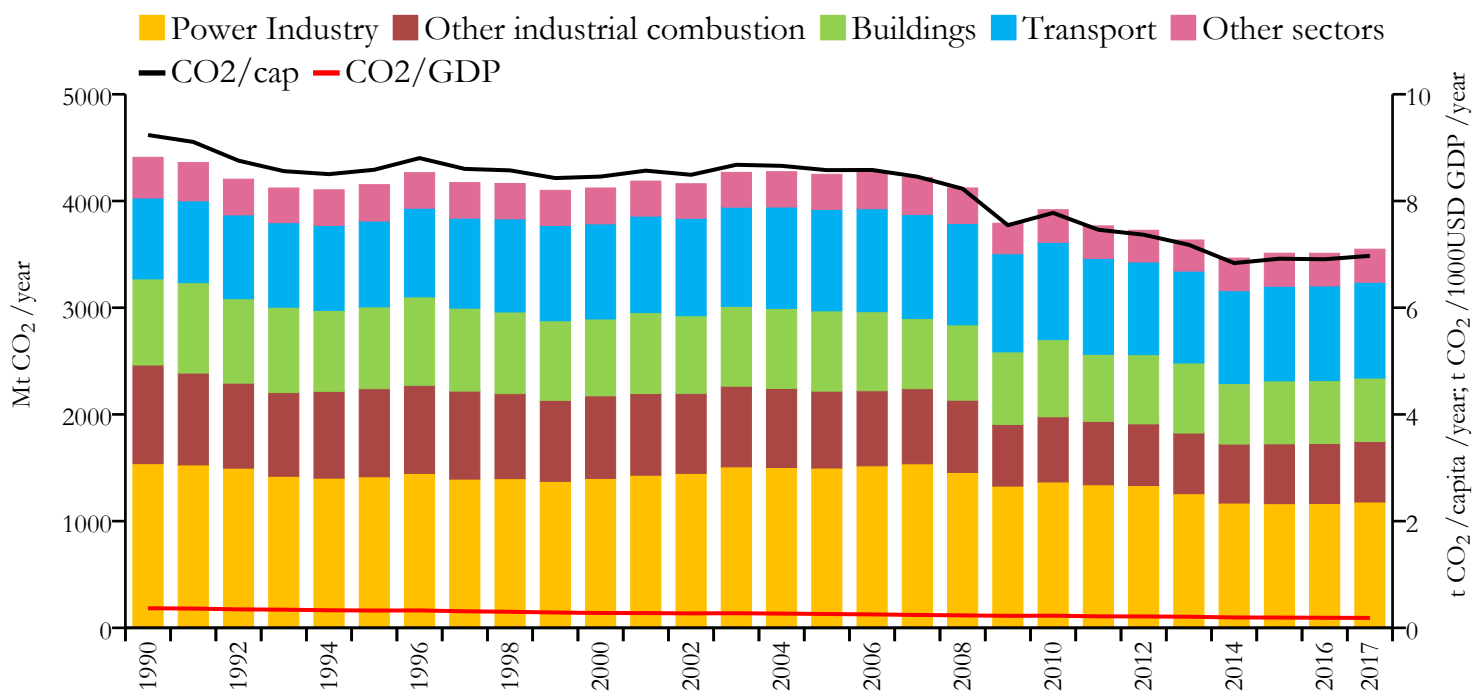
	Power Industry	n/a
	Other industrial combustion	n/a
	Buildings	n/a
	Transport	 <b>+110%</b>
	Other sectors	n/a

### 2017 vs 2005

	Power Industry	n/a
	Other industrial combustion	n/a
	Buildings	n/a
	Transport	 <b>+29%</b>
	Other sectors	n/a



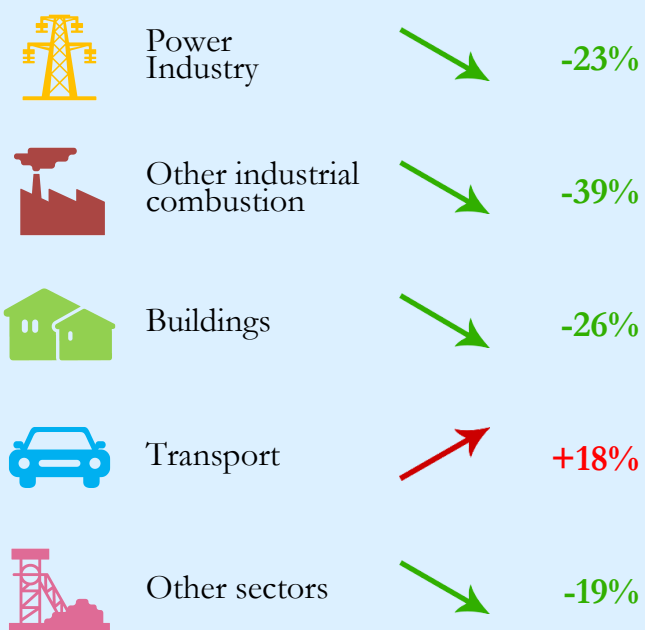
## Fossil CO<sub>2</sub> emissions by sector



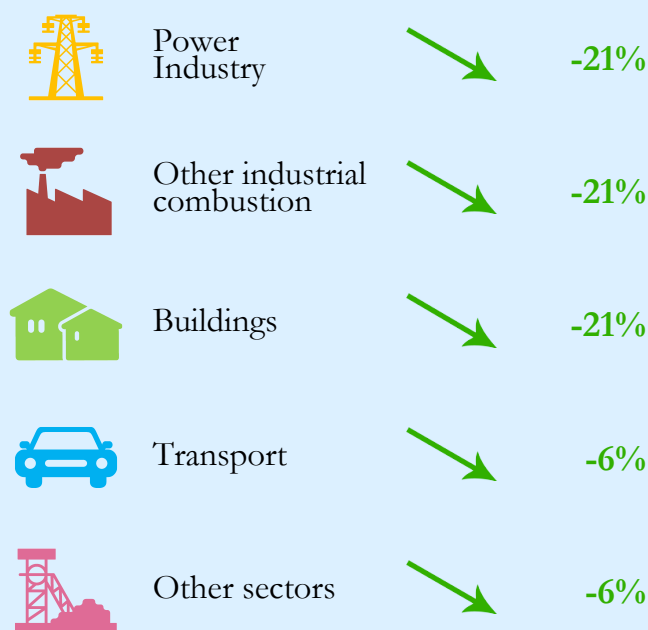
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3548.345	6.972	0.186	508943606
2005	4249.995	8.578	0.260	495449412
1990	4409.339	9.237	0.367	477381463



### 2017 vs 1990



### 2017 vs 2005



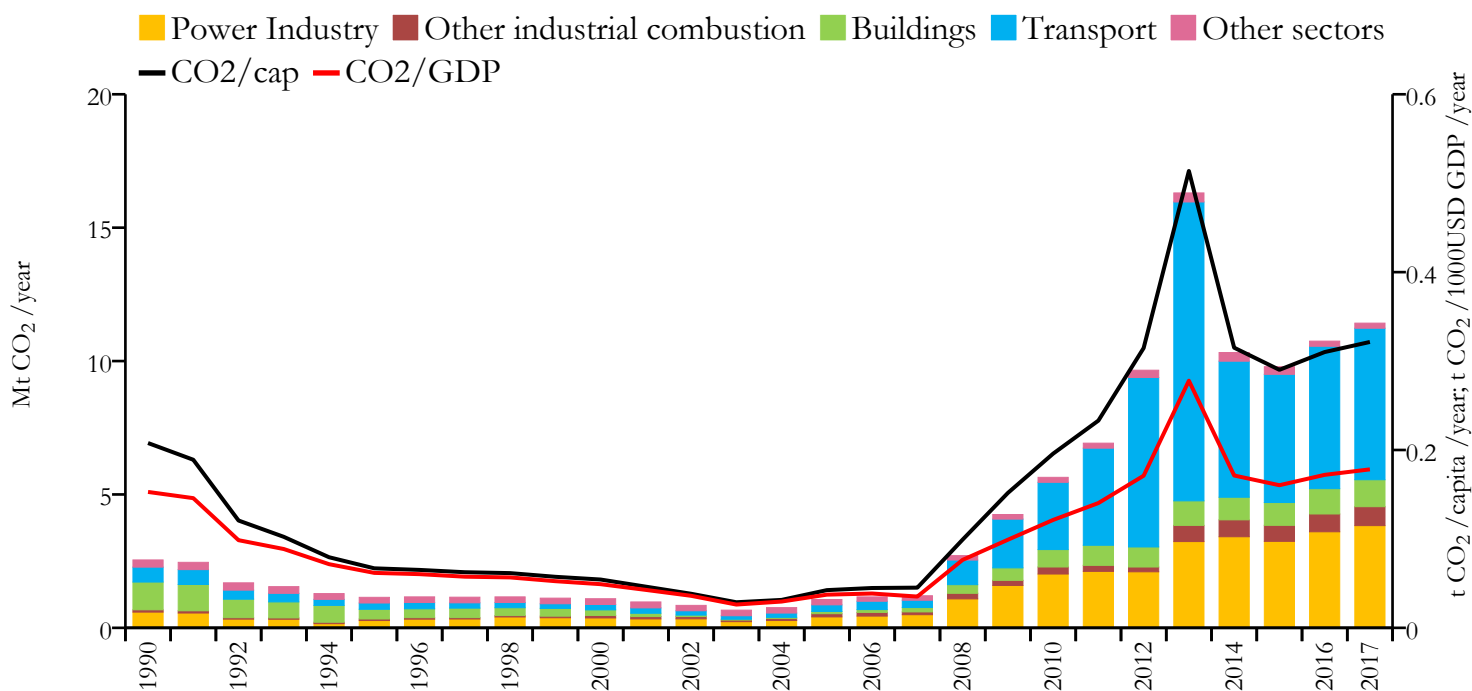
## **Annex 4: Fossil CO<sub>2</sub> emissions by country**

Fossil CO<sub>2</sub> emissions by country: Afghanistan; Albania; Algeria; Angola; Anguilla; Antigua and Barbuda; Argentina; Armenia; Aruba; Australia; Austria; Azerbaijan; Bahamas; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Belize; Benin; Bermuda; Bhutan; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; British Virgin Islands; Brunei; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Cape Verde; Cayman Islands; Central African Republic; Chad; Chile; China; Colombia; Comoros; Congo; Cook Islands; Costa Rica; Côte d'Ivoire; Croatia; Cuba; Curaçao; Cyprus; Czechia; Democratic Republic of the Congo; Denmark; Djibouti; Dominica; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Estonia; Ethiopia; Falkland Islands; Faroes; Fiji; Finland; former Yugoslav Republic of Macedonia, the; France and Monaco; French Guiana; French Polynesia; Gabon; Georgia; Germany; Ghana; Gibraltar; Greece; Greenland; Grenada; Guadeloupe; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; Hong Kong; Hungary; Iceland; India; Indonesia; Iran; Iraq; Ireland; Israel and Palestine, State of; Italy, San Marino and the Holy See; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Kiribati; Kuwait; Kyrgyzstan; Laos; Latvia; Lebanon; Lesotho; Liberia; Libya; Lithuania; Luxembourg; Macao; Madagascar; Malawi; Malaysia; Maldives; Mali; Malta; Martinique; Mauritania; Mauritius; Mexico; Moldova; Mongolia; Morocco; Mozambique; Myanmar/Burma; Namibia; Nepal; Netherlands; New Caledonia; New Zealand; Nicaragua; Niger; Nigeria; North Korea; Norway; Oman; Pakistan; Palau; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Puerto Rico; Qatar; Réunion; Romania; Russia; Rwanda; Saint Helena, Ascension and Tristan da Cunha; Saint Kitts and Nevis; Saint Lucia; Saint Pierre and Miquelon; Saint Vincent and the Grenadines; Samoa; São Tomé and Príncipe; Saudi Arabia; Senegal; Serbia and Montenegro; Seychelles; Sierra Leone; Singapore; Slovakia; Slovenia; Solomon Islands; Somalia; South Africa; South Korea; Spain and Andorra; Sri Lanka; Sudan and South Sudan; Suriname; Swaziland; Sweden; Switzerland and Liechtenstein; Syria; Taiwan; Tajikistan; Tanzania; Thailand; The Gambia; Timor-Leste; Togo; Tonga; Trinidad and Tobago; Tunisia; Turkey; Turkmenistan; Turks and Caicos Islands; Uganda; Ukraine; United Arab Emirates; United Kingdom; United States; Uruguay; Uzbekistan; Vanuatu; Venezuela; Vietnam; Western Sahara; Yemen; Zambia; Zimbabwe.

# Afghanistan



## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	11.422	0.321	0.178	35530081
2005	1.063	0.042	0.037	25070798
1990	2.546	0.208	0.153	12249114



### 2017 vs 1990

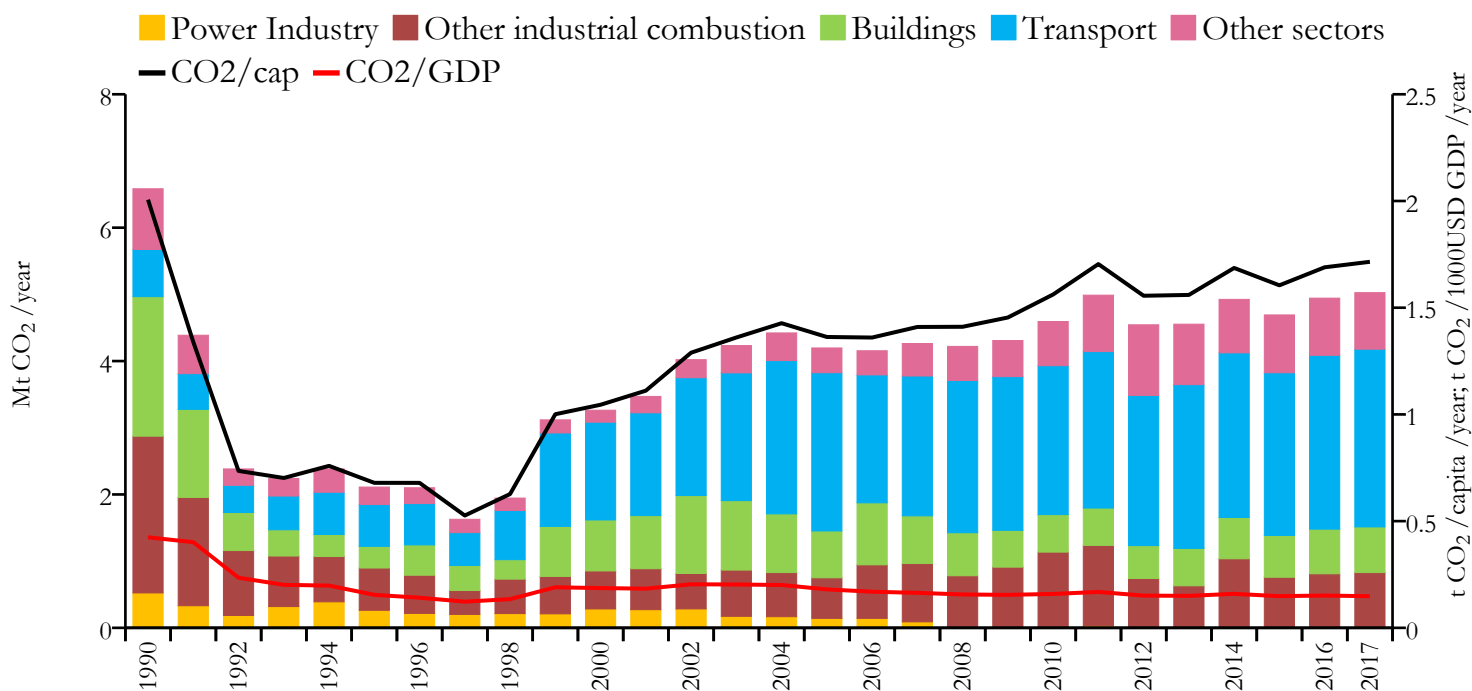


### 2017 vs 2005





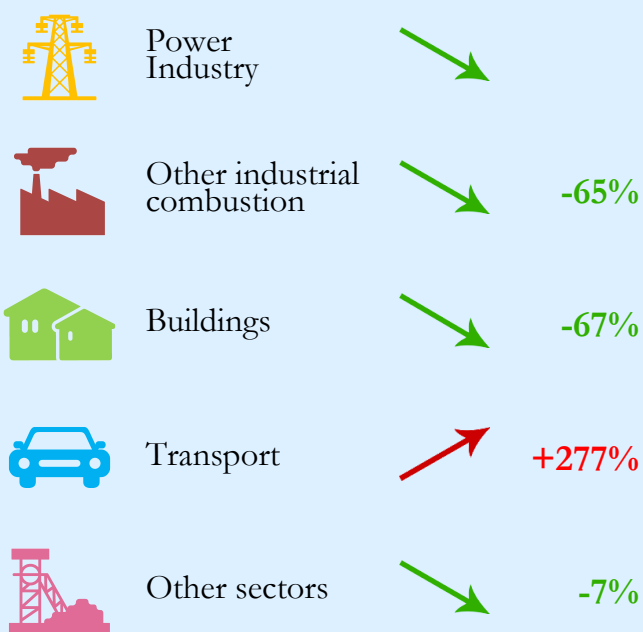
## Fossil CO<sub>2</sub> emissions by sector



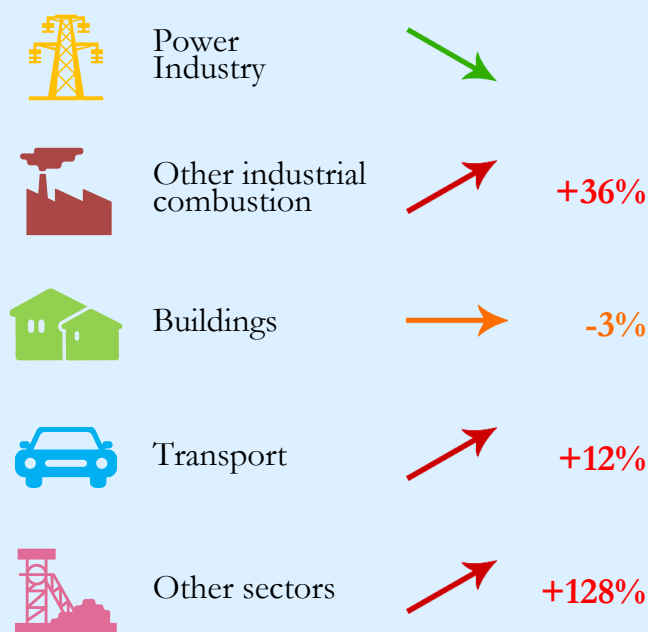
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.026	1.715	0.148	2930187
2005	4.196	1.363	0.180	3079179
1990	6.583	2.006	0.424	3281454



### 2017 vs 1990



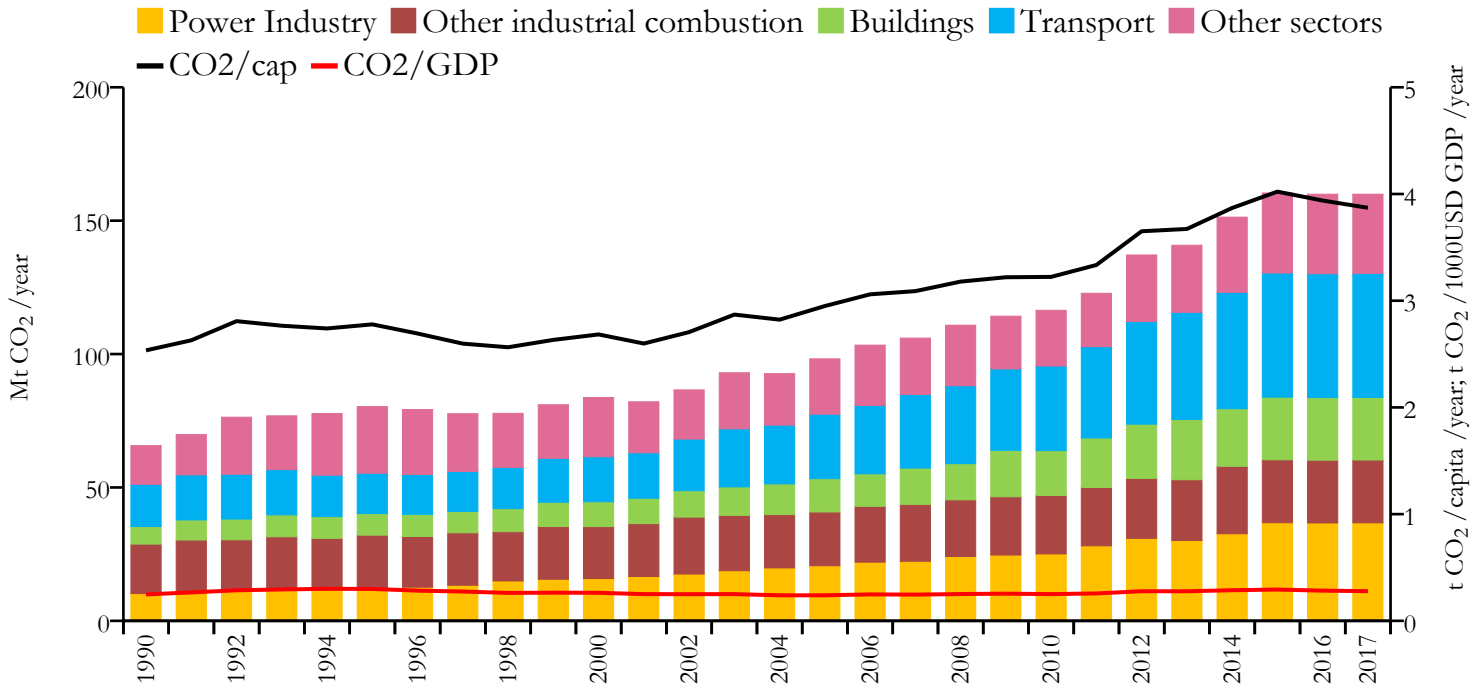
### 2017 vs 2005







## Fossil CO<sub>2</sub> emissions by sector



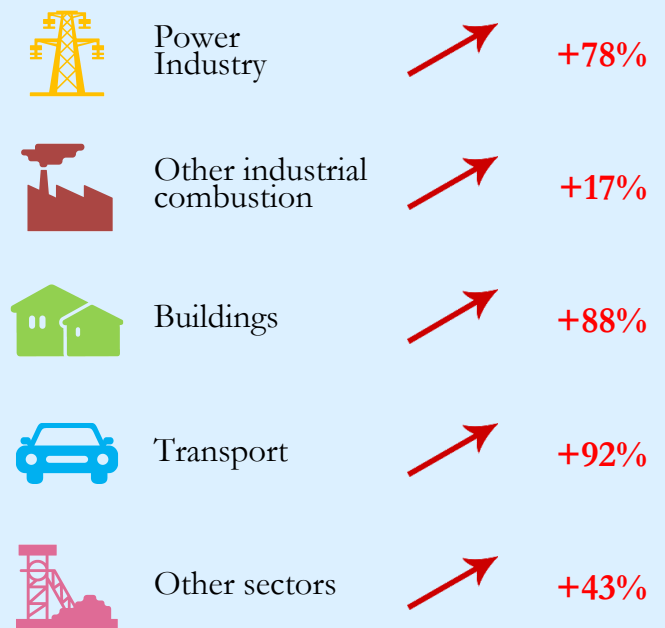
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	159.929	3.871	0.278	41318142
2005	98.197	2.950	0.239	33288437
1990	65.677	2.535	0.248	25912367



### 2017 vs 1990

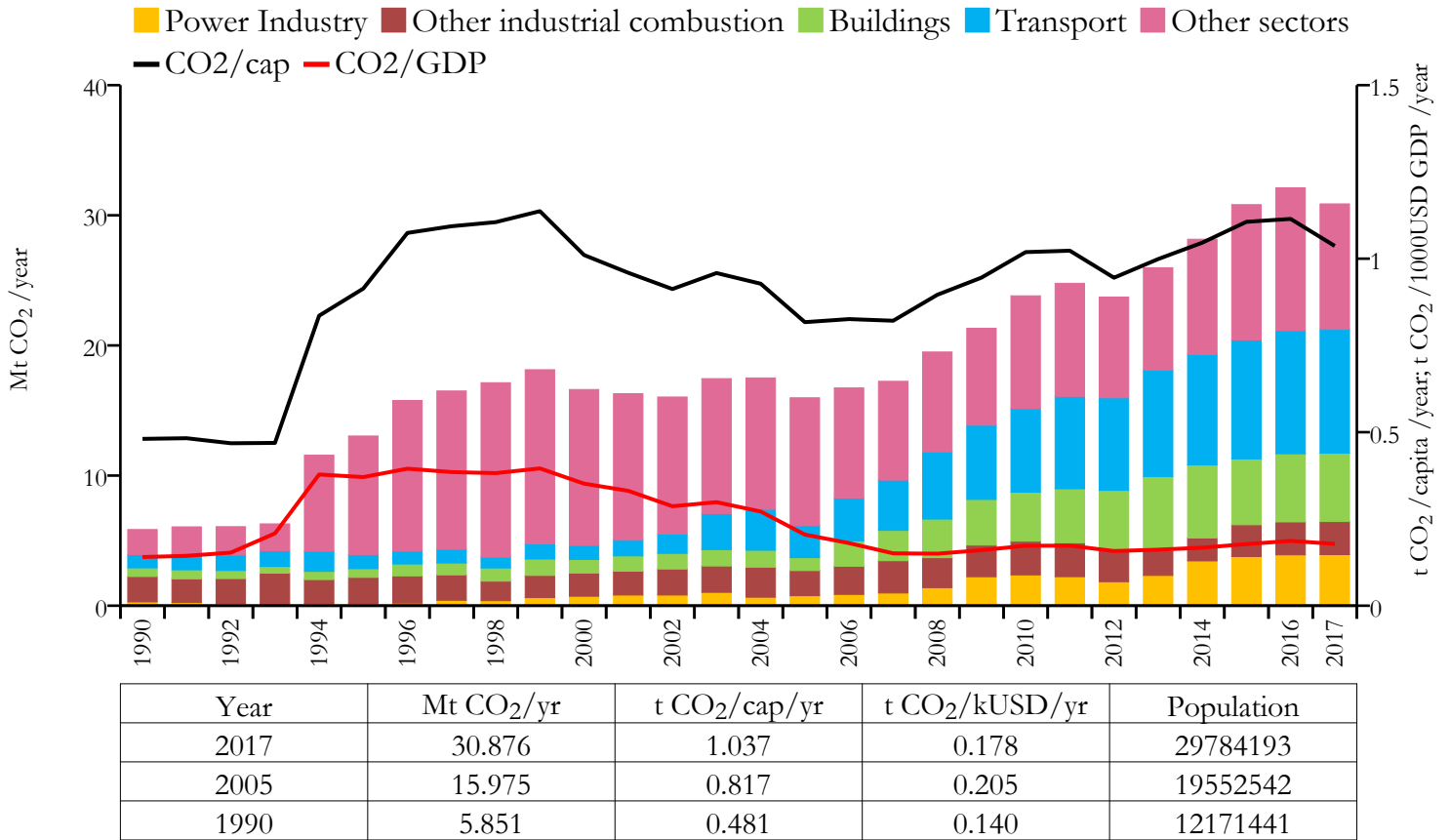


### 2017 vs 2005





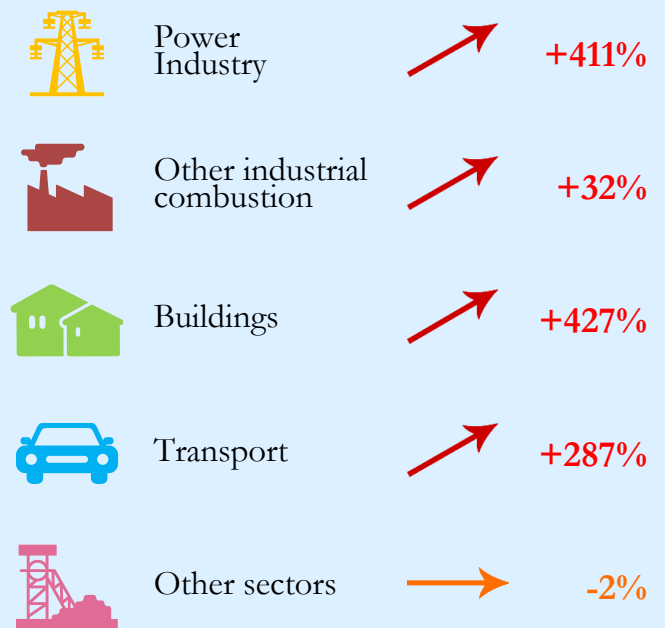
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990



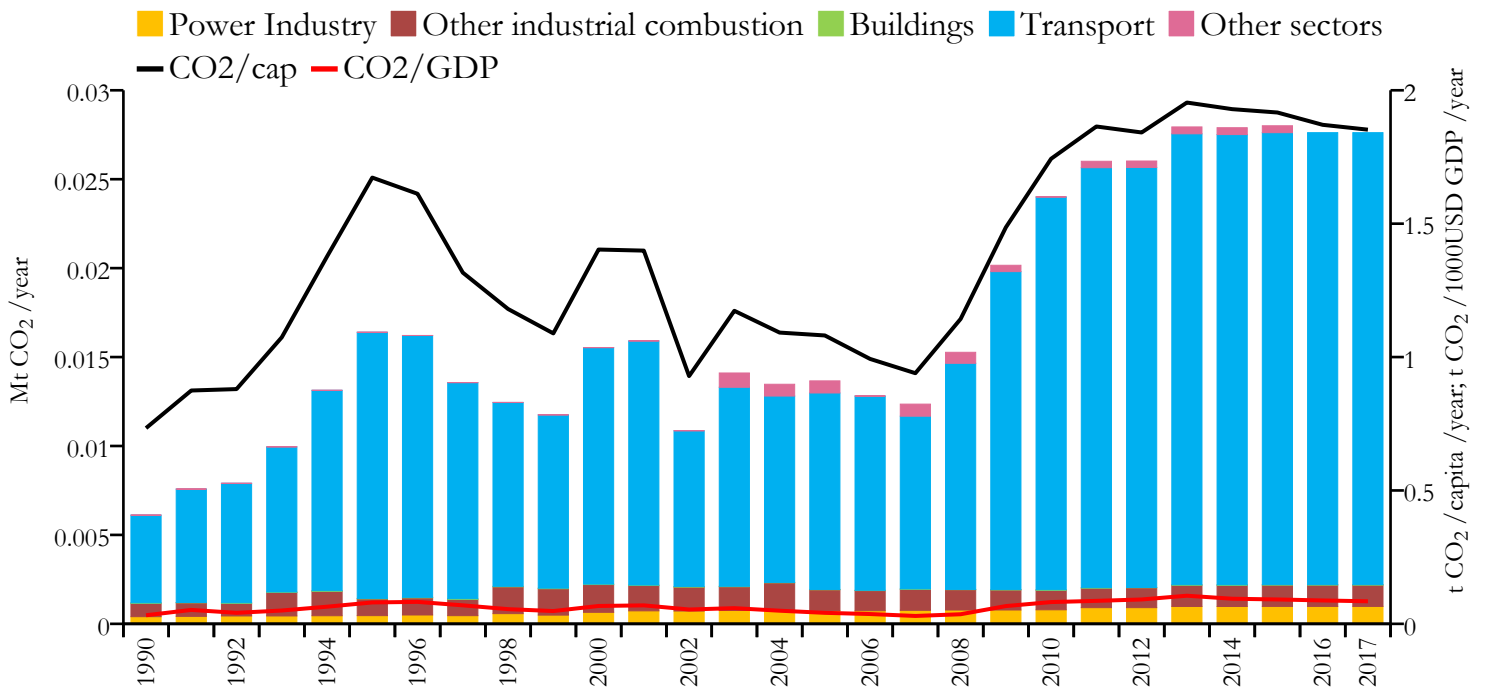
### 2017 vs 2005



# Anguilla



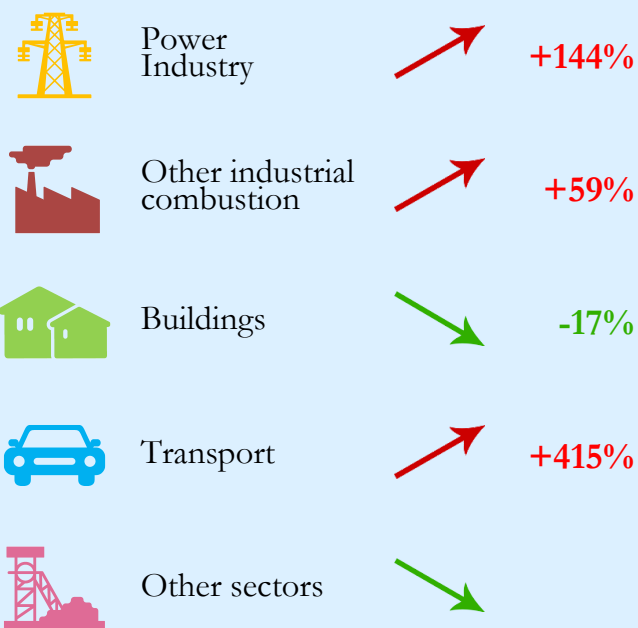
## Fossil CO<sub>2</sub> emissions by sector



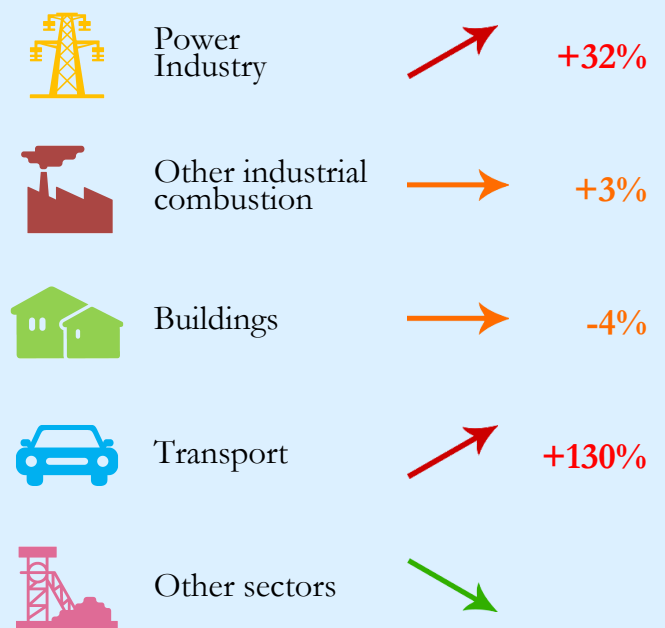
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.028	1.852	0.085	14909
2005	0.014	1.081	0.041	12638
1990	0.006	0.734	0.032	8334



### 2017 vs 1990



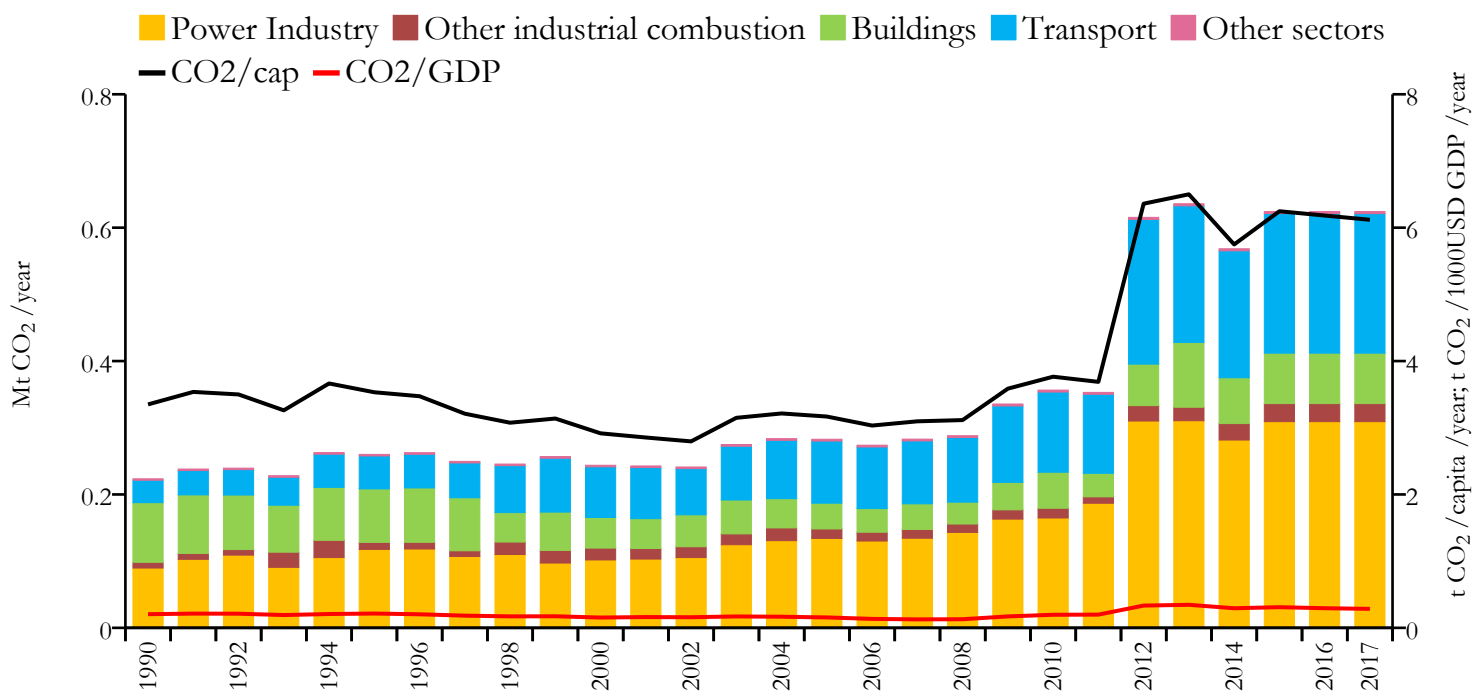
### 2017 vs 2005



# Antigua and Barbuda



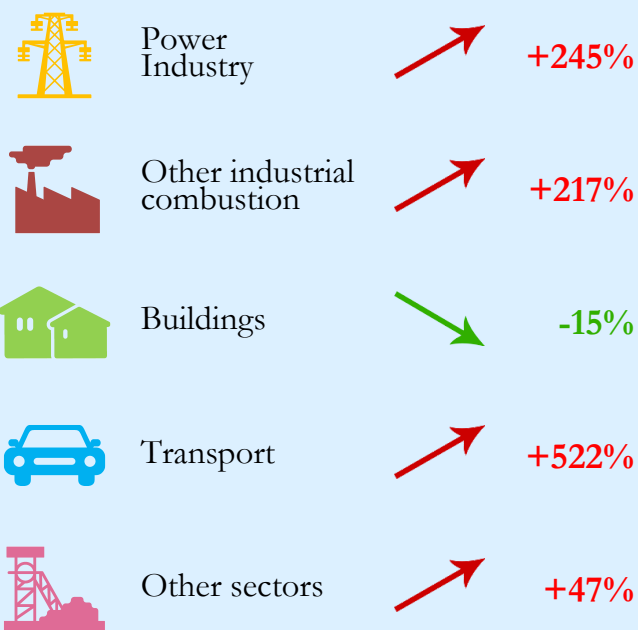
## Fossil CO<sub>2</sub> emissions by sector



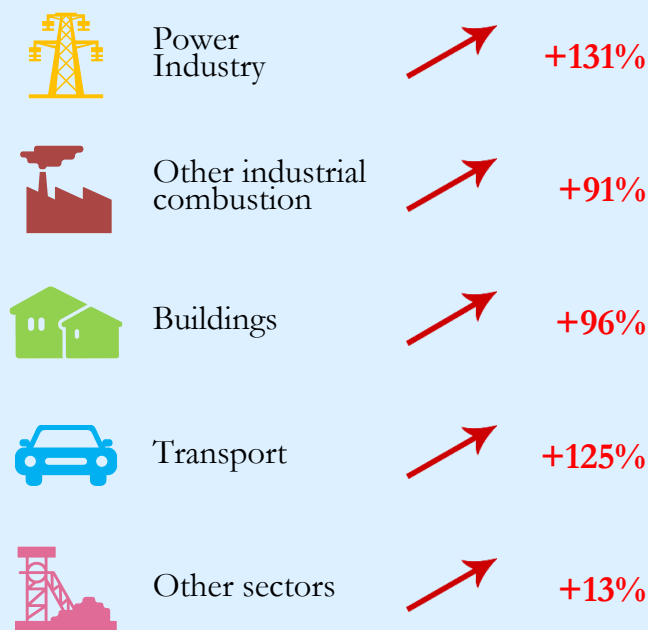
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.624	6.118	0.285	102012
2005	0.283	3.168	0.156	89253
1990	0.223	3.350	0.205	66696



### 2017 vs 1990



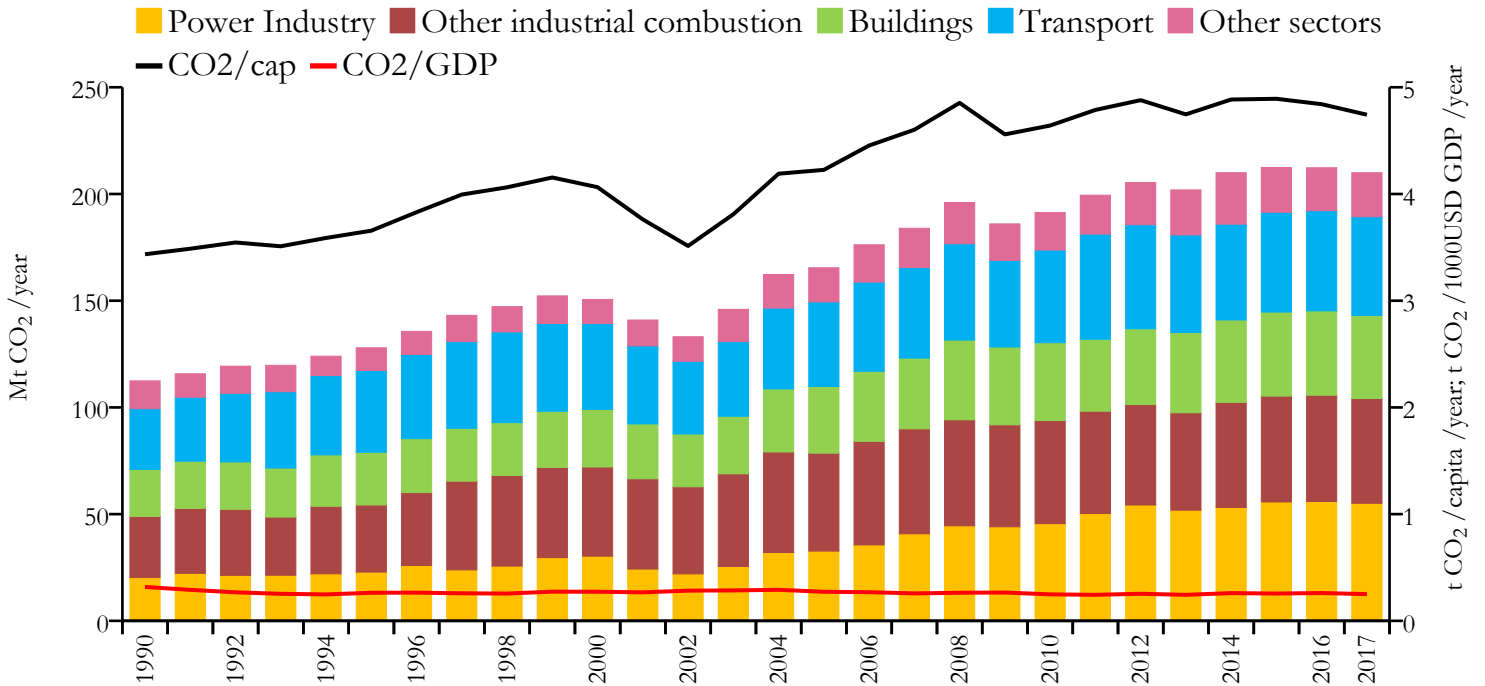
### 2017 vs 2005



# Argentina



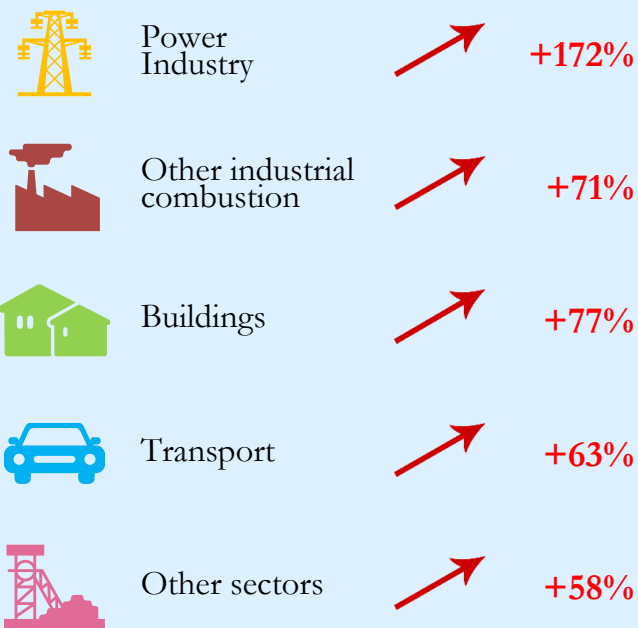
## Fossil CO<sub>2</sub> emissions by sector



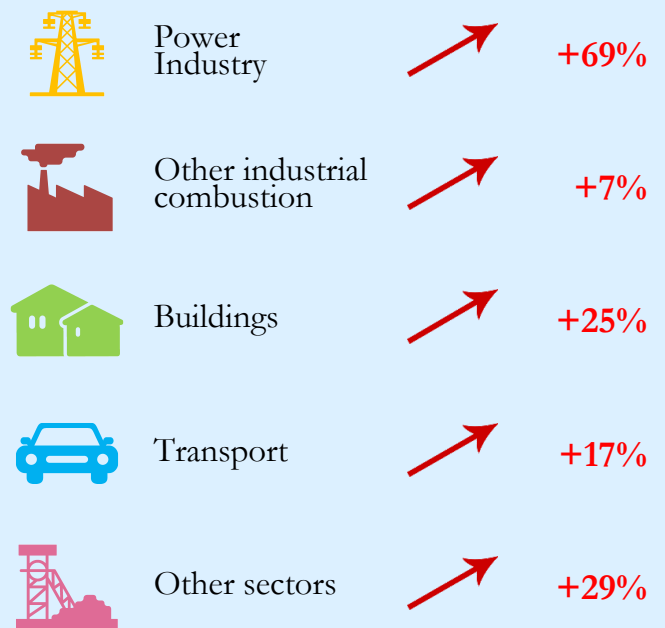
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	209.968	4.743	0.250	44271041
2005	165.429	4.226	0.272	39145488
1990	112.434	3.435	0.318	32729739



### 2017 vs 1990



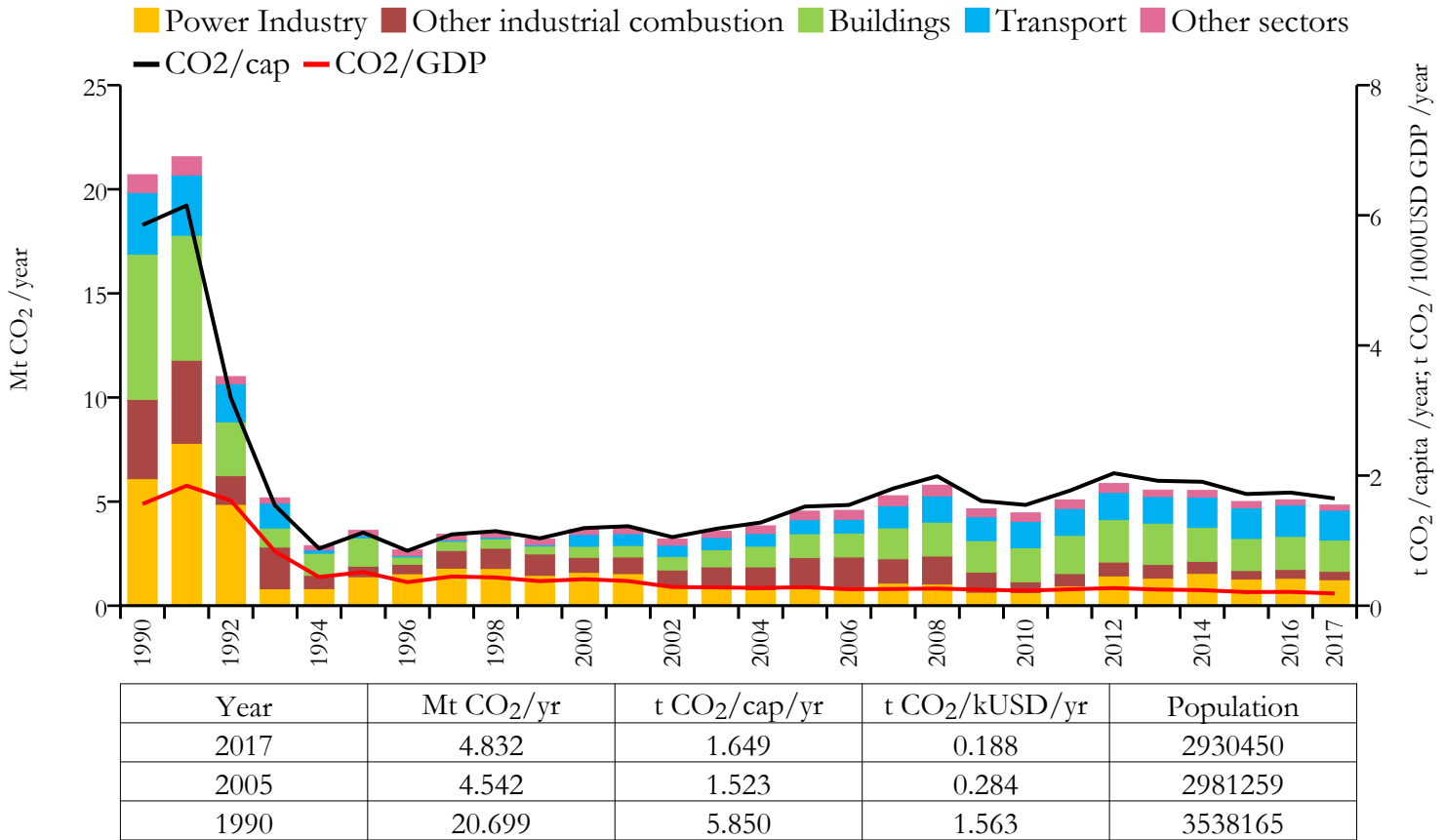
### 2017 vs 2005



# Armenia



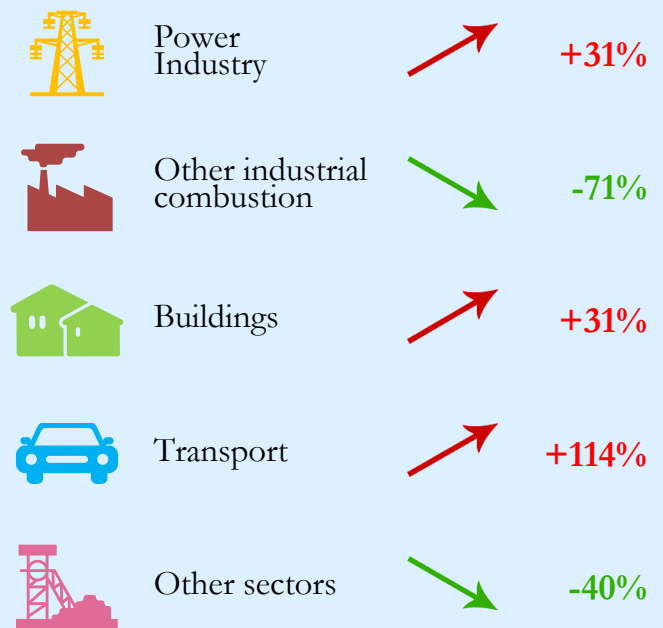
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990

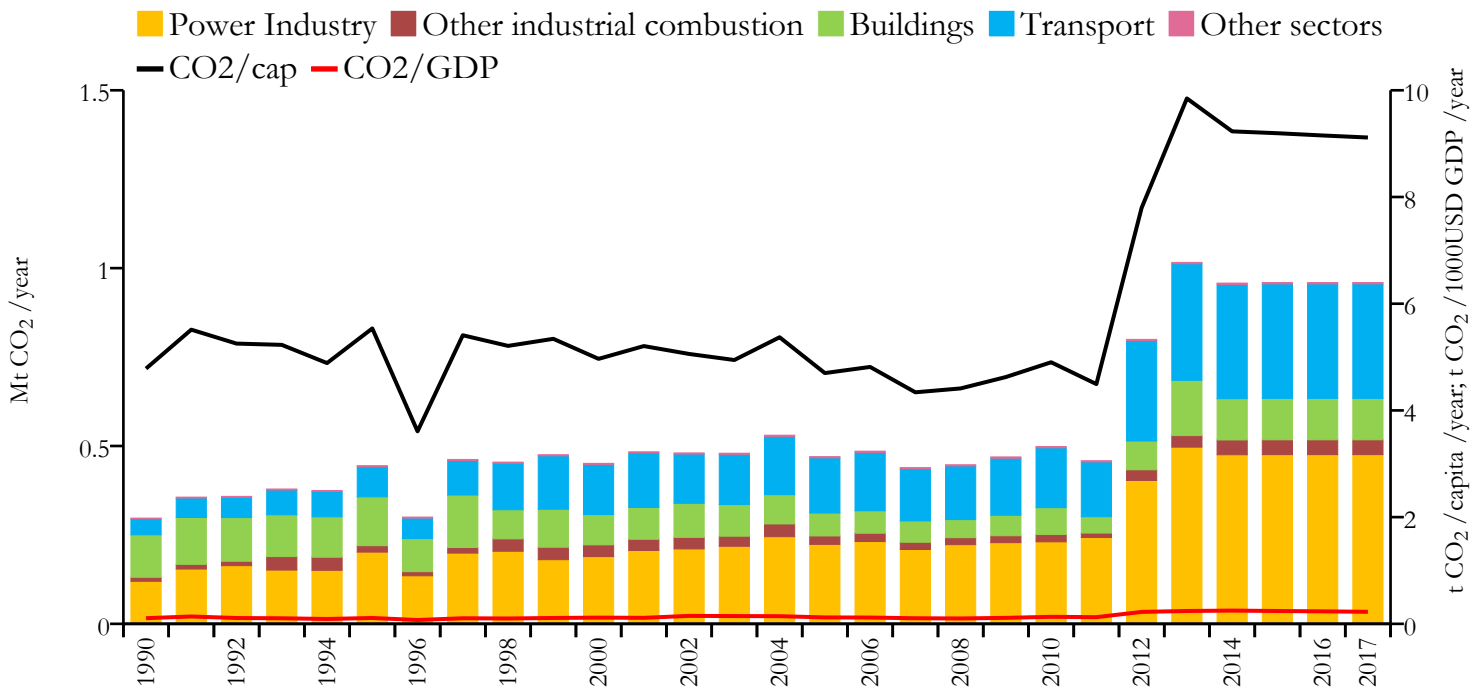


### 2017 vs 2005





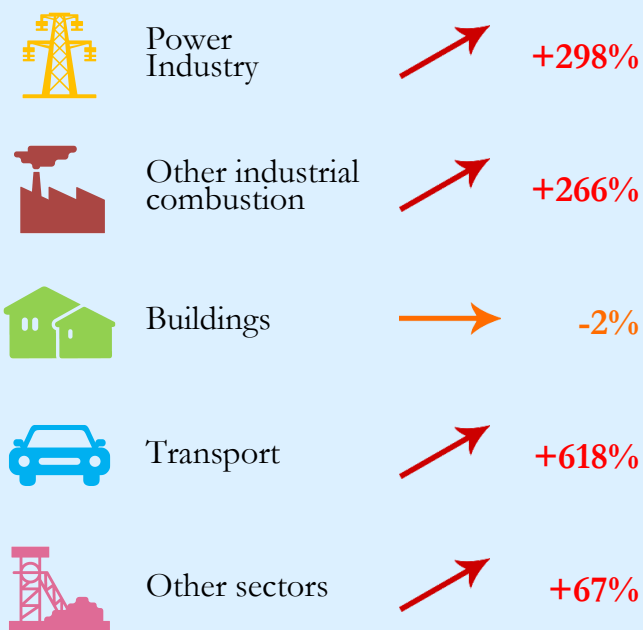
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.959	9.115	0.226	105264
2005	0.470	4.700	0.120	100031
1990	0.297	4.784	0.106	62149



### 2017 vs 1990



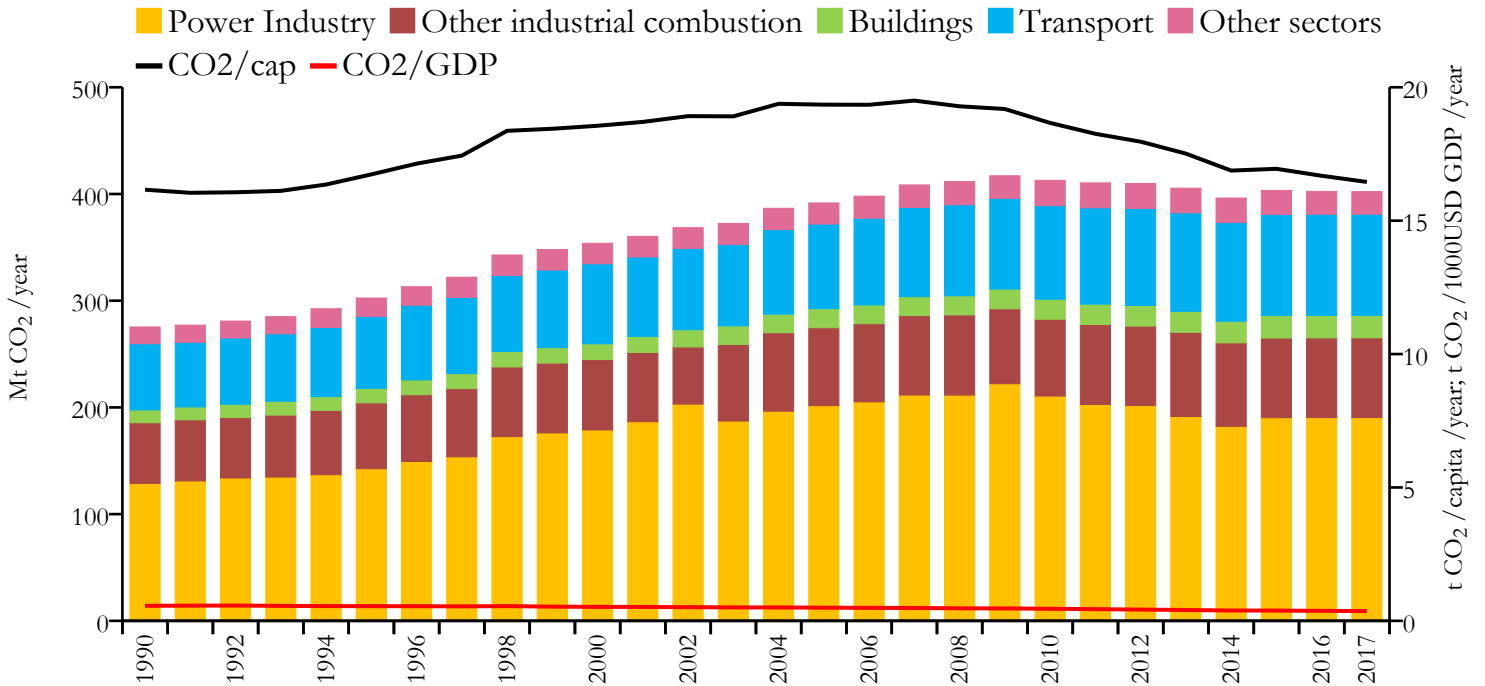
### 2017 vs 2005



# Australia



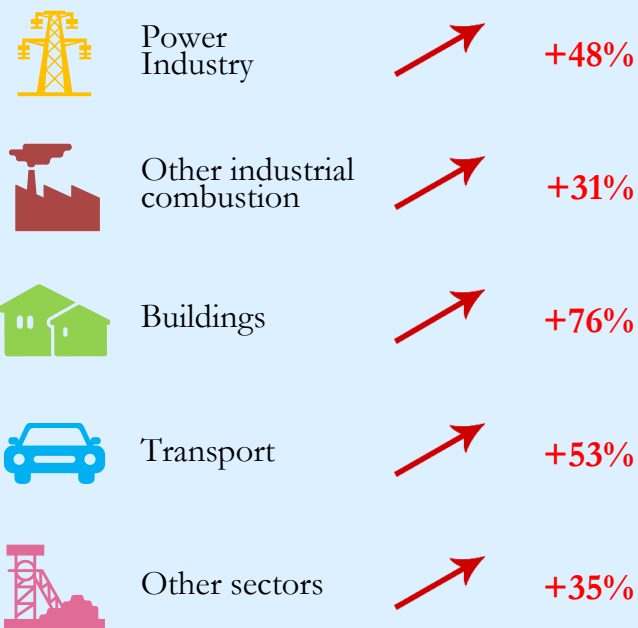
## Fossil CO<sub>2</sub> emissions by sector



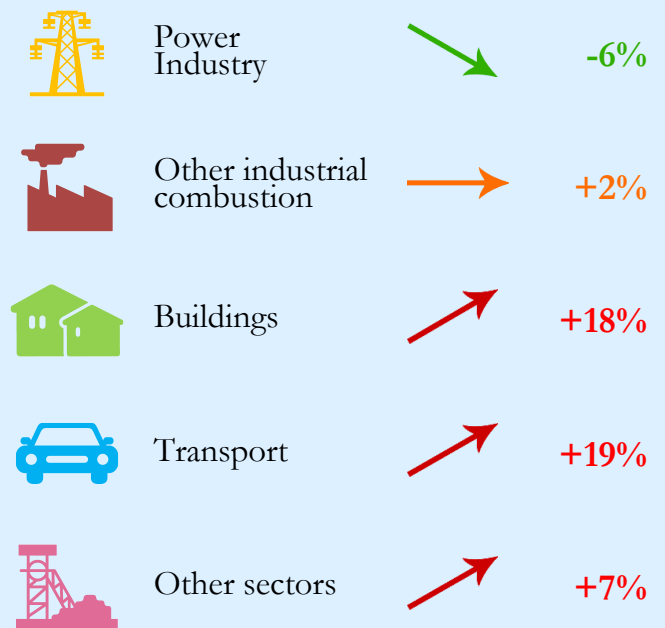
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	402.253	16.452	0.366	24450561
2005	391.590	19.348	0.493	20238903
1990	275.408	16.161	0.563	17041431



### 2017 vs 1990



### 2017 vs 2005

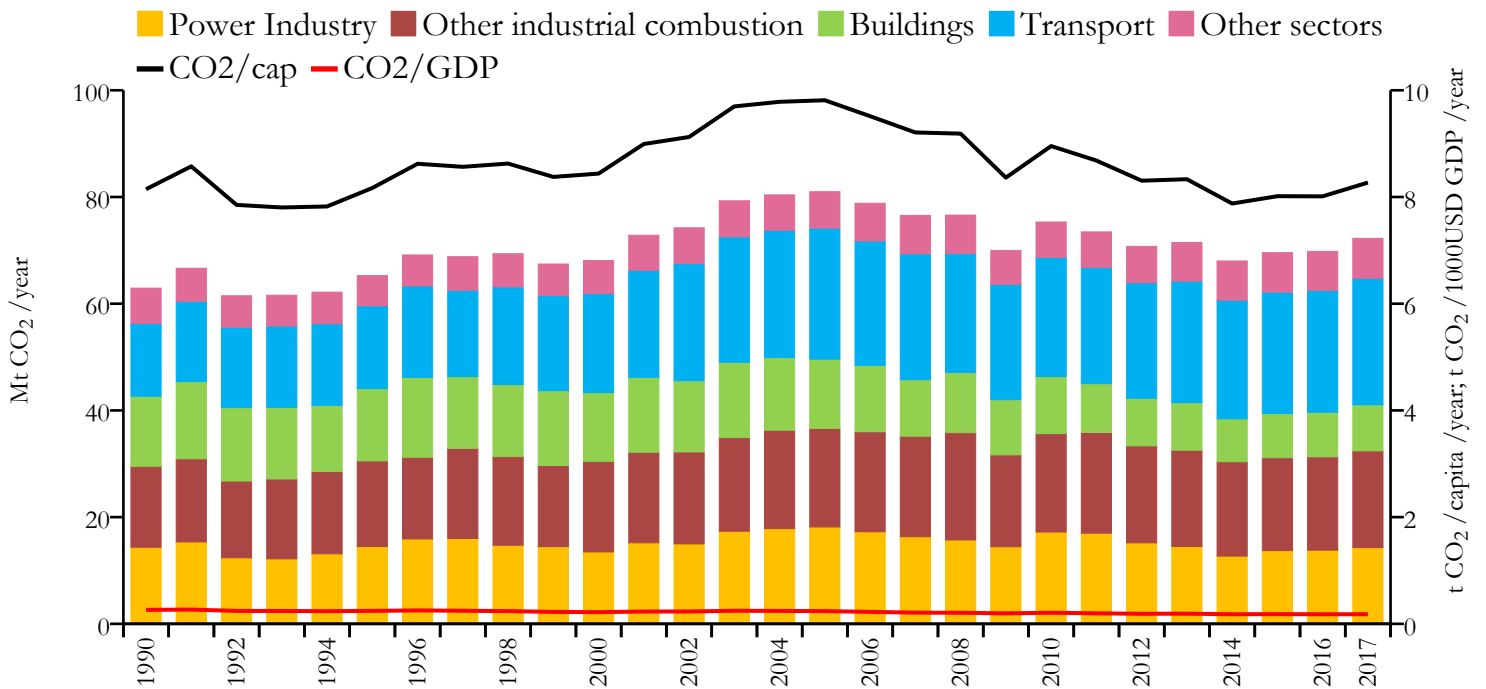




# Austria



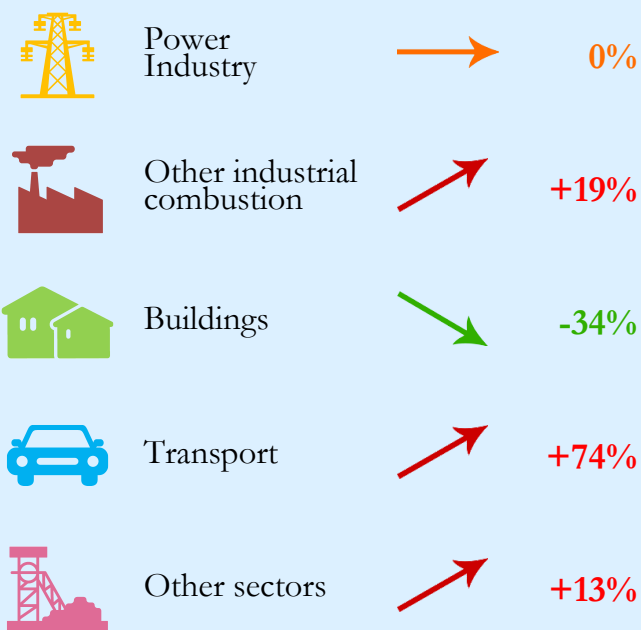
## Fossil CO<sub>2</sub> emissions by sector



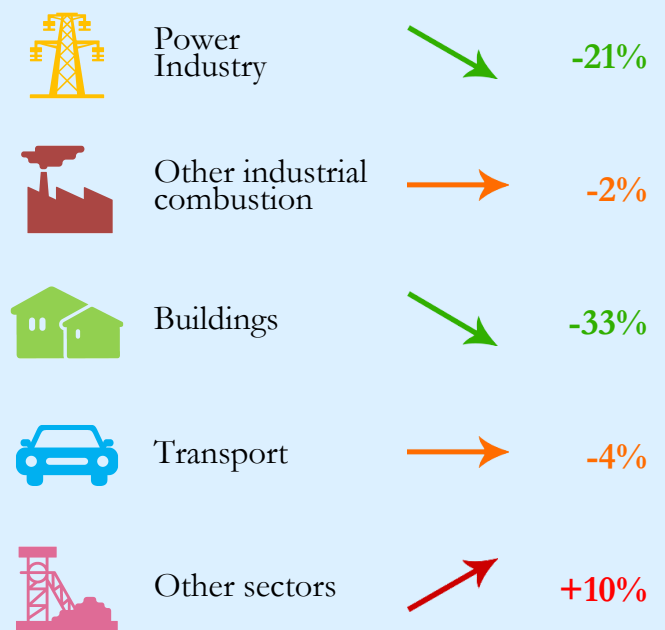
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	72.249	8.271	0.181	8735453
2005	80.994	9.813	0.238	8253650
1990	62.918	8.146	0.261	7723949



### 2017 vs 1990



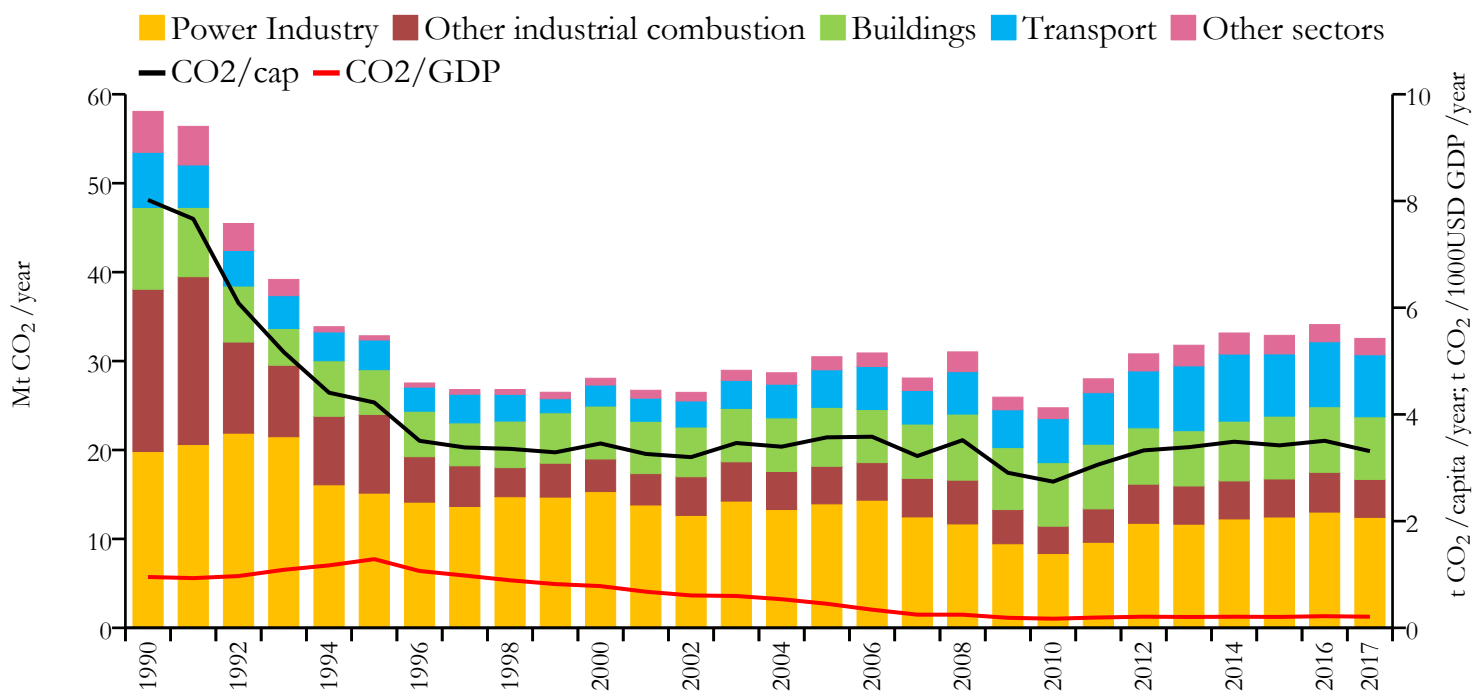
### 2017 vs 2005



# Azerbaijan



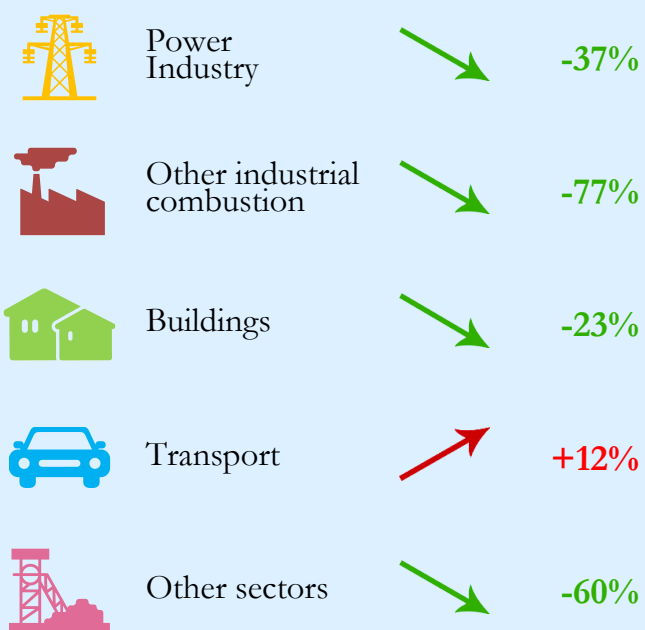
## Fossil CO<sub>2</sub> emissions by sector



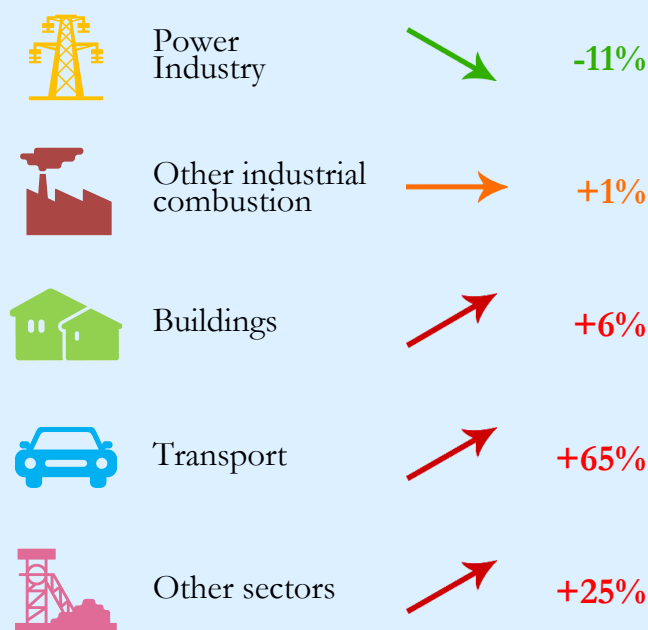
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	32.544	3.312	0.208	9827589
2005	30.485	3.570	0.451	8538606
1990	58.077	8.019	0.953	7242770



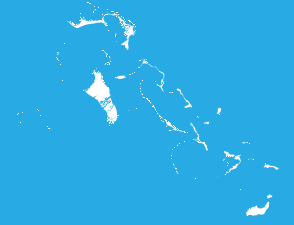
### 2017 vs 1990



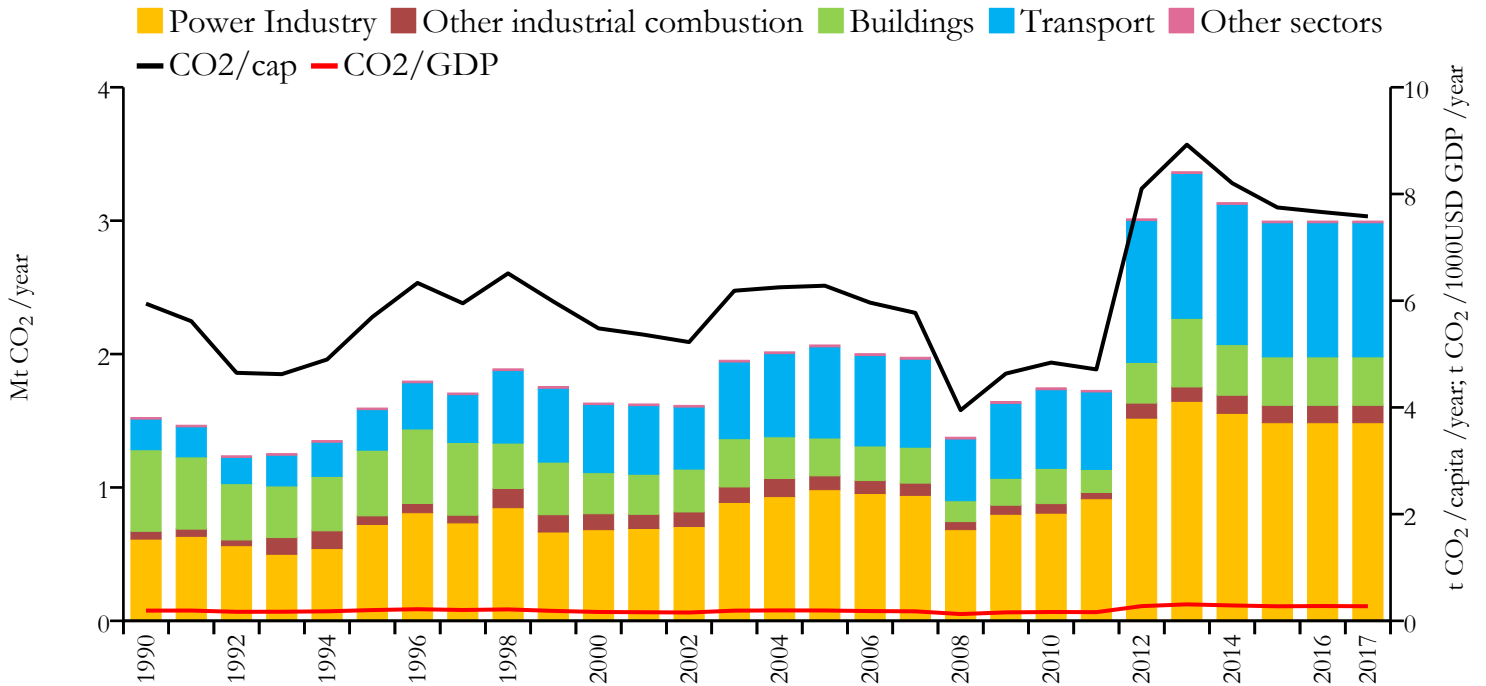
### 2017 vs 2005



# Bahamas



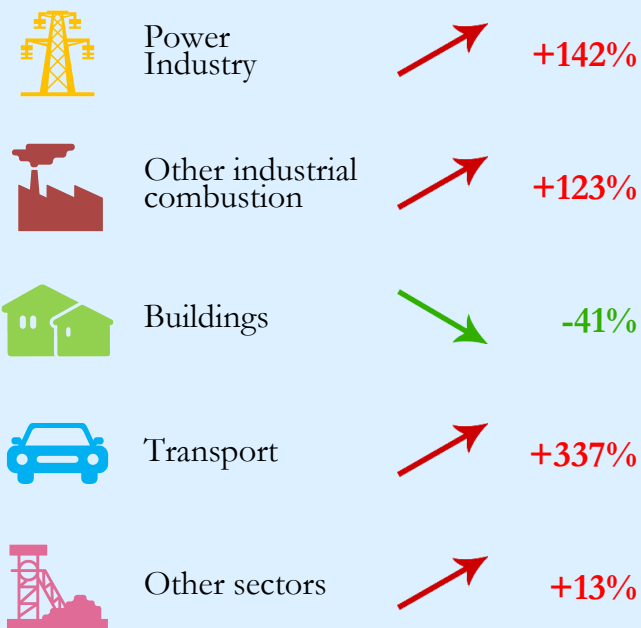
## Fossil CO<sub>2</sub> emissions by sector



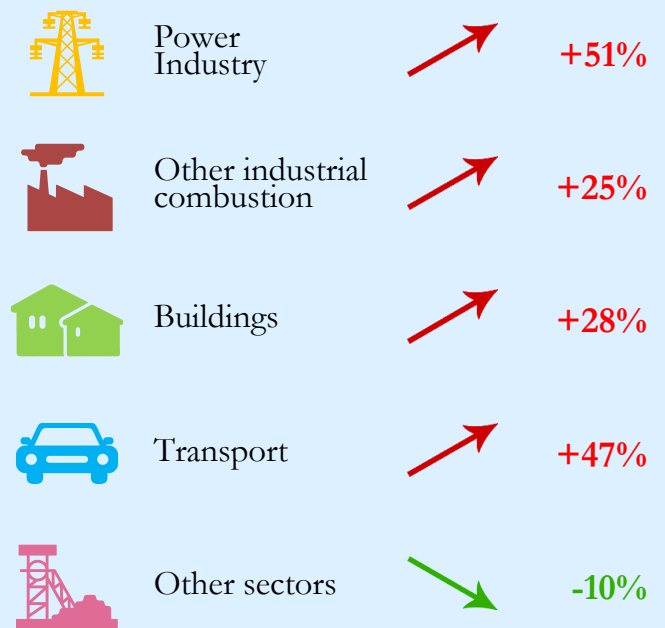
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.997	7.580	0.273	395361
2005	2.068	6.281	0.194	329249
1990	1.524	5.945	0.192	256336



### 2017 vs 1990



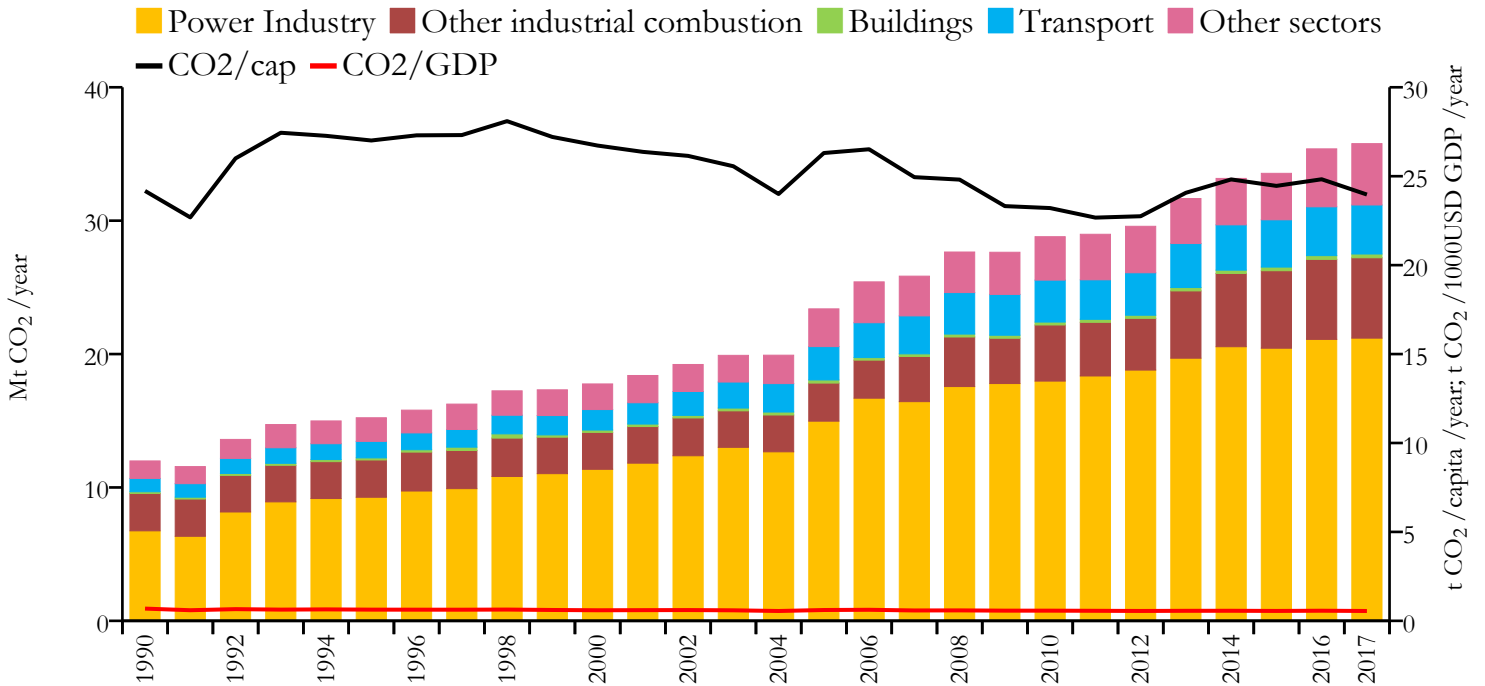
### 2017 vs 2005



# Bahrain



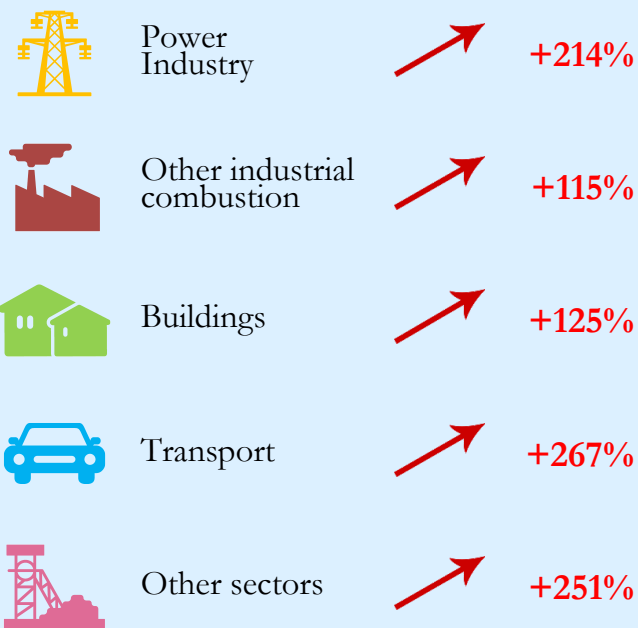
## Fossil CO<sub>2</sub> emissions by sector



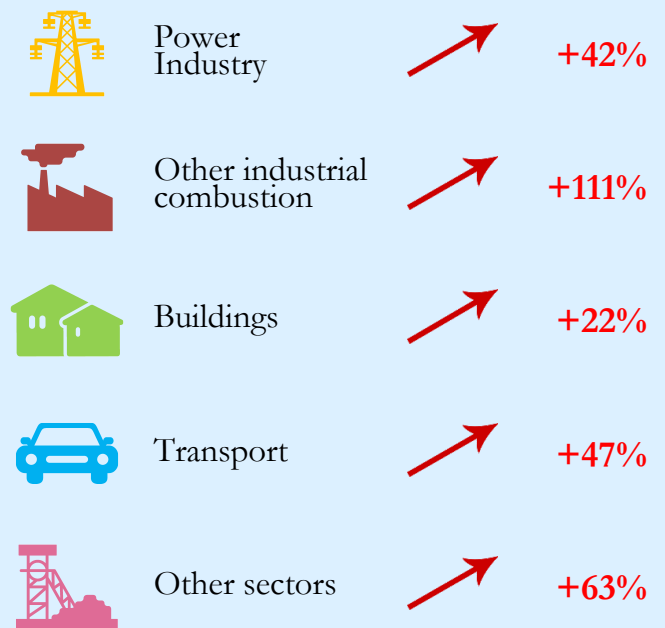
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	35.775	23.968	0.554	1492584
2005	23.388	26.303	0.609	889168
1990	11.988	24.173	0.688	495931



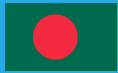
### 2017 vs 1990



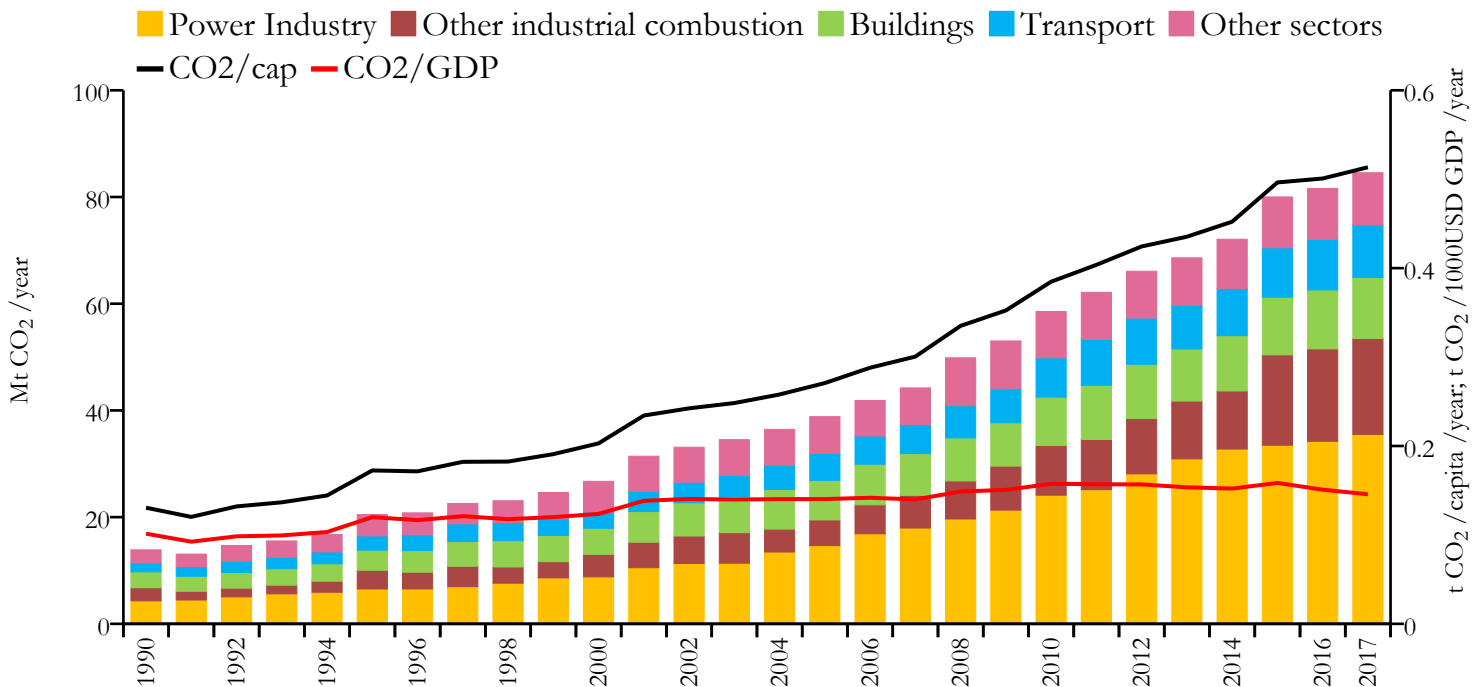
### 2017 vs 2005



# Bangladesh



## Fossil CO<sub>2</sub> emissions by sector



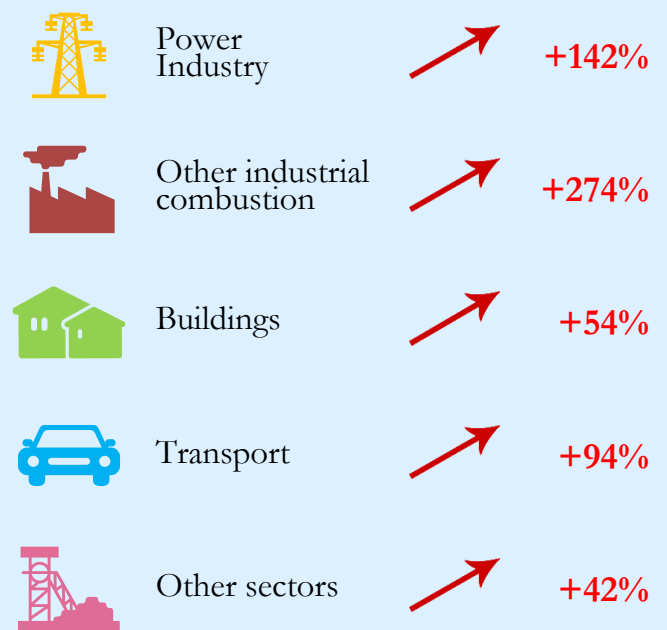
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	84.546	0.513	0.146	164669751
2005	38.834	0.271	0.140	143431101
1990	13.868	0.131	0.101	106188642



### 2017 vs 1990

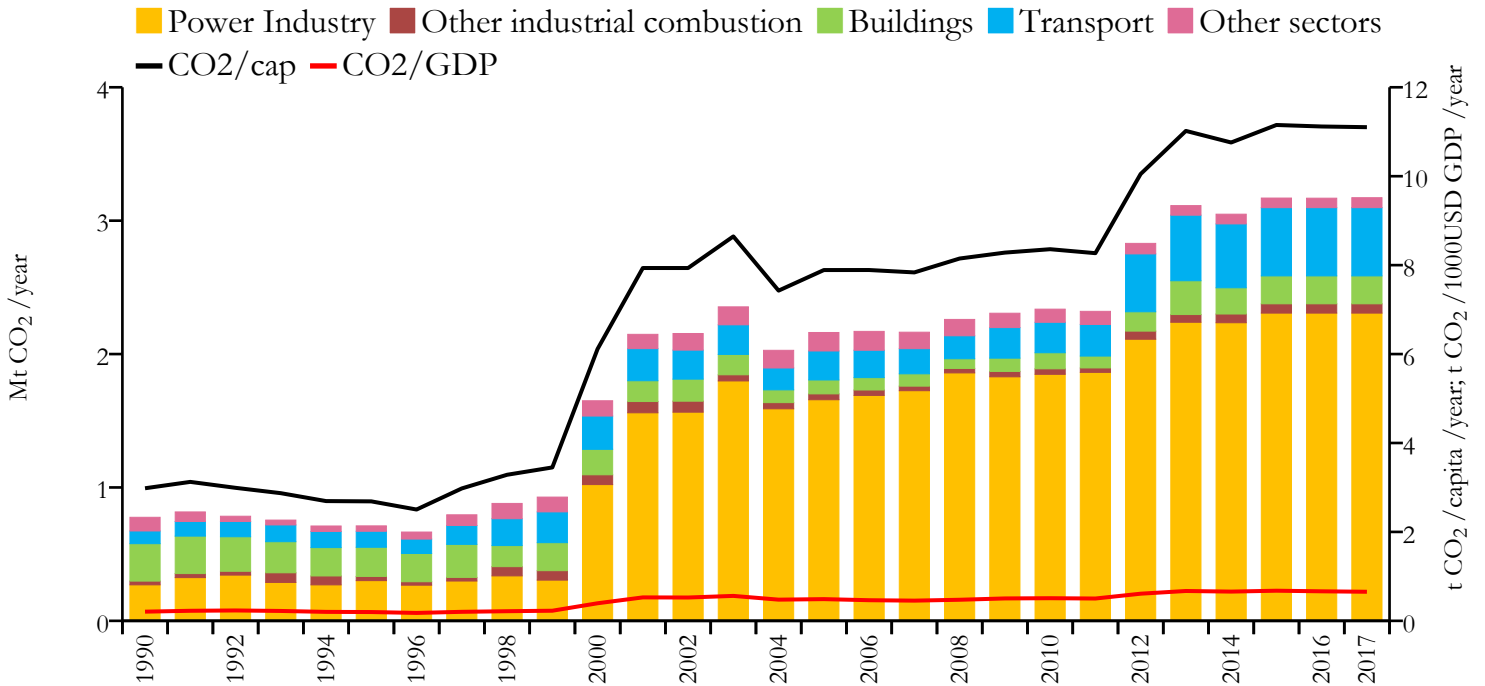


### 2017 vs 2005





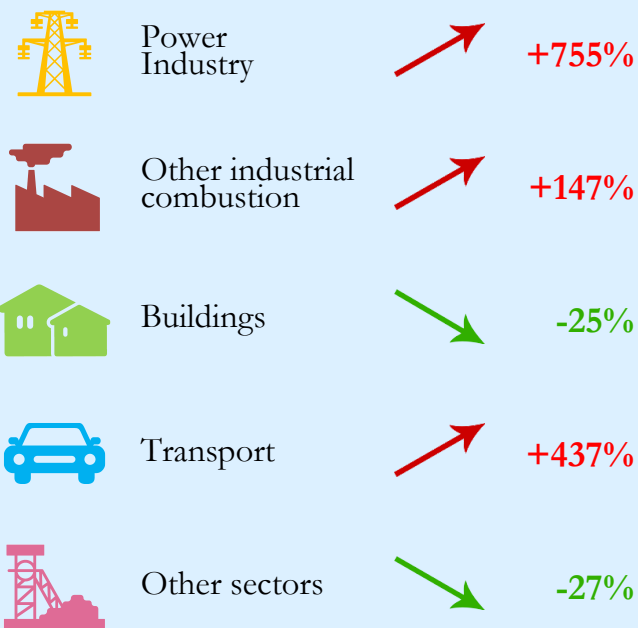
## Fossil CO<sub>2</sub> emissions by sector



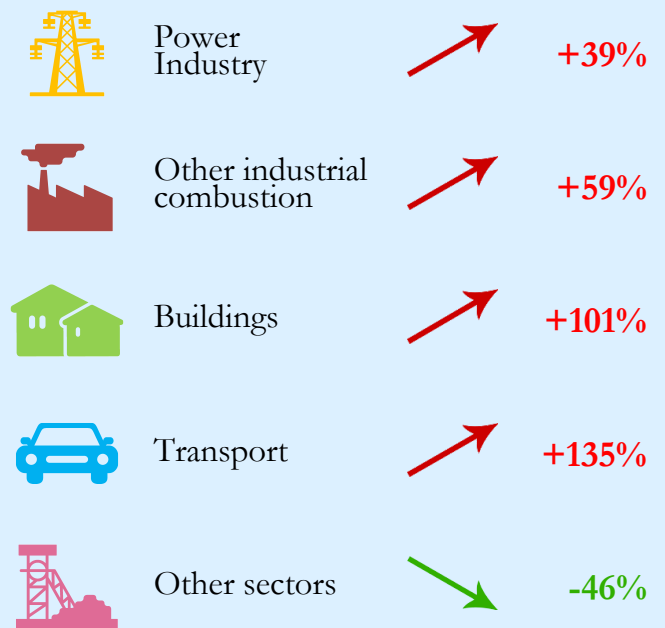
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3.172	11.103	0.654	285719
2005	2.162	7.889	0.488	274009
1990	0.776	2.982	0.207	260374



### 2017 vs 1990



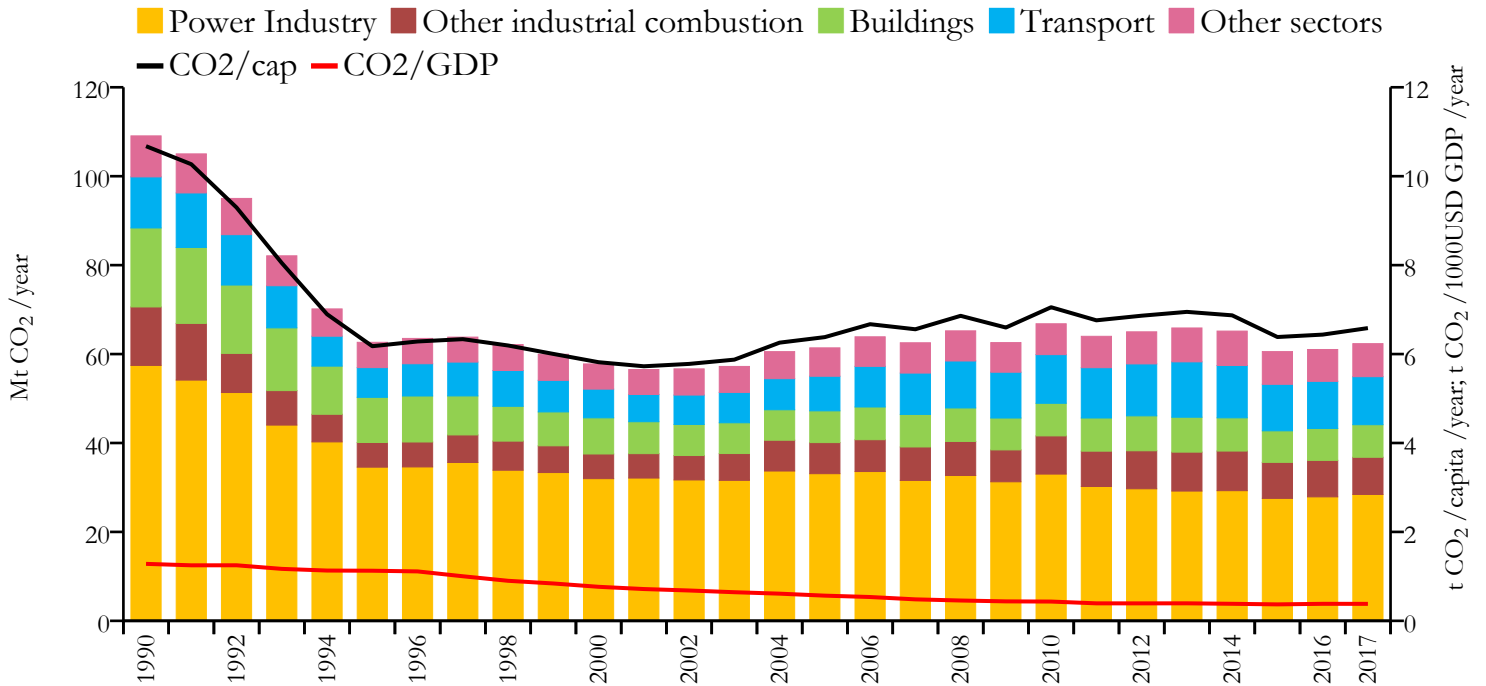
### 2017 vs 2005



# Belarus



## Fossil CO<sub>2</sub> emissions by sector



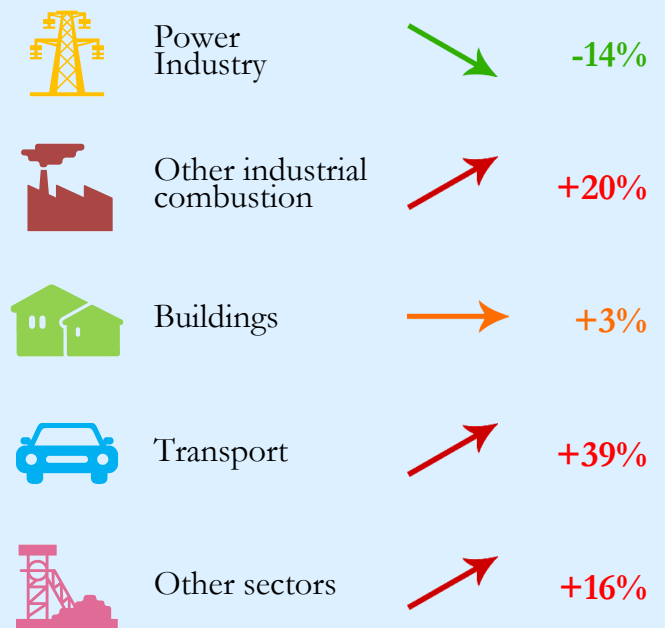
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	62.340	6.584	0.382	9468338
2005	61.396	6.381	0.567	9621543
1990	109.069	10.675	1.281	10216846



### 2017 vs 1990



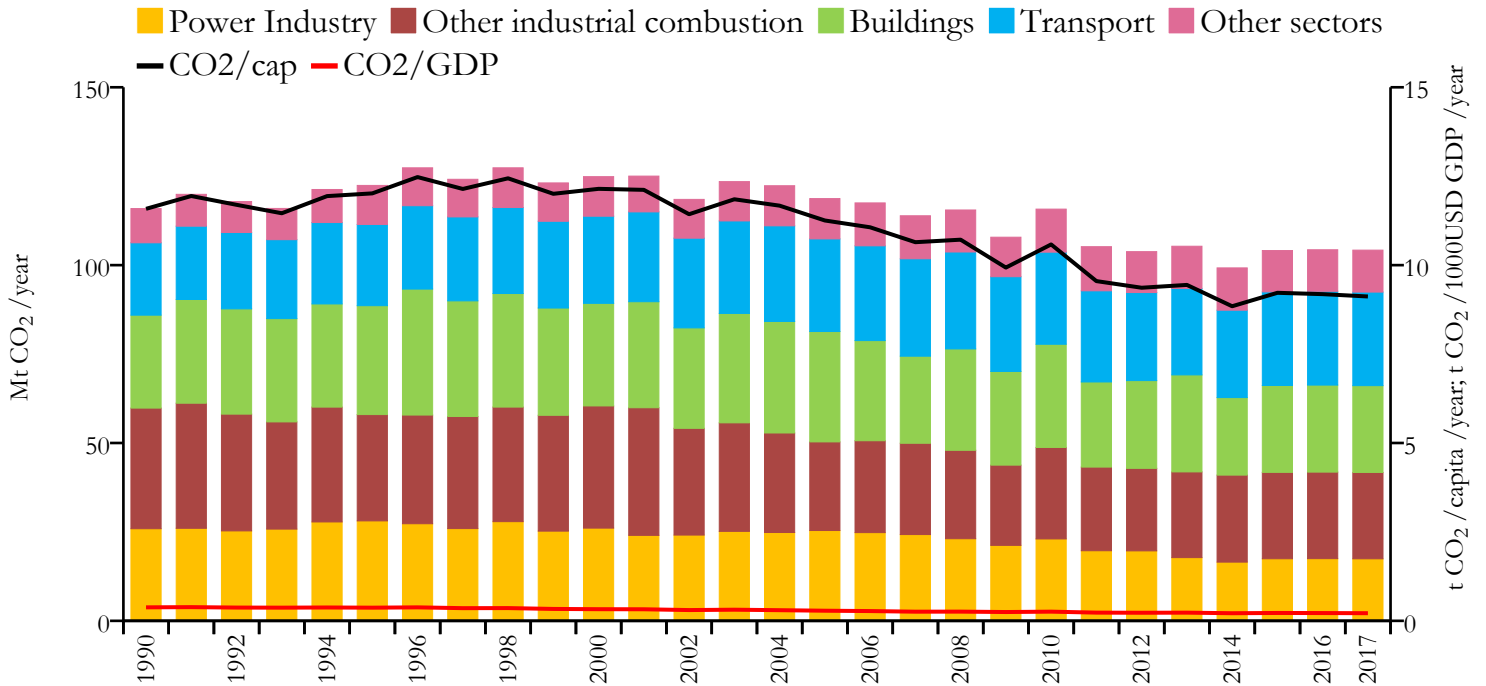
### 2017 vs 2005



# Belgium



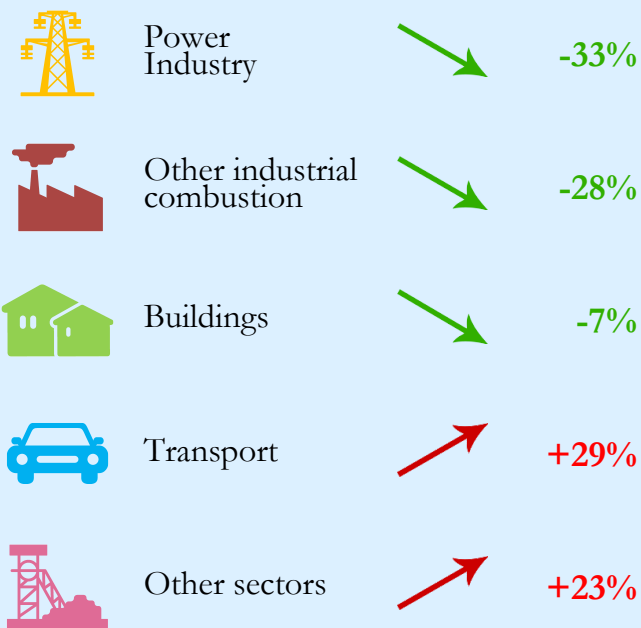
## Fossil CO<sub>2</sub> emissions by sector



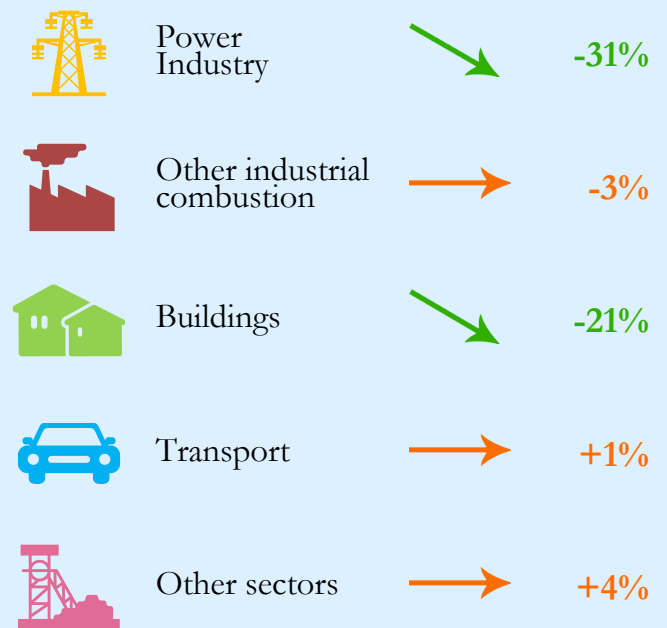
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	104.221	9.119	0.215	11429336
2005	118.708	11.255	0.285	10546886
1990	115.903	11.583	0.379	10006544



### 2017 vs 1990



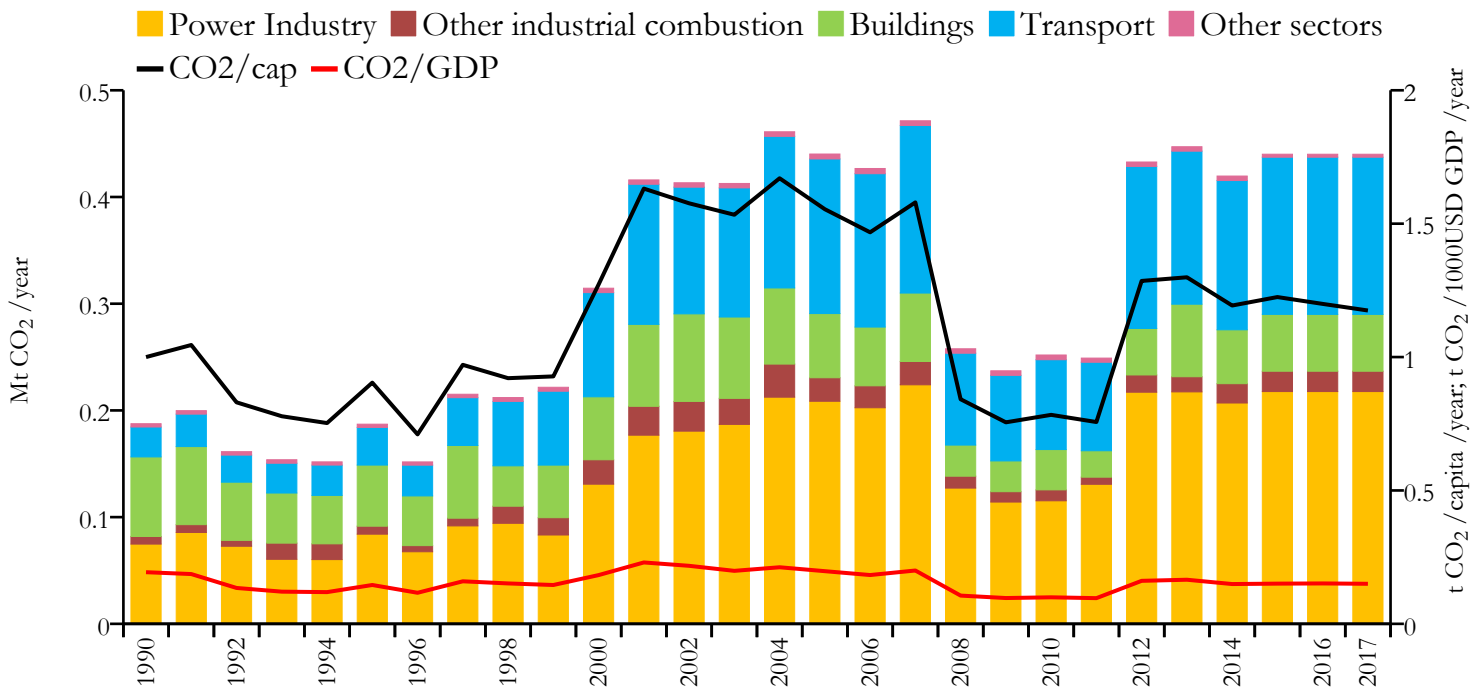
### 2017 vs 2005







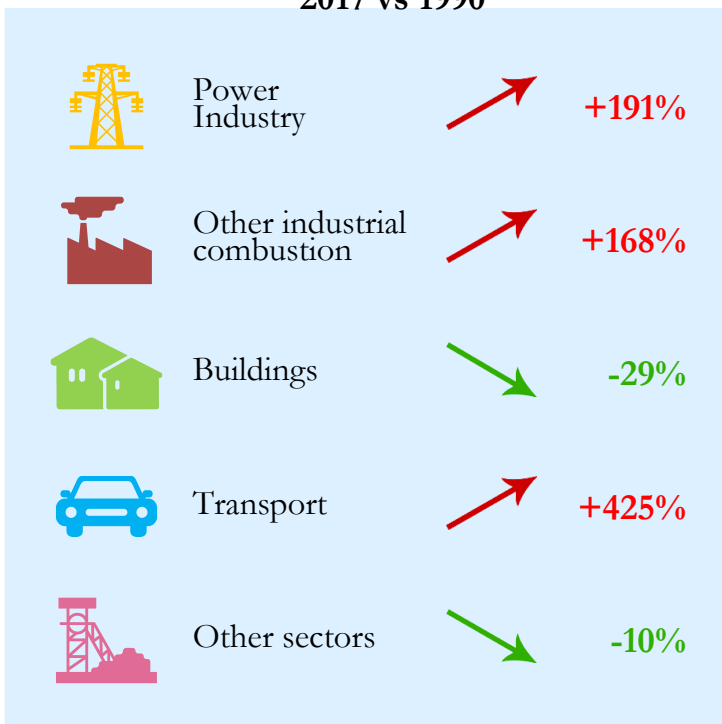
## Fossil CO<sub>2</sub> emissions by sector



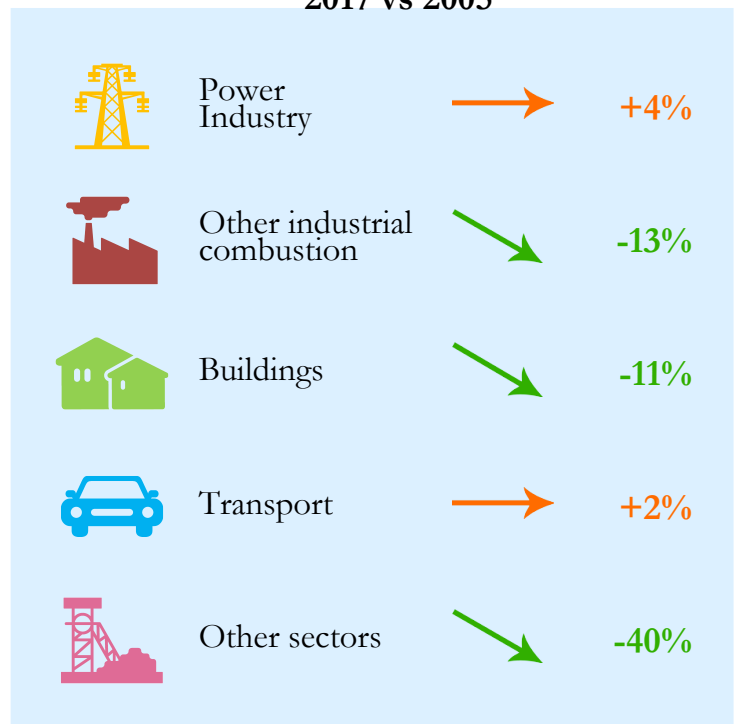
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.440	1.175	0.150	374681
2005	0.440	1.554	0.197	283277
1990	0.188	1.000	0.194	187552



### 2017 vs 1990

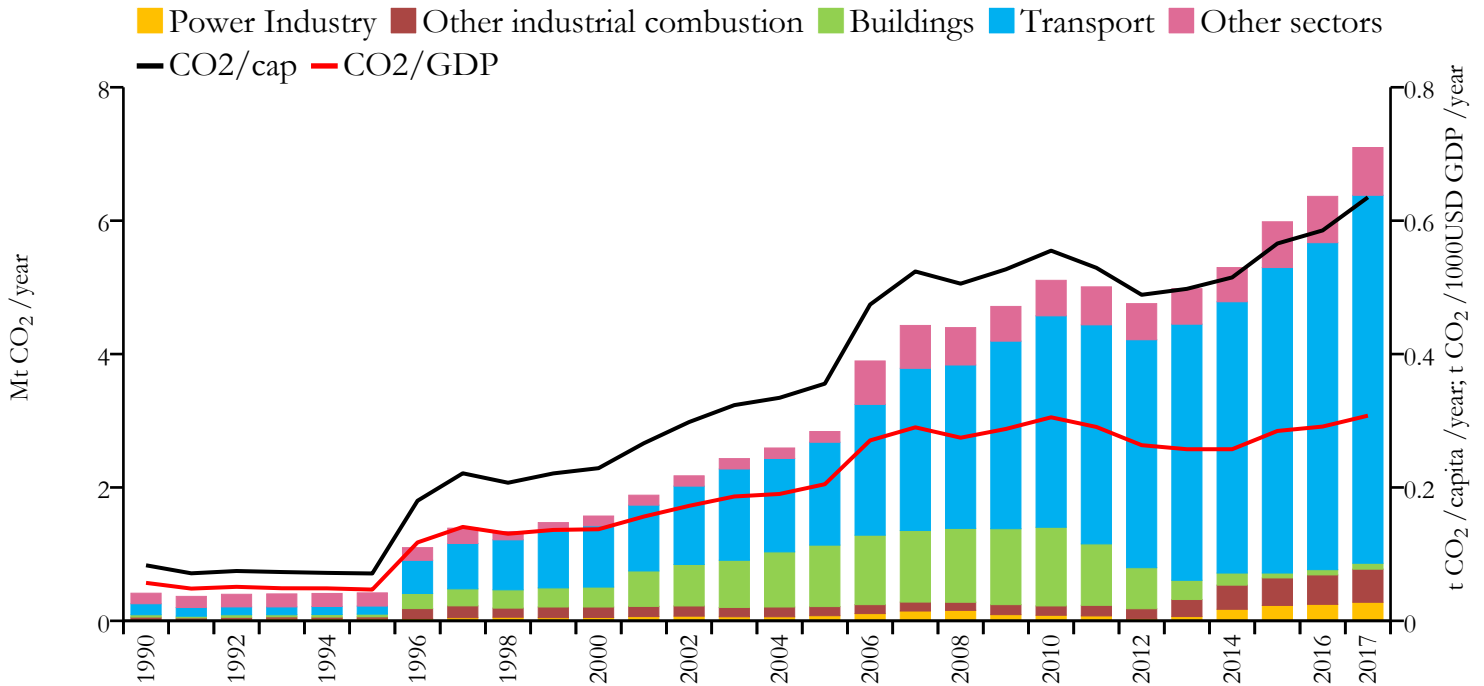


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



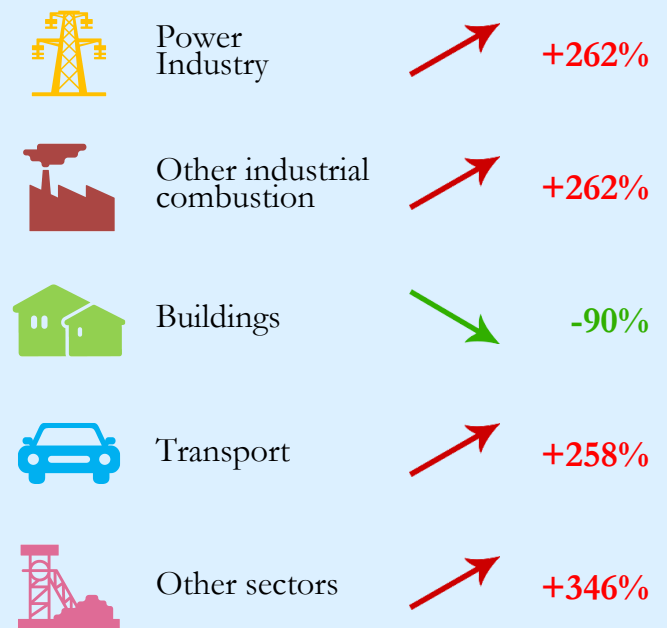
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.097	0.635	0.308	11175692
2005	2.839	0.356	0.205	7982225
1990	0.415	0.083	0.057	4978496



### 2017 vs 1990



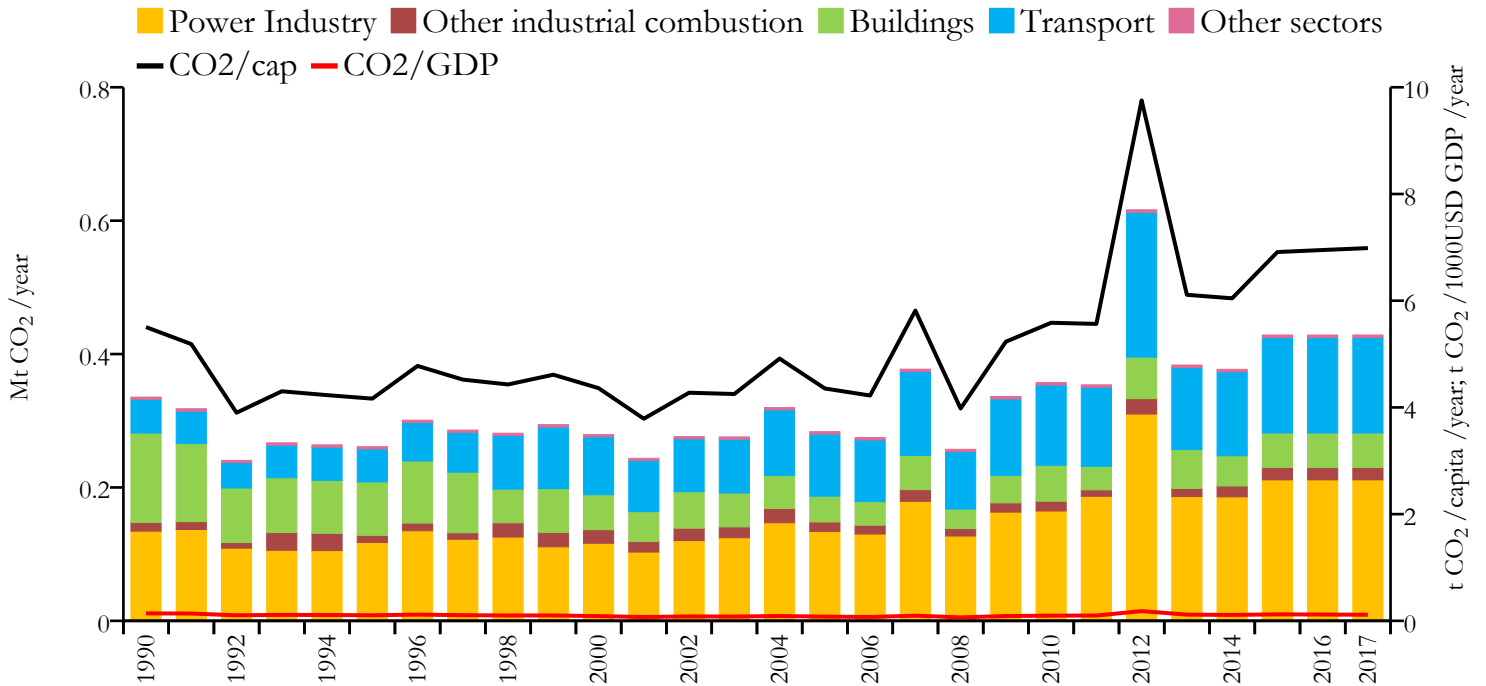
### 2017 vs 2005



# Bermuda



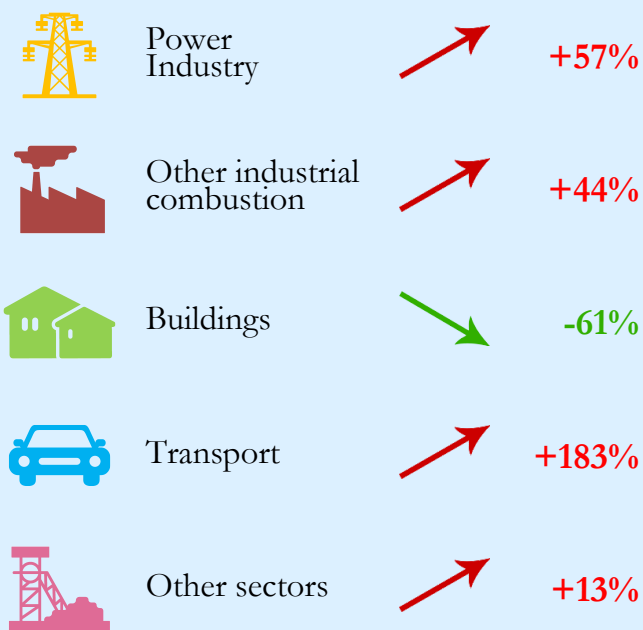
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.429	6.986	0.114	61349
2005	0.284	4.355	0.079	65130
1990	0.335	5.505	0.139	60930



### 2017 vs 1990

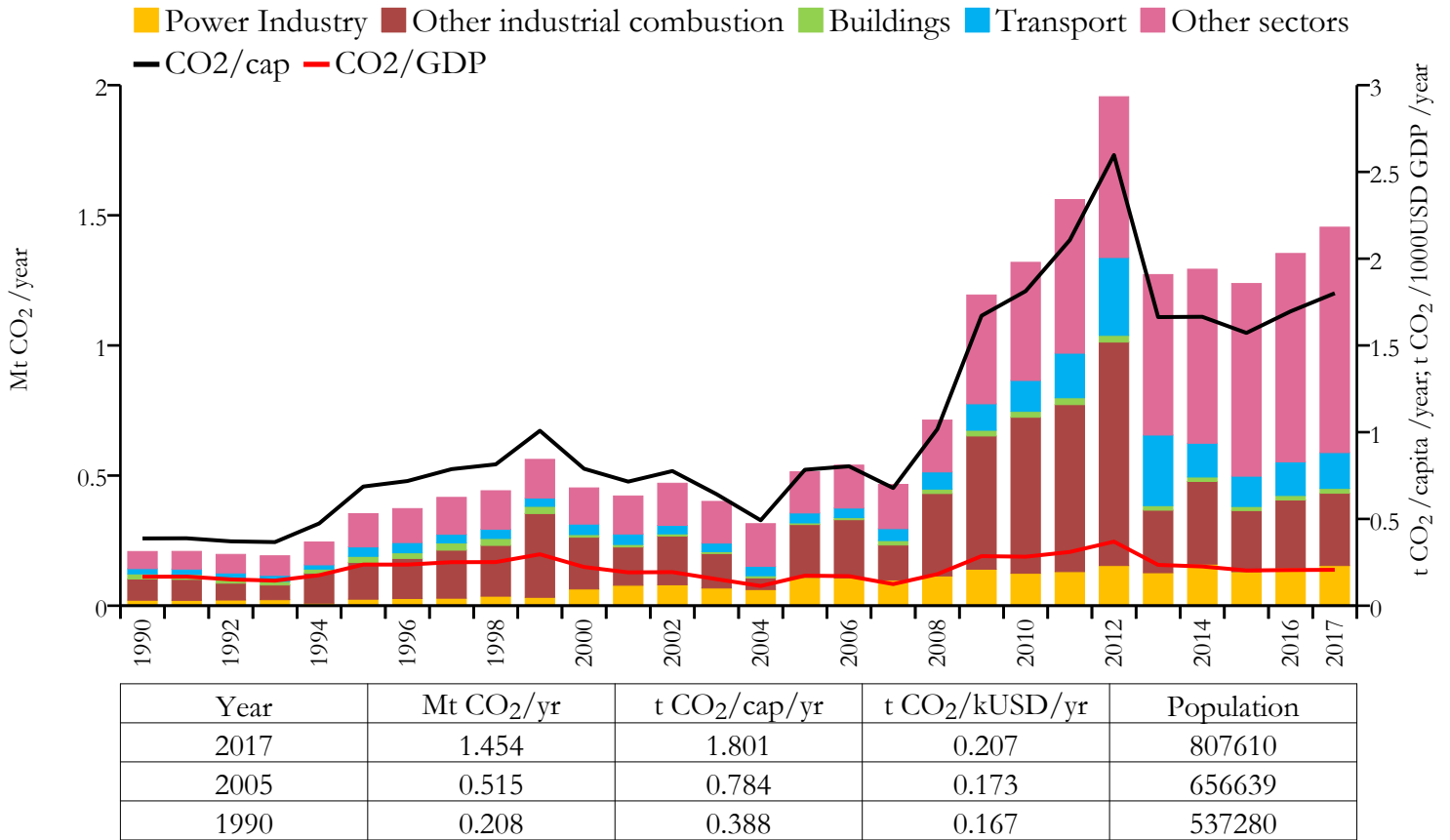


### 2017 vs 2005

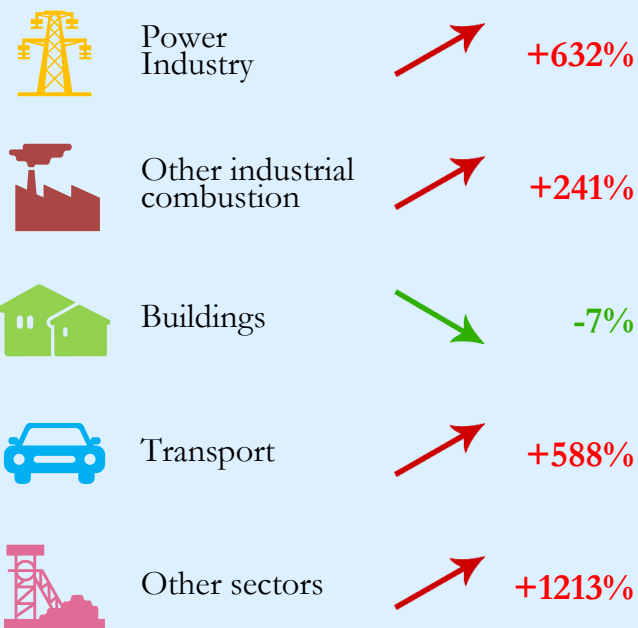




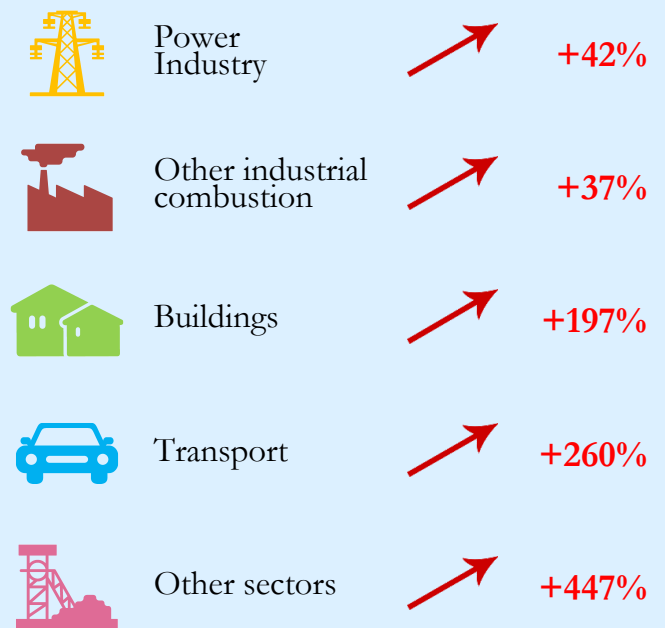
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990

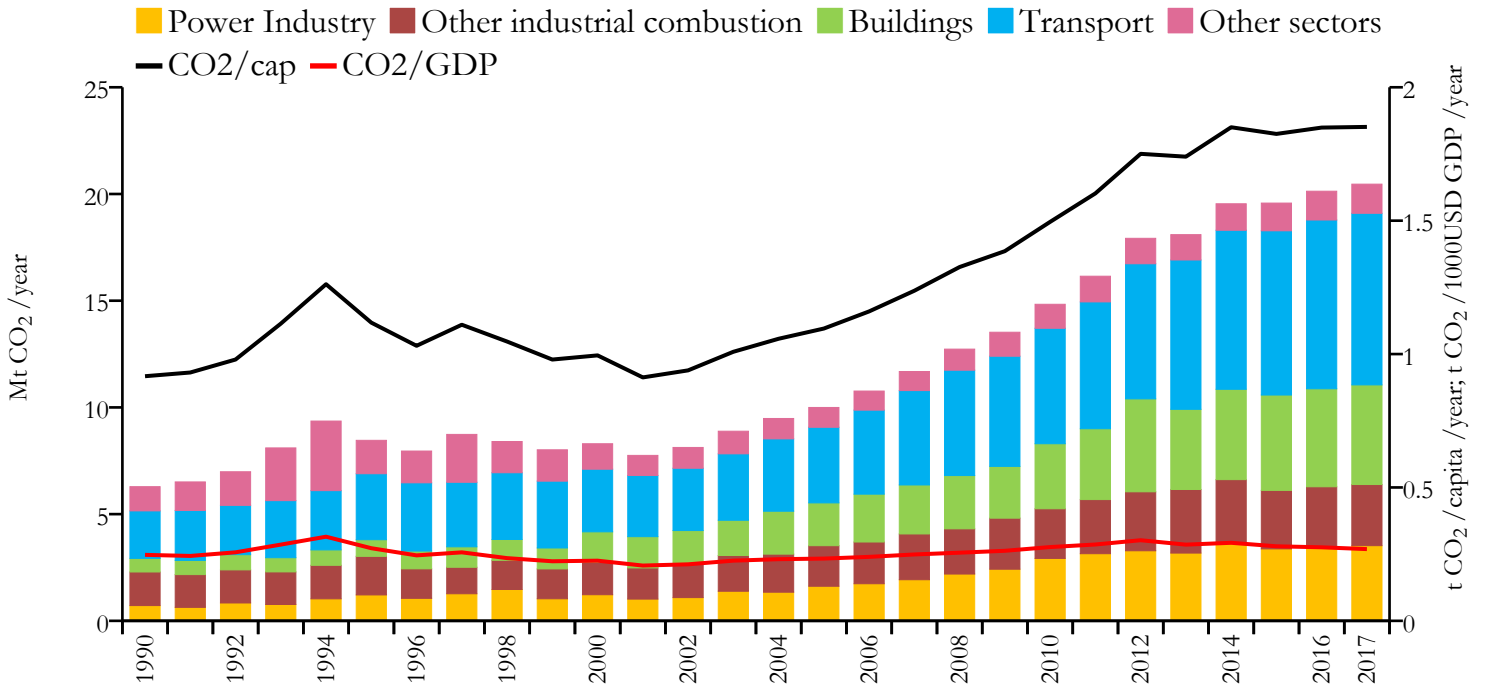


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



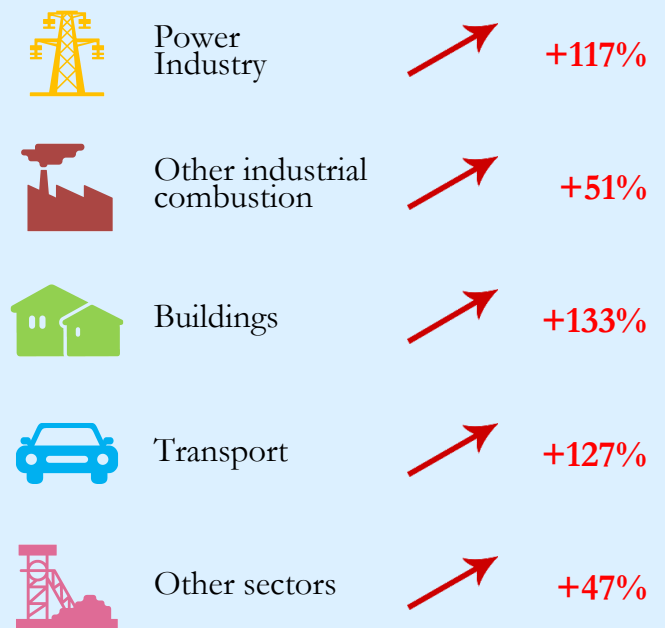
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	20.462	1.851	0.269	11051600
2005	9.998	1.096	0.233	9125409
1990	6.287	0.917	0.247	6856244



### 2017 vs 1990



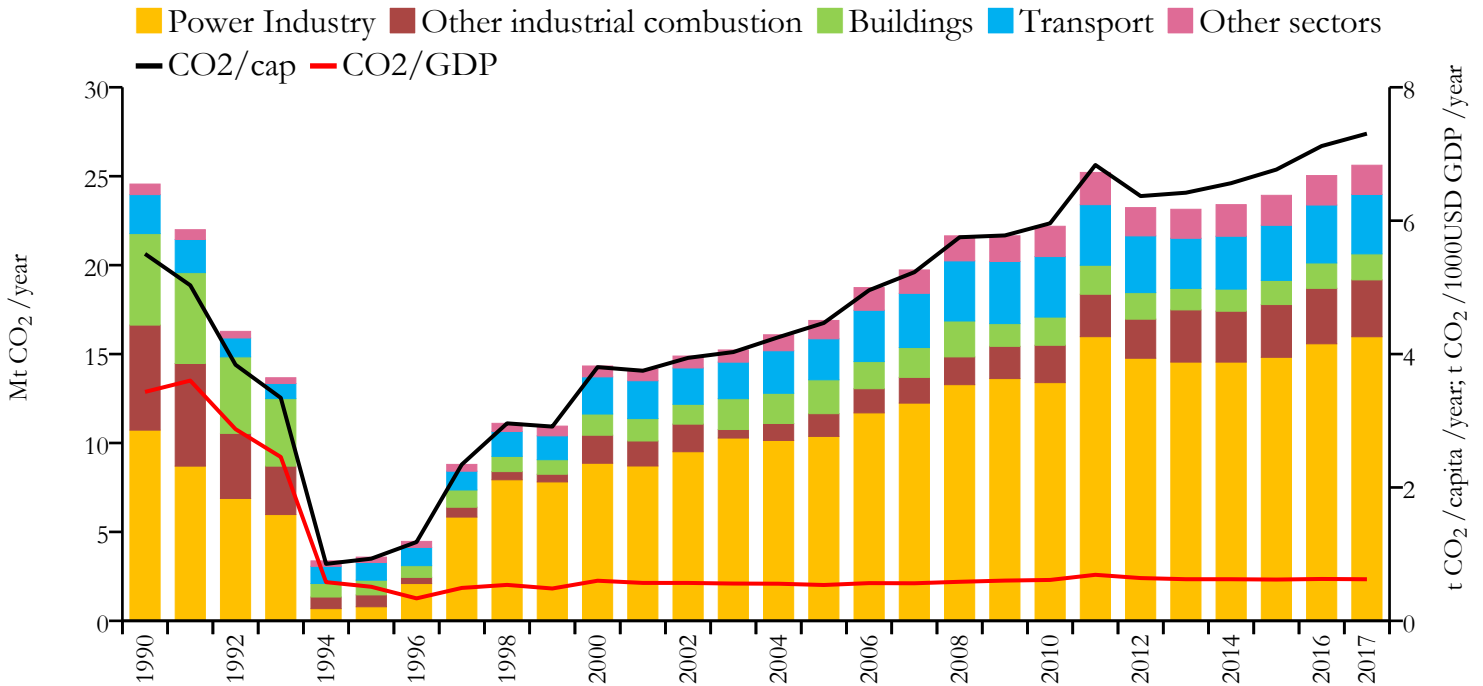
### 2017 vs 2005



# Bosnia and Herzegovina



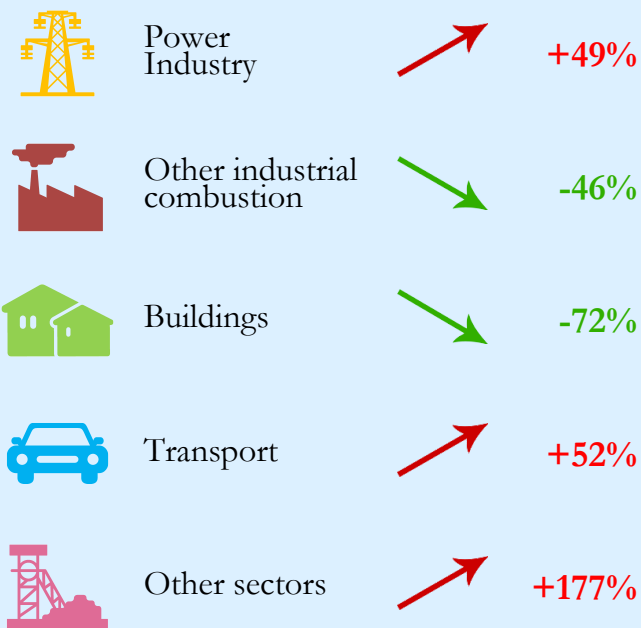
## Fossil CO<sub>2</sub> emissions by sector



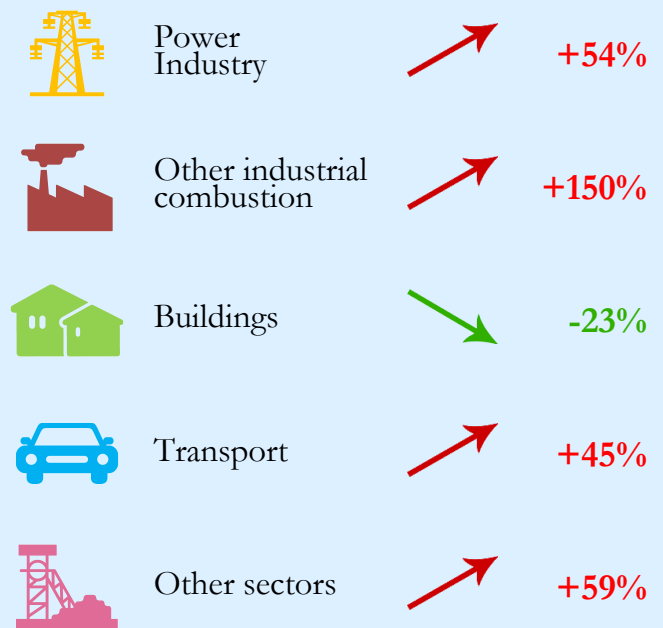
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	25.618	7.305	0.624	3507017
2005	16.890	4.466	0.537	3781530
1990	24.559	5.502	3.433	4463422



### 2017 vs 1990



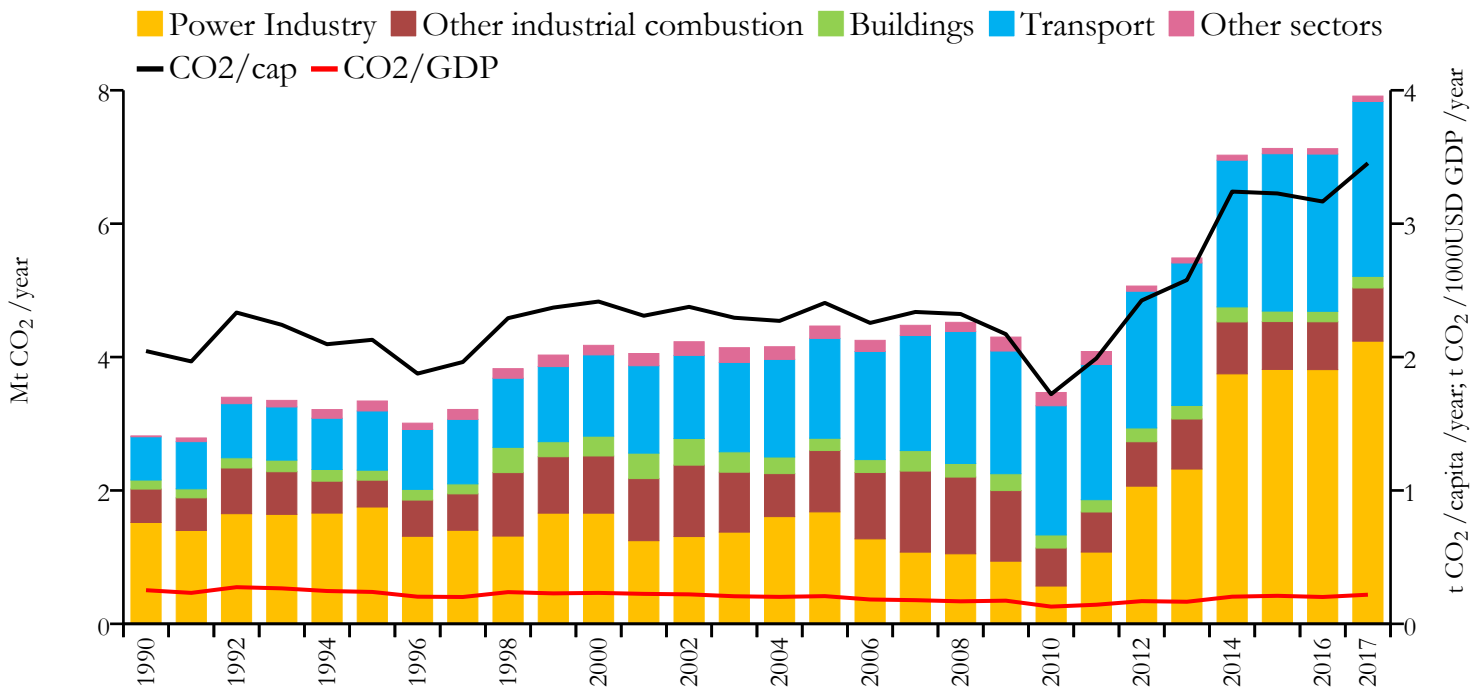
### 2017 vs 2005



# Botswana



## Fossil CO<sub>2</sub> emissions by sector



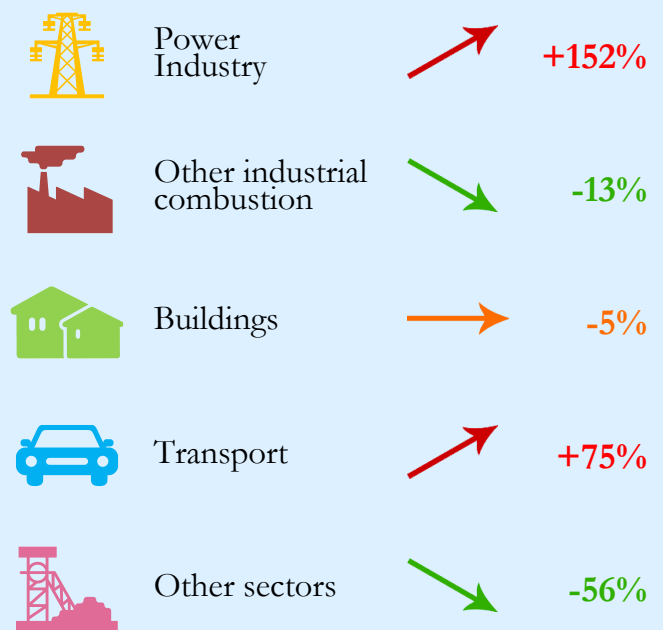
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.913	3.453	0.218	2291661
2005	4.465	2.406	0.208	1855852
1990	2.818	2.045	0.252	1377912



### 2017 vs 1990



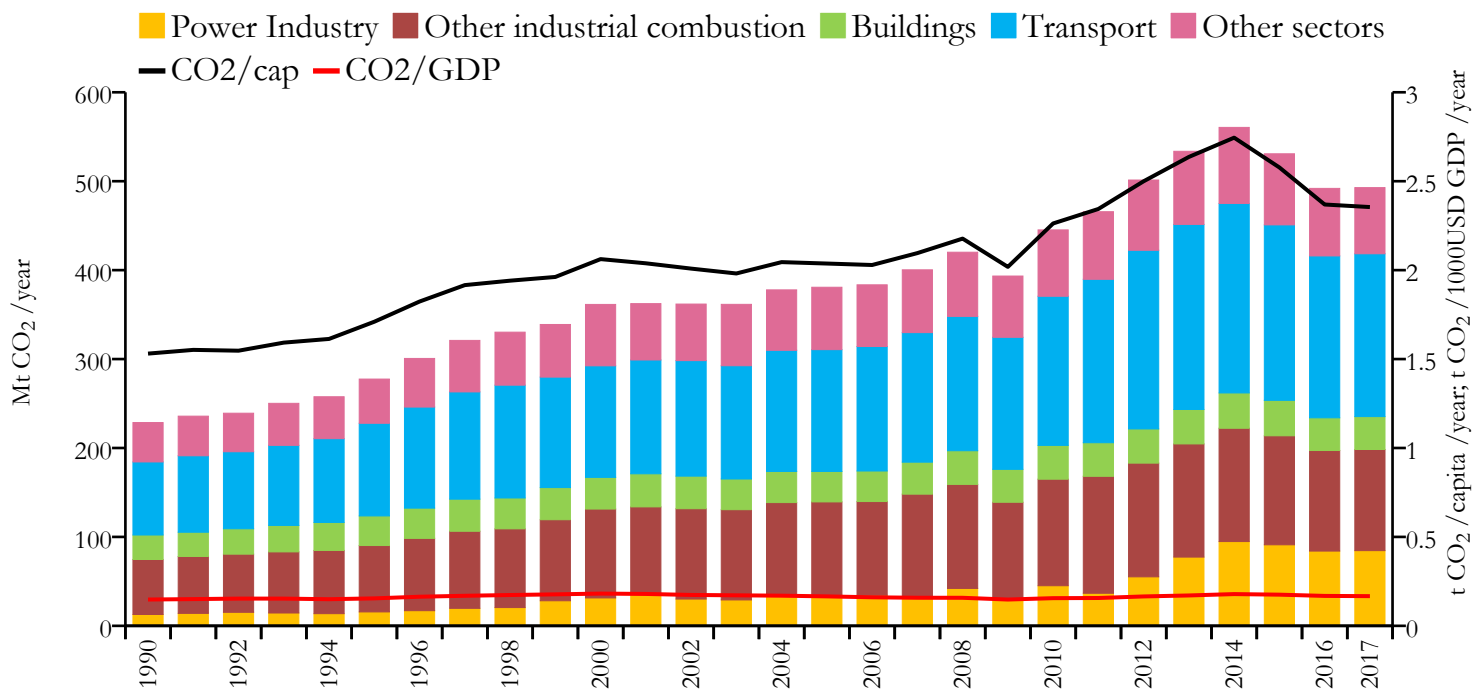
### 2017 vs 2005



# Brazil



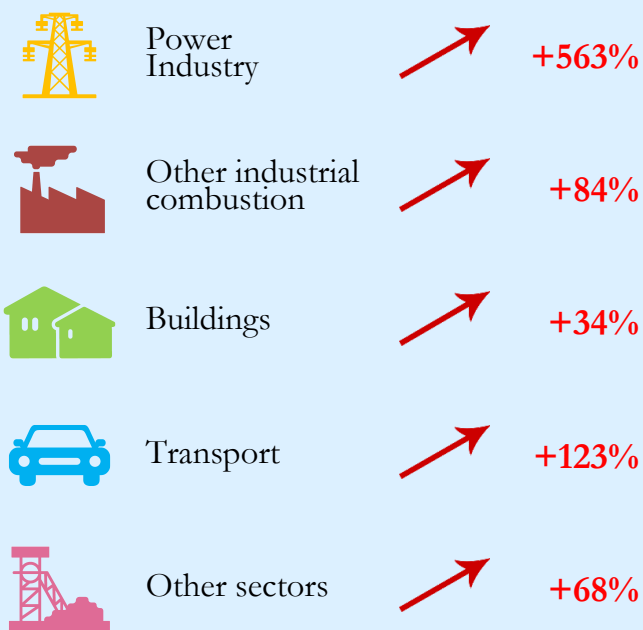
## Fossil CO<sub>2</sub> emissions by sector



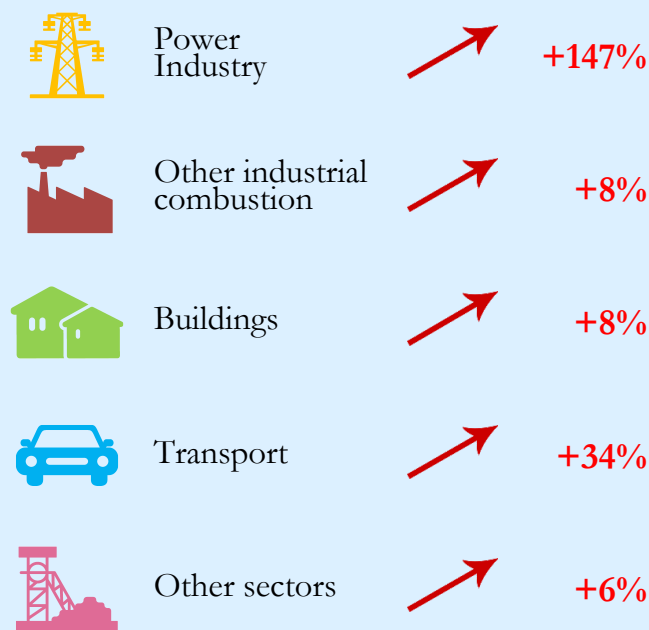
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	492.791	2.355	0.167	209288278
2005	380.765	2.037	0.166	186917361
1990	228.603	1.531	0.148	149352145



### 2017 vs 1990

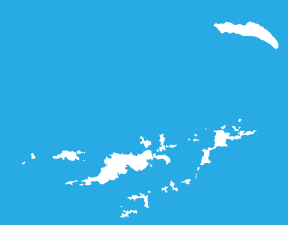


### 2017 vs 2005

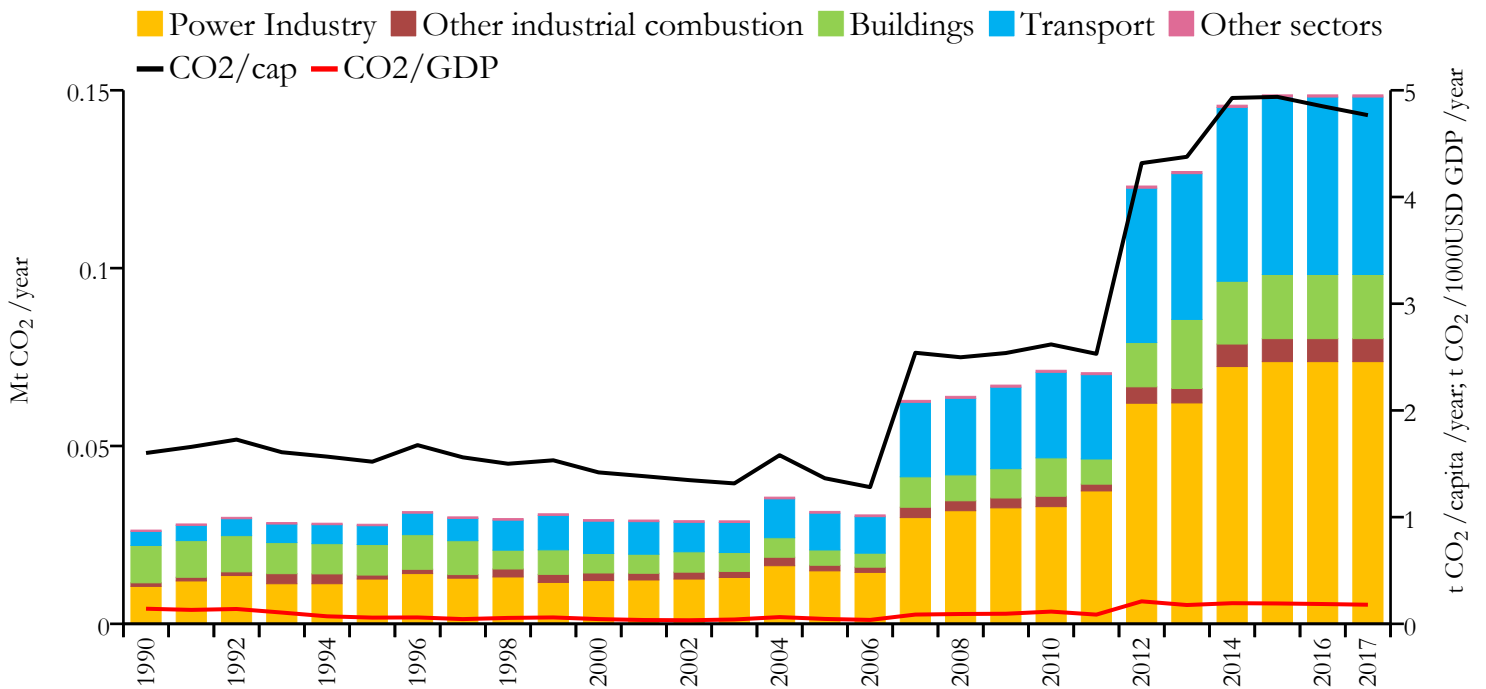




# British Virgin Islands



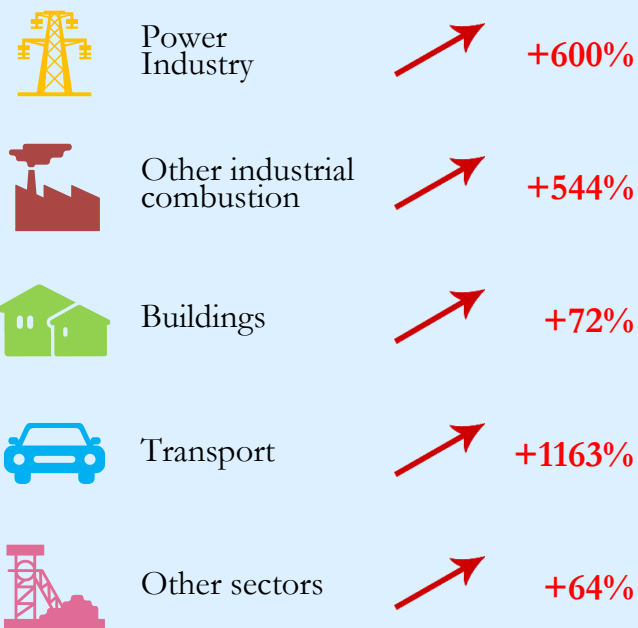
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.149	4.767	0.179	31196
2005	0.032	1.364	0.046	23168
1990	0.026	1.601	0.142	16461



### 2017 vs 1990

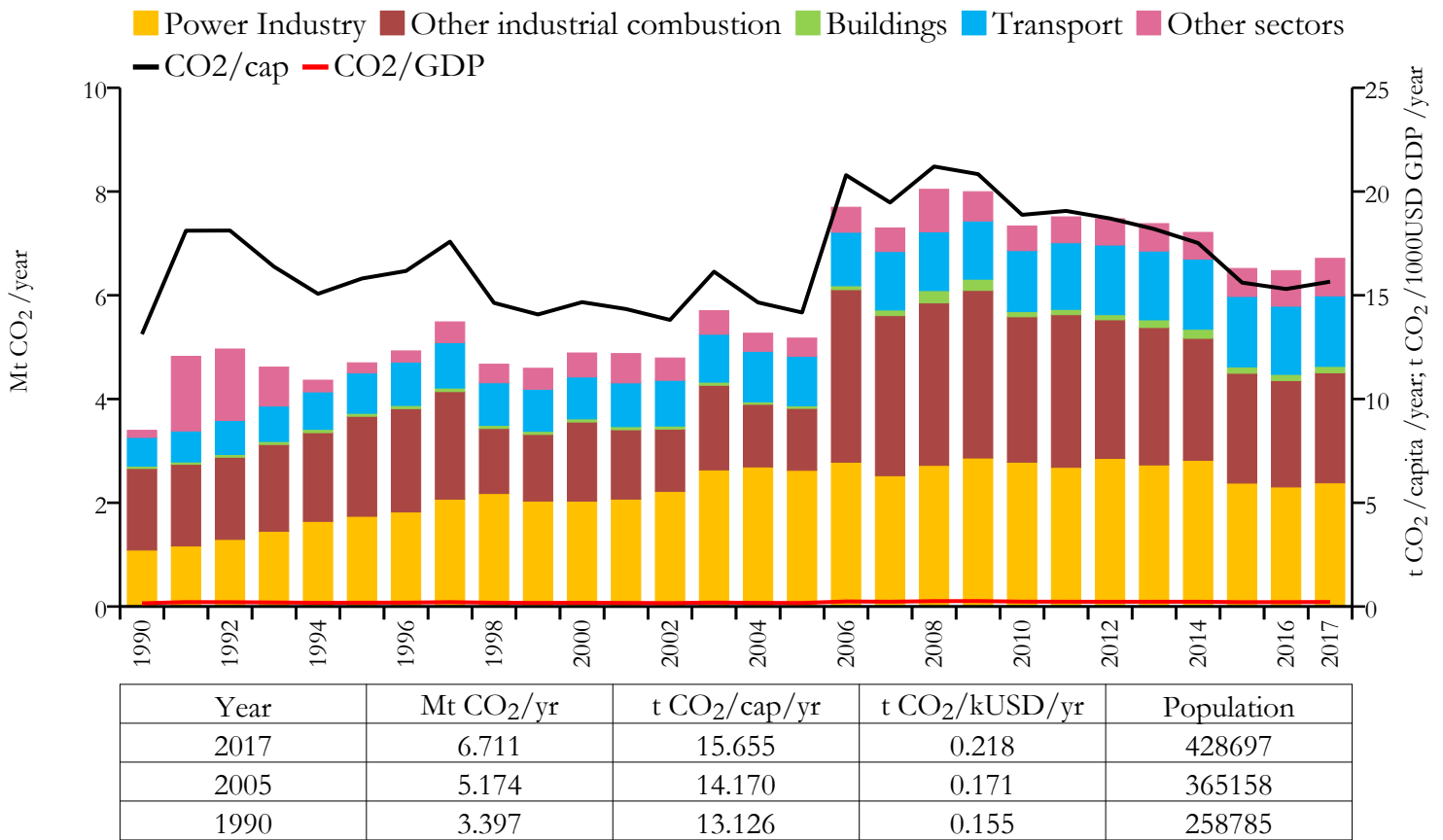


### 2017 vs 2005

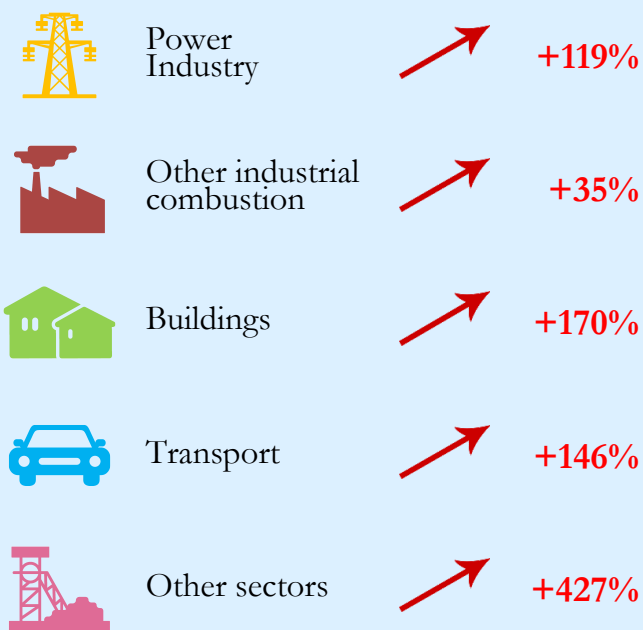




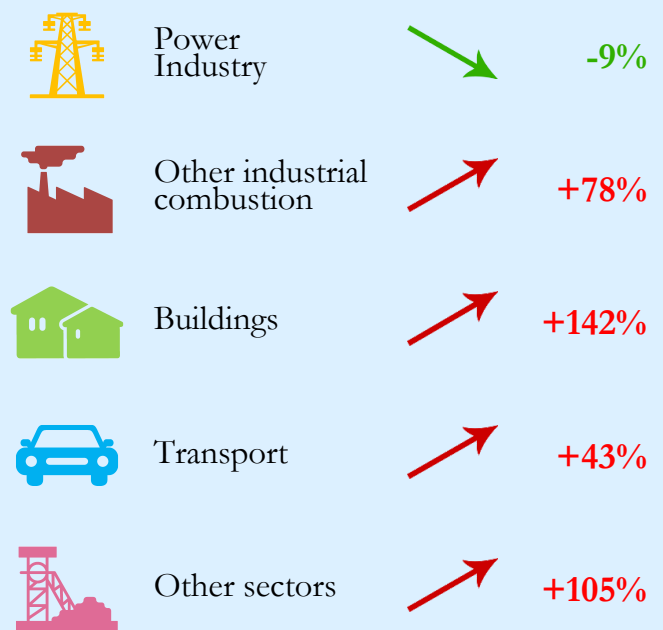
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990



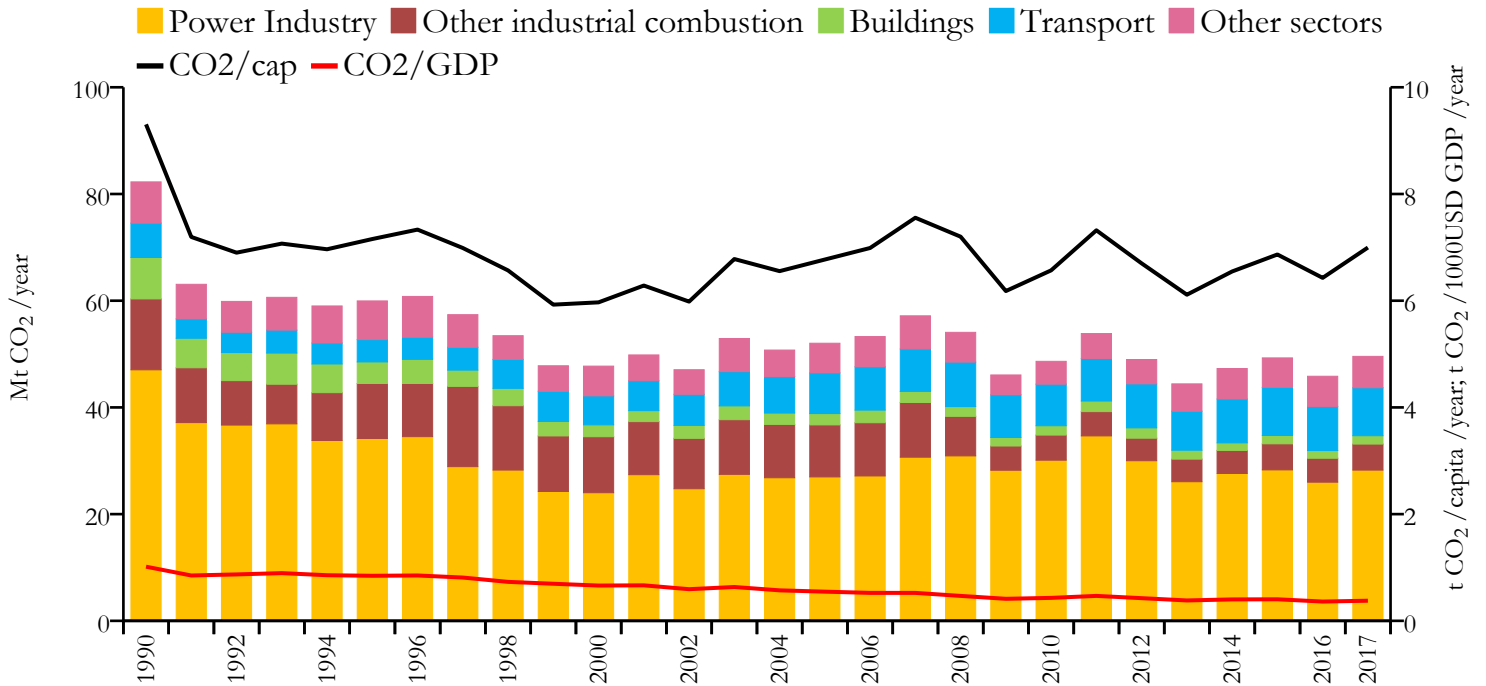
### 2017 vs 2005



# Bulgaria



## Fossil CO<sub>2</sub> emissions by sector



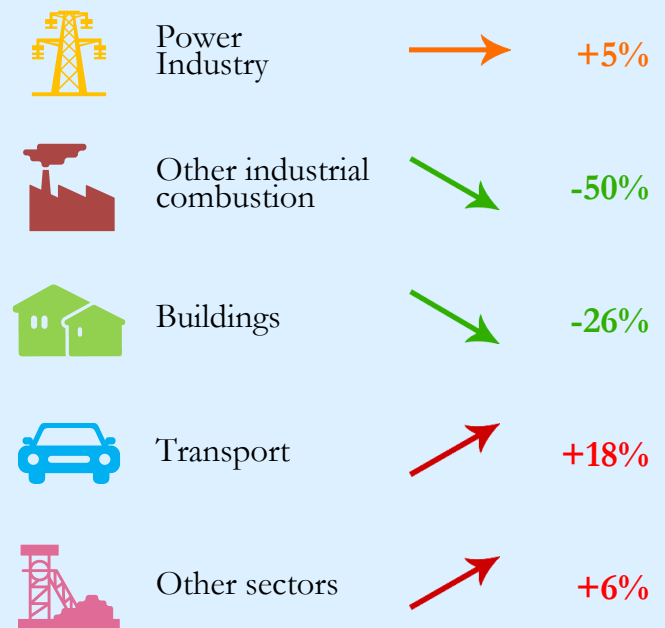
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	49.568	6.997	0.377	7084571
2005	52.032	6.772	0.547	7683763
1990	82.271	9.305	1.015	8841371



### 2017 vs 1990



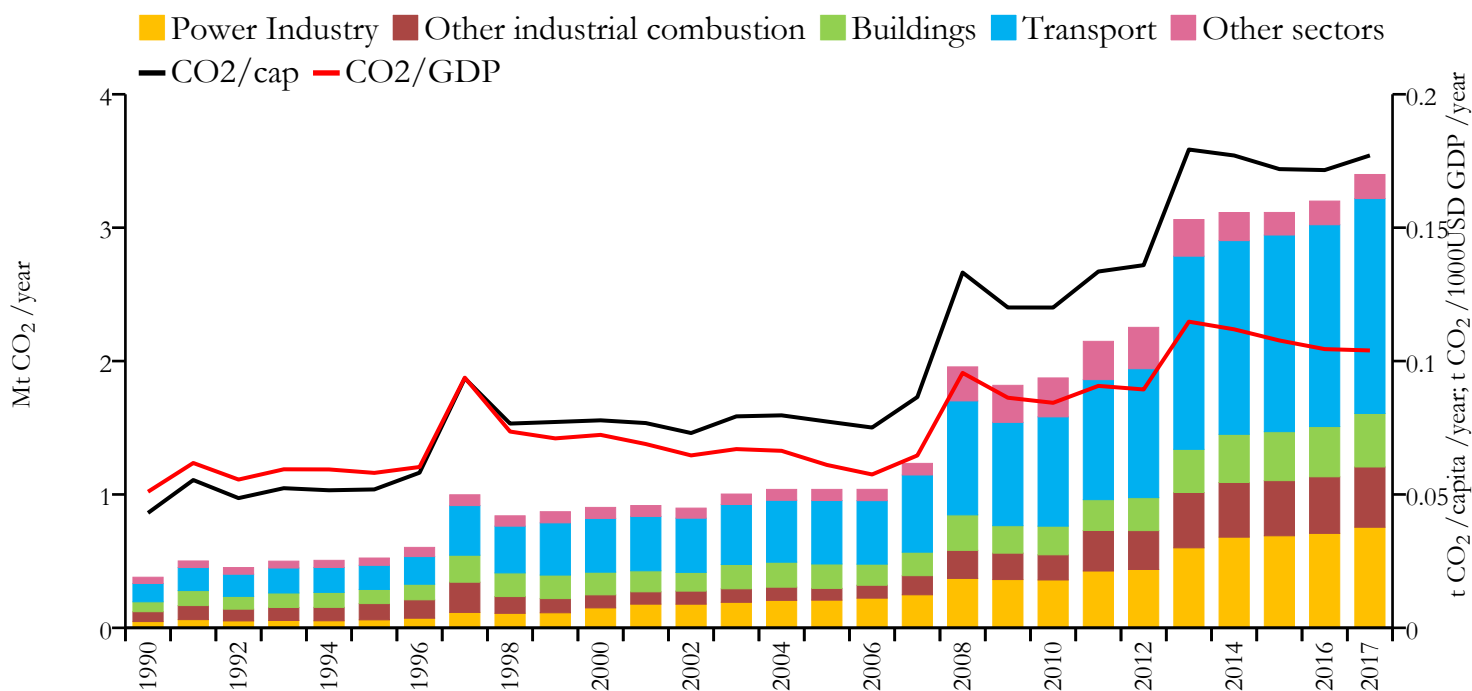
### 2017 vs 2005



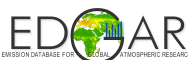
# Burkina Faso



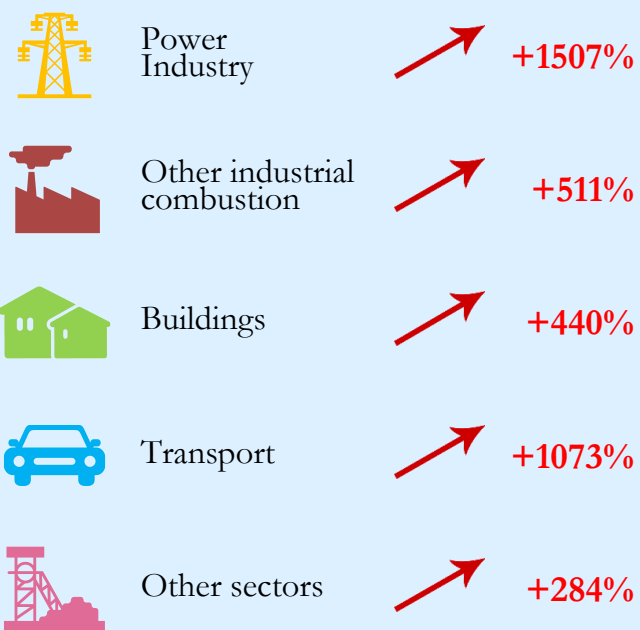
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3.399	0.177	0.104	19193382
2005	1.038	0.077	0.061	13421930
1990	0.380	0.043	0.051	8811034



### 2017 vs 1990

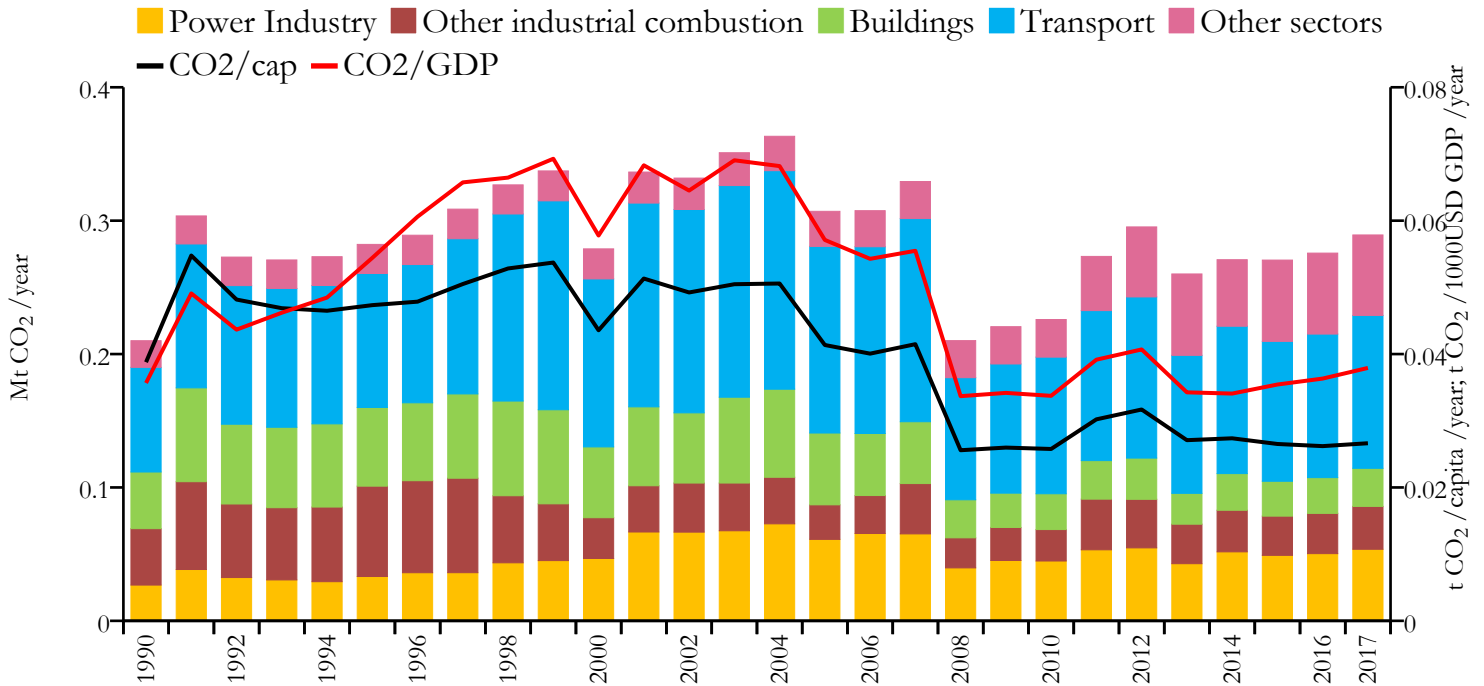


### 2017 vs 2005





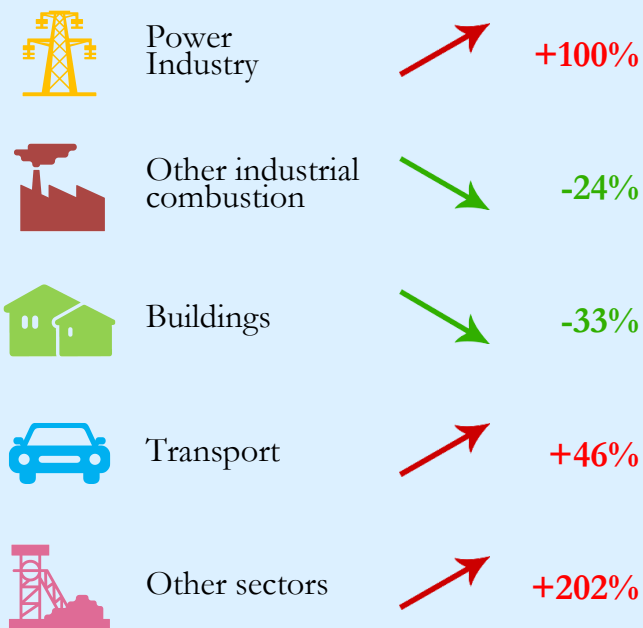
## Fossil CO<sub>2</sub> emissions by sector



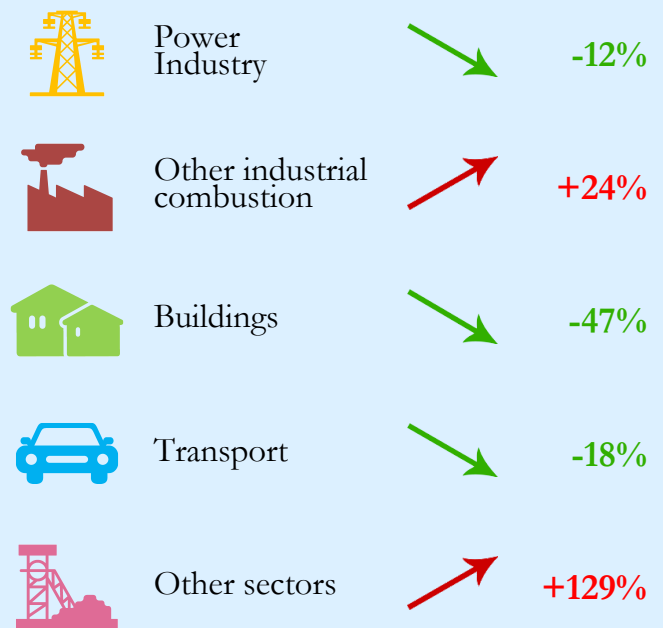
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.289	0.027	0.038	10864245
2005	0.307	0.041	0.057	7423289
1990	0.210	0.039	0.036	5415415

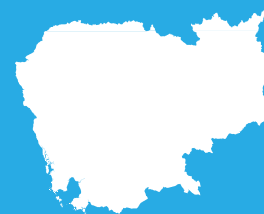


### 2017 vs 1990

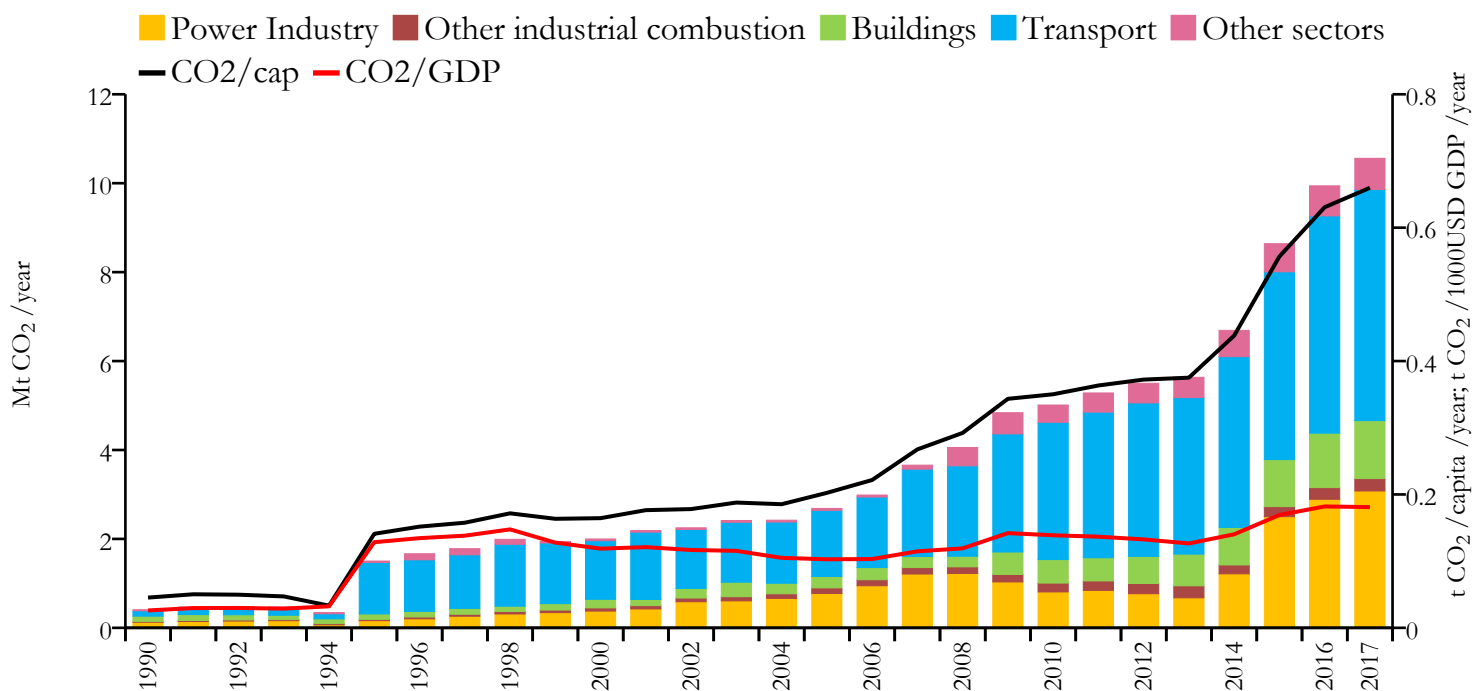


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	10.560	0.660	0.181	16005373
2005	2.686	0.202	0.103	13270201
1990	0.407	0.045	0.026	8973342



### 2017 vs 1990



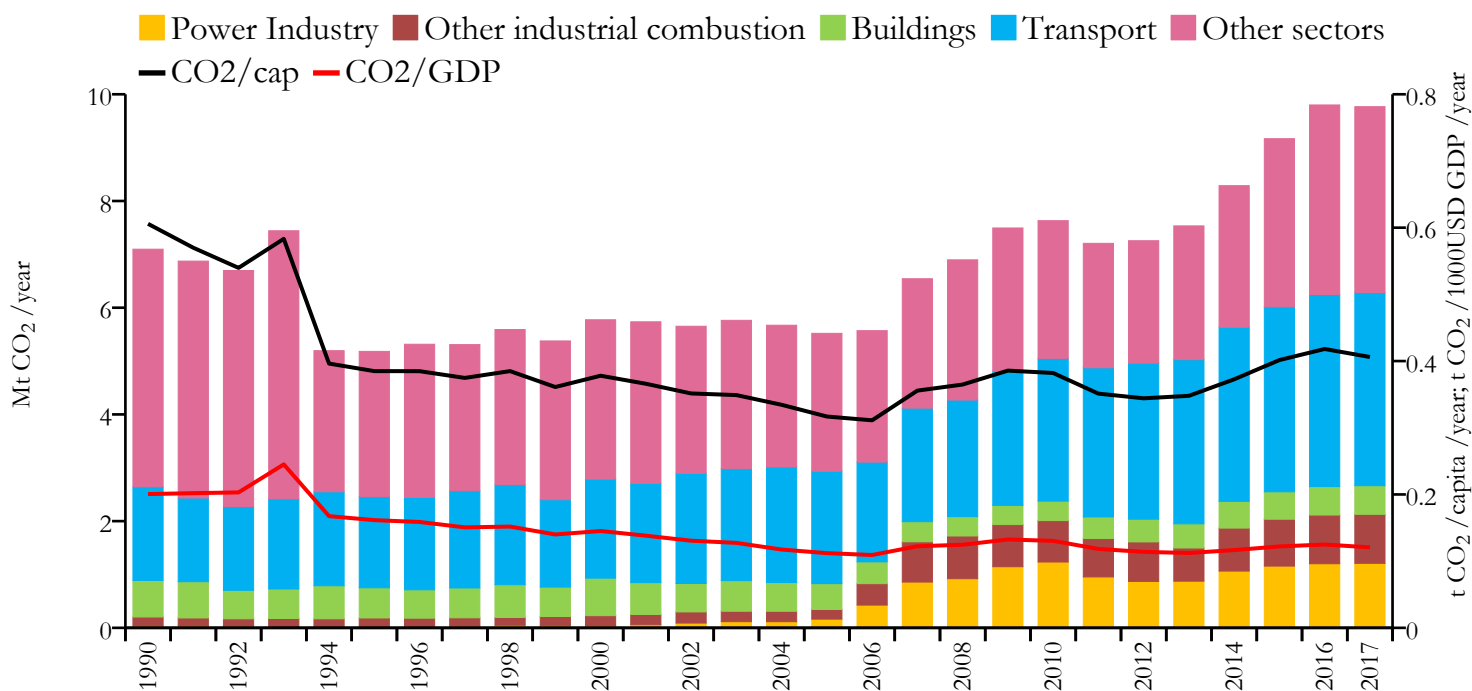
### 2017 vs 2005



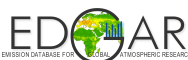
# Cameroon



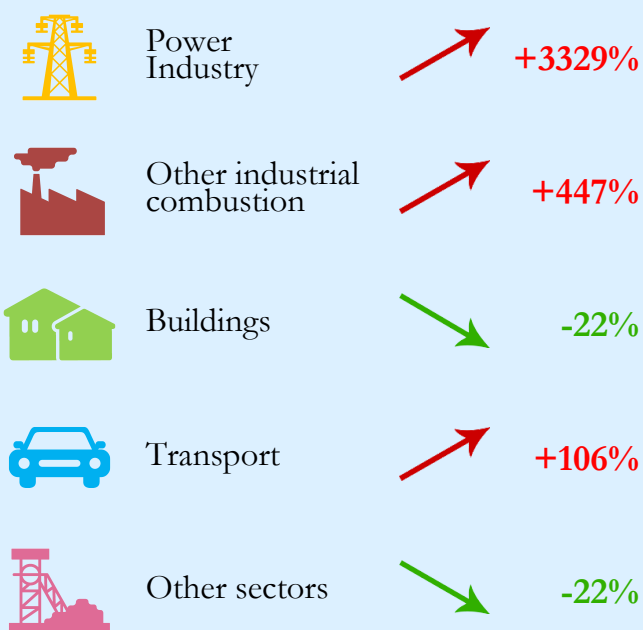
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	9.768	0.406	0.121	24053727
2005	5.520	0.317	0.112	17420795
1990	7.097	0.606	0.201	11715218



### 2017 vs 1990

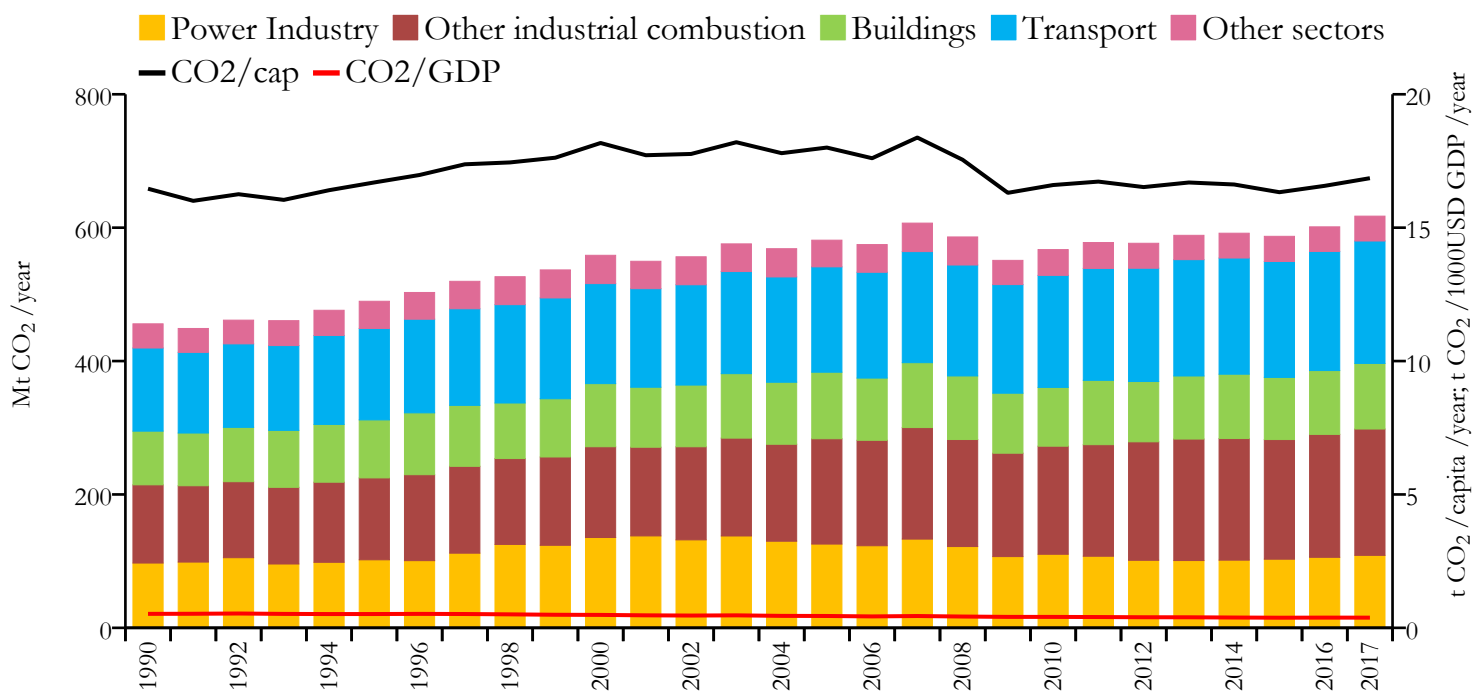


### 2017 vs 2005





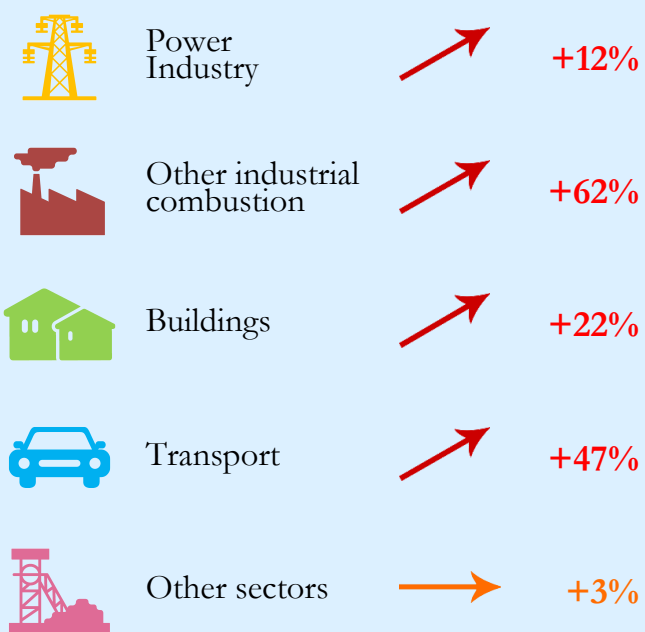
## Fossil CO<sub>2</sub> emissions by sector



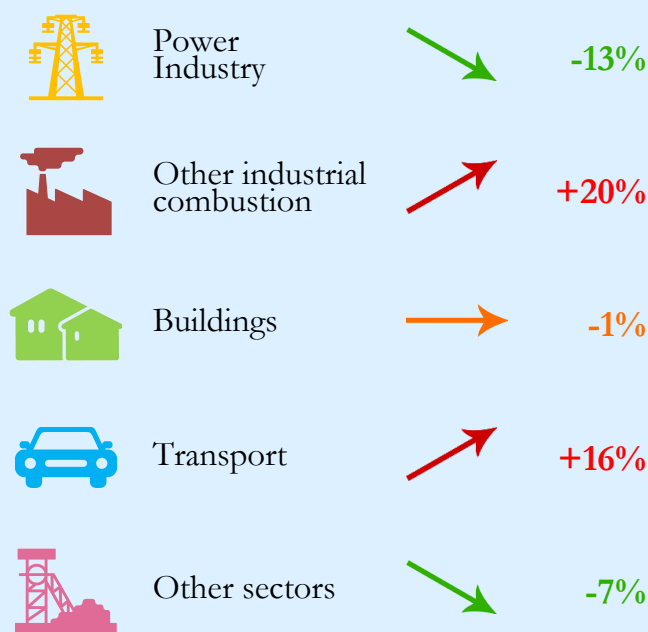
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	617.301	16.855	0.382	36624199
2005	581.267	18.003	0.444	32287980
1990	455.827	16.460	0.524	27692680



### 2017 vs 1990



### 2017 vs 2005

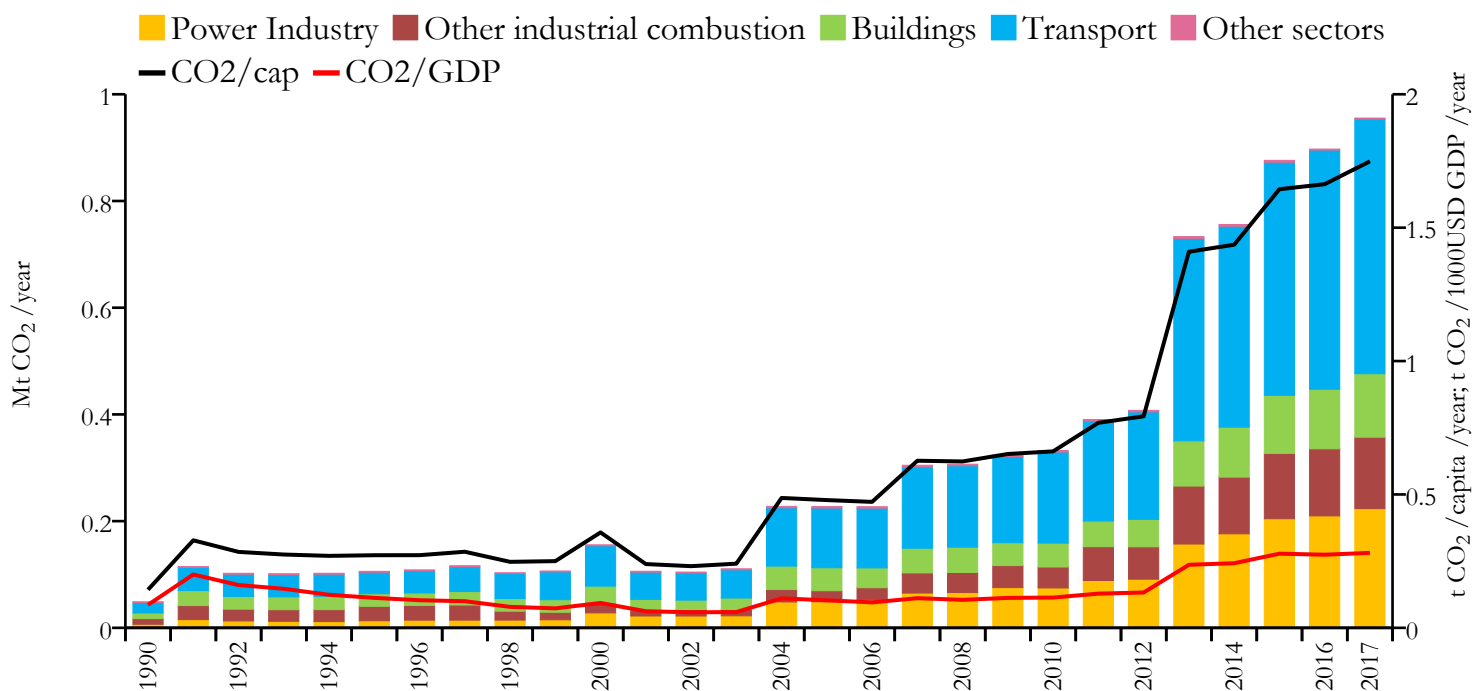




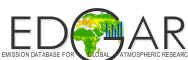
# Cape Verde



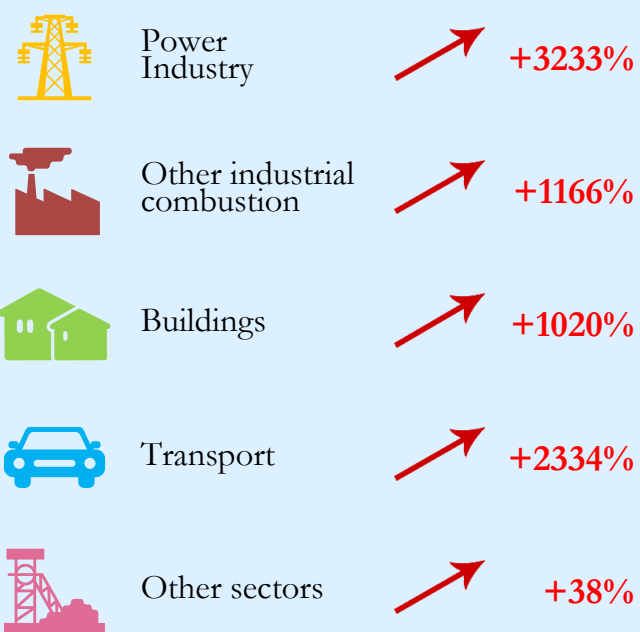
## Fossil CO<sub>2</sub> emissions by sector



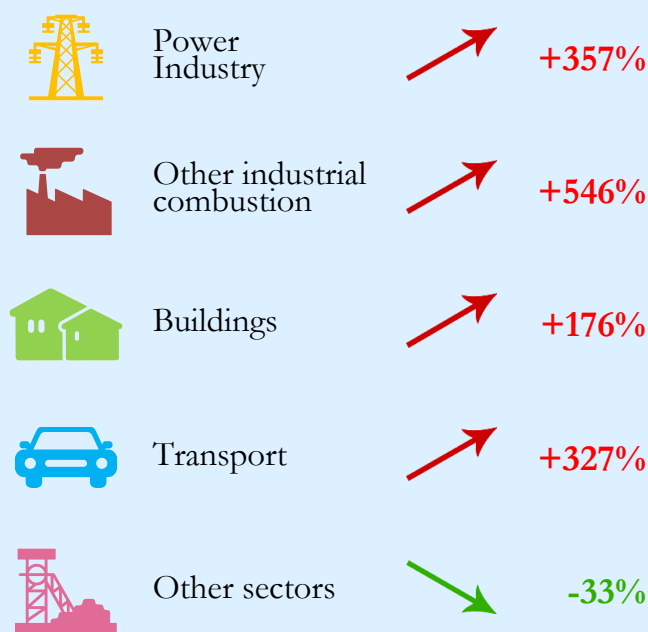
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.955	1.749	0.281	546388
2005	0.227	0.479	0.103	474567
1990	0.049	0.143	0.086	341883



### 2017 vs 1990



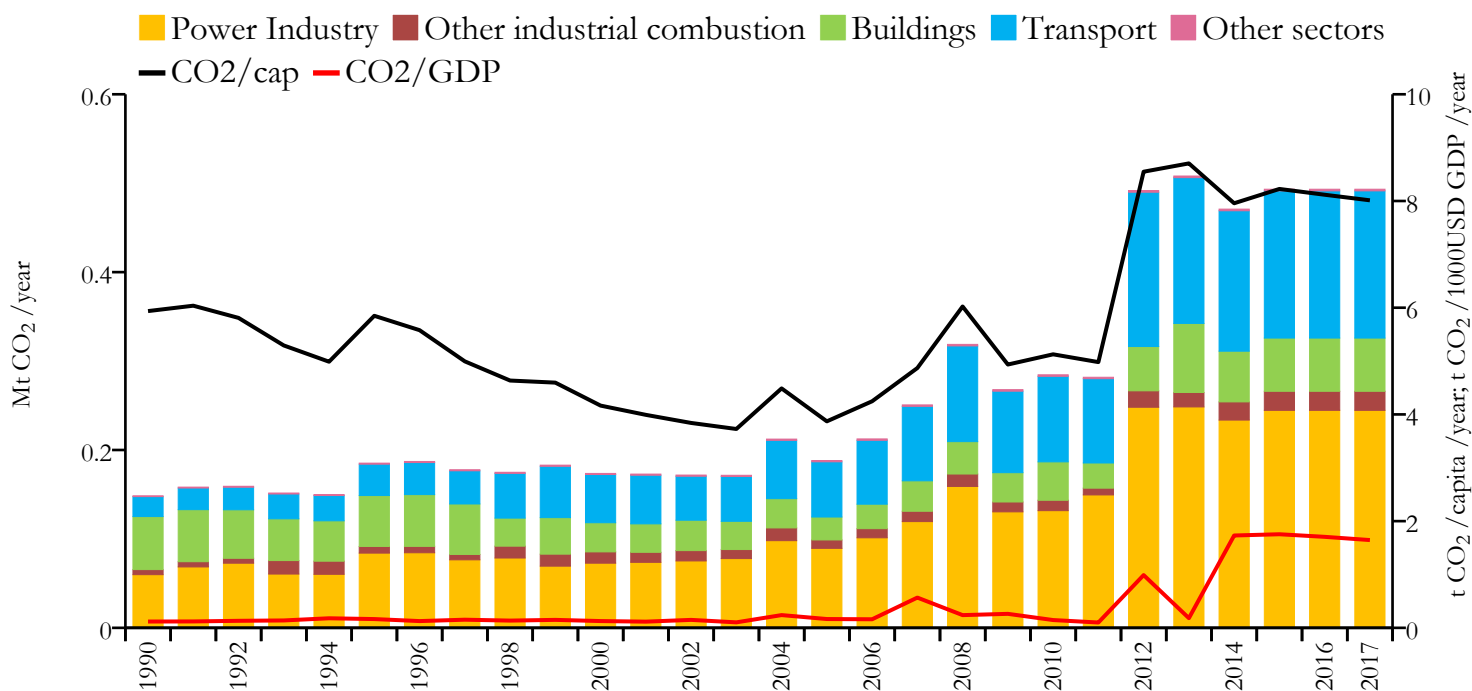
### 2017 vs 2005



# Cayman Islands



## Fossil CO<sub>2</sub> emissions by sector



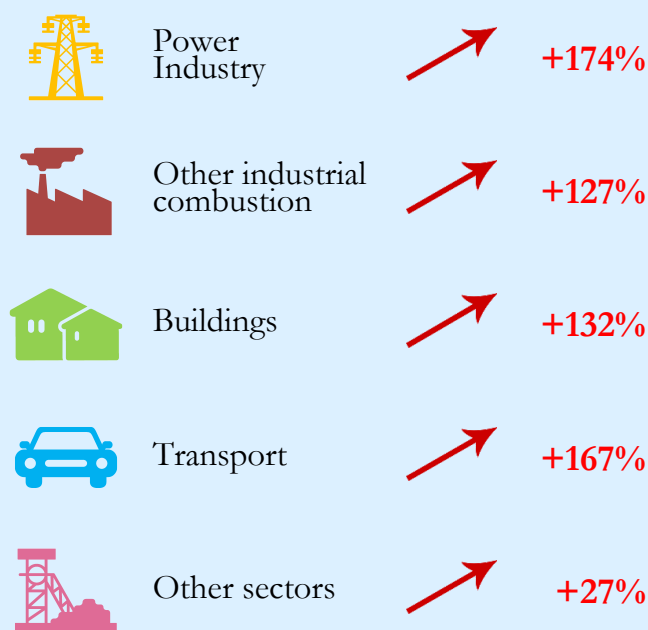
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.493	8.013	1.645	61559
2005	0.188	3.870	0.165	48622
1990	0.148	5.937	0.118	25010



### 2017 vs 1990



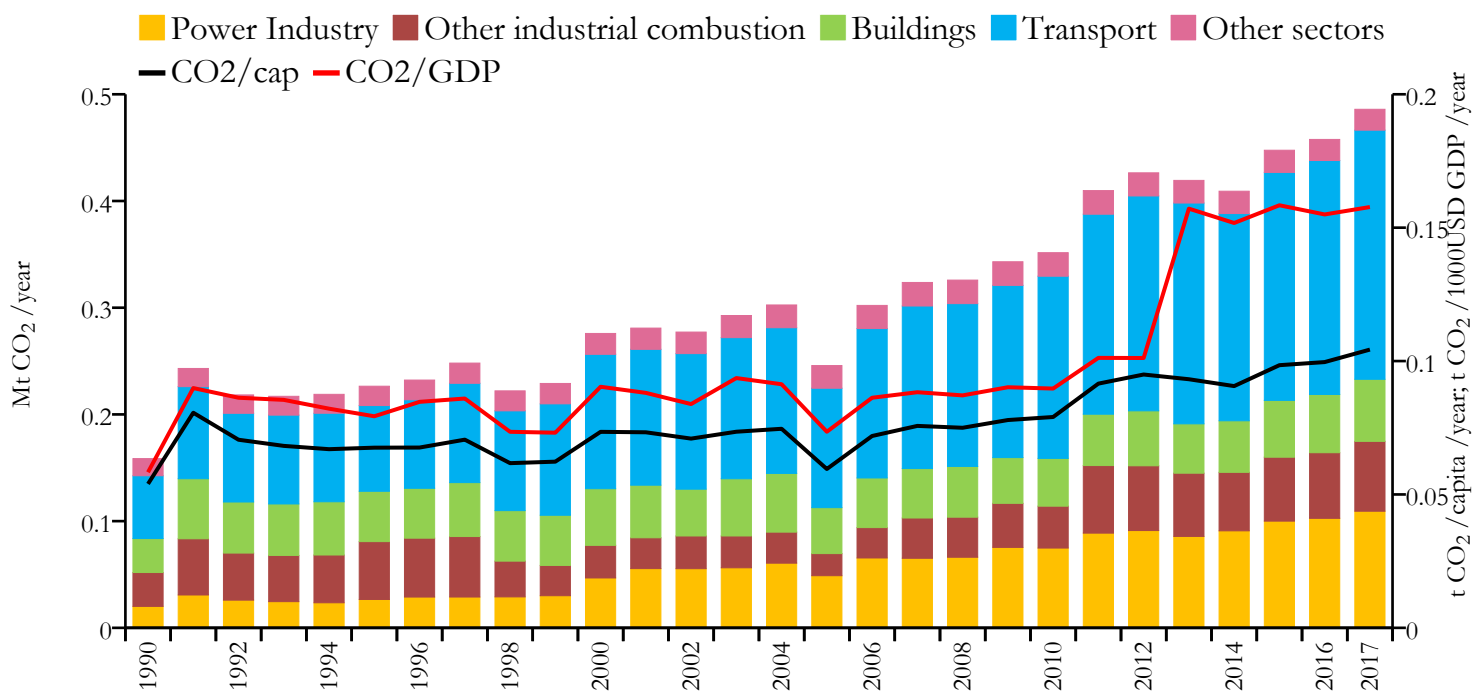
### 2017 vs 2005



# Central African Republic



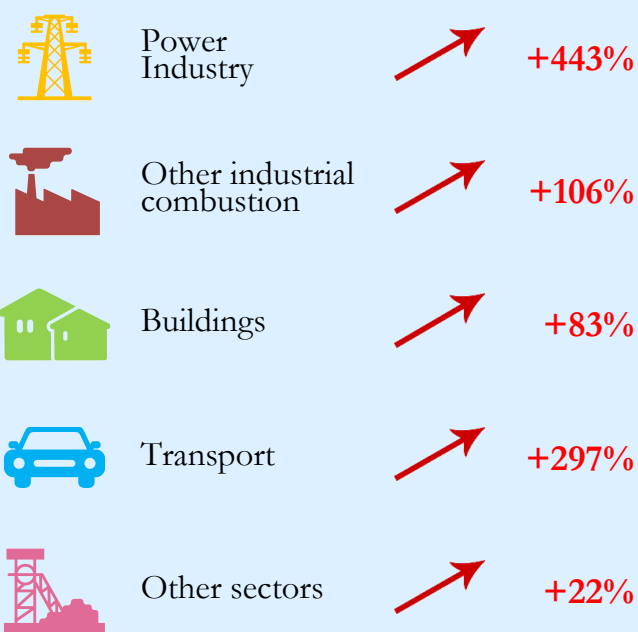
## Fossil CO<sub>2</sub> emissions by sector



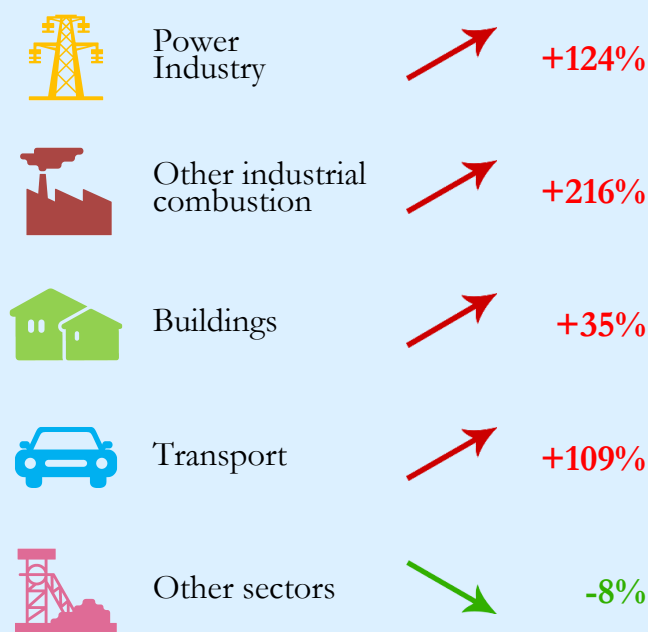
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.486	0.104	0.158	4659080
2005	0.246	0.060	0.074	4127910
1990	0.159	0.054	0.058	2939780



### 2017 vs 1990

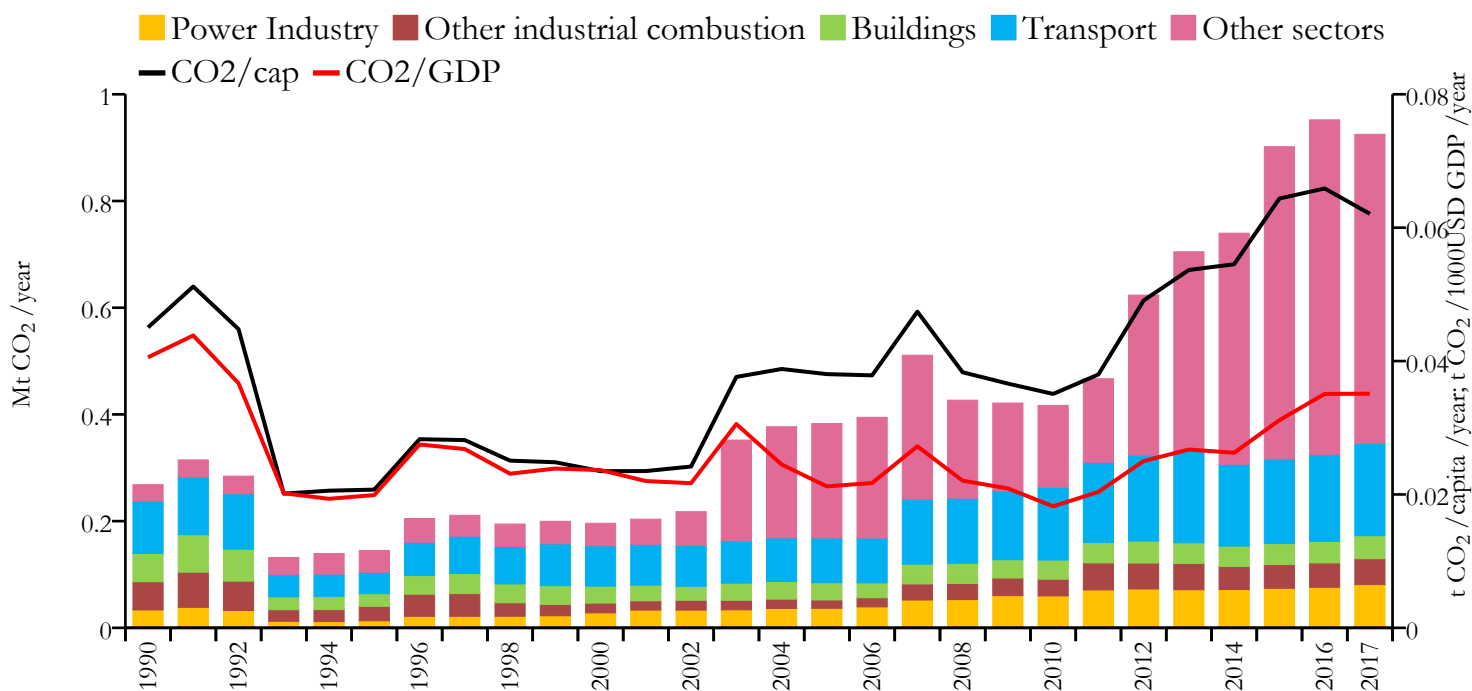


### 2017 vs 2005





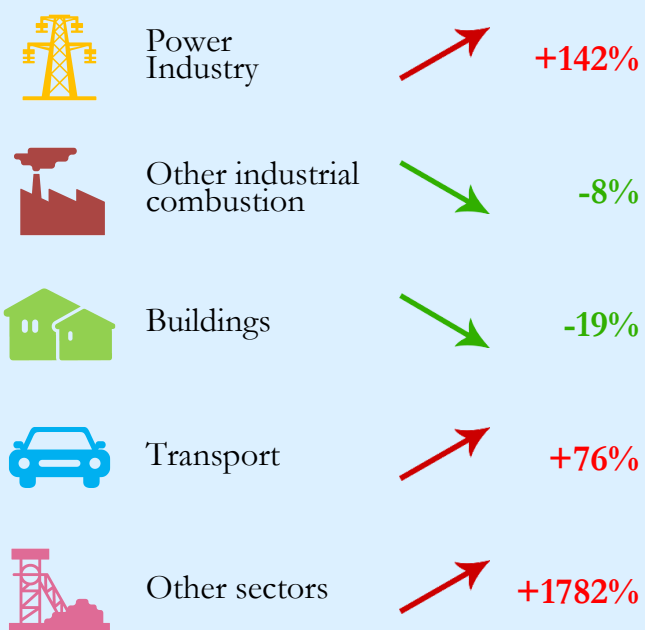
## Fossil CO<sub>2</sub> emissions by sector



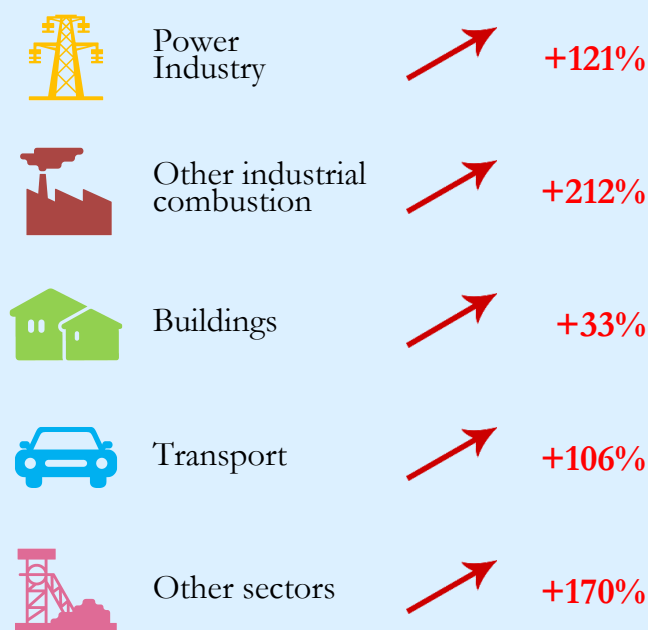
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.925	0.062	0.035	14899994
2005	0.383	0.038	0.021	10067009
1990	0.268	0.045	0.041	5956859



### 2017 vs 1990

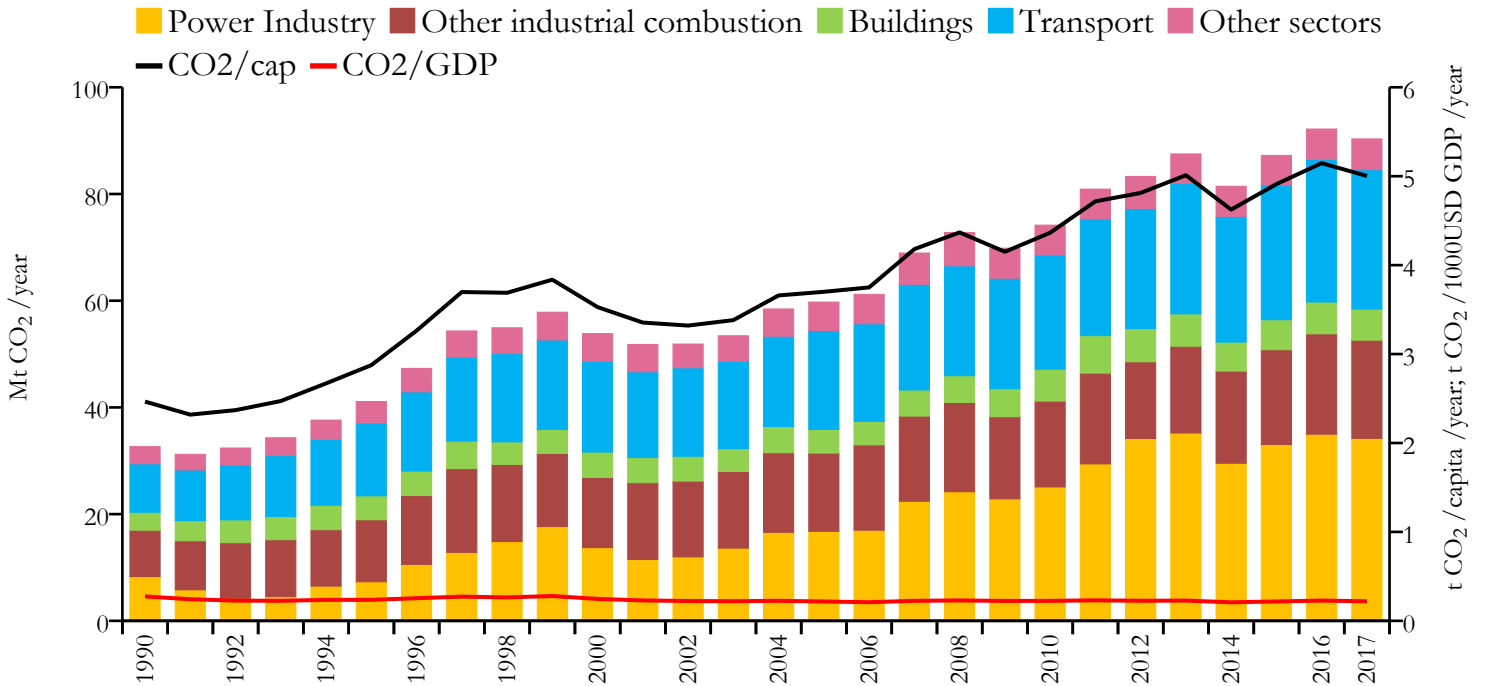


### 2017 vs 2005





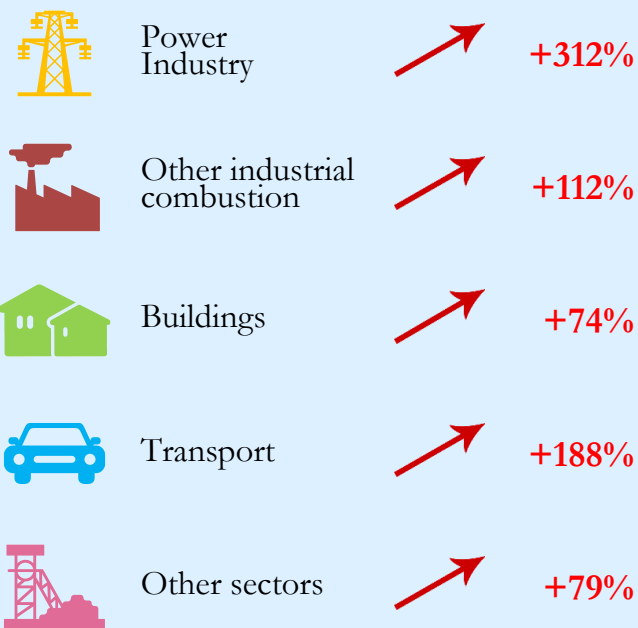
## Fossil CO<sub>2</sub> emissions by sector



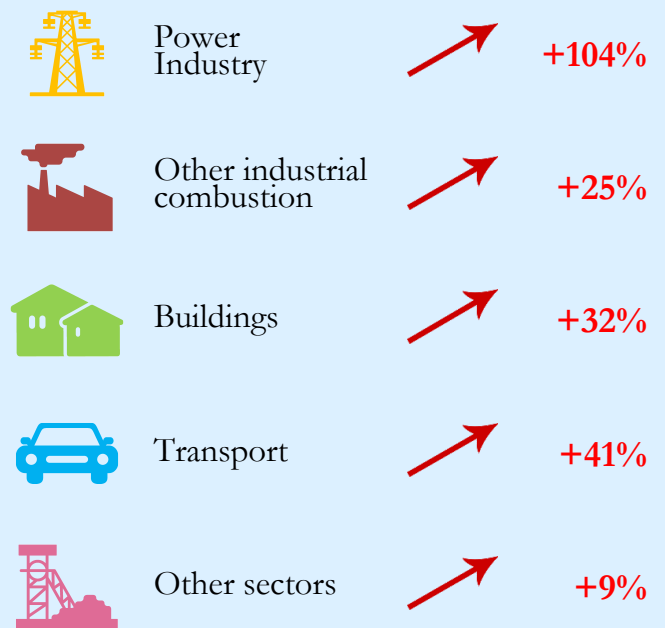
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	90.325	5.003	0.220	18054726
2005	59.747	3.700	0.218	16147064
1990	32.654	2.466	0.274	13242132



### 2017 vs 1990

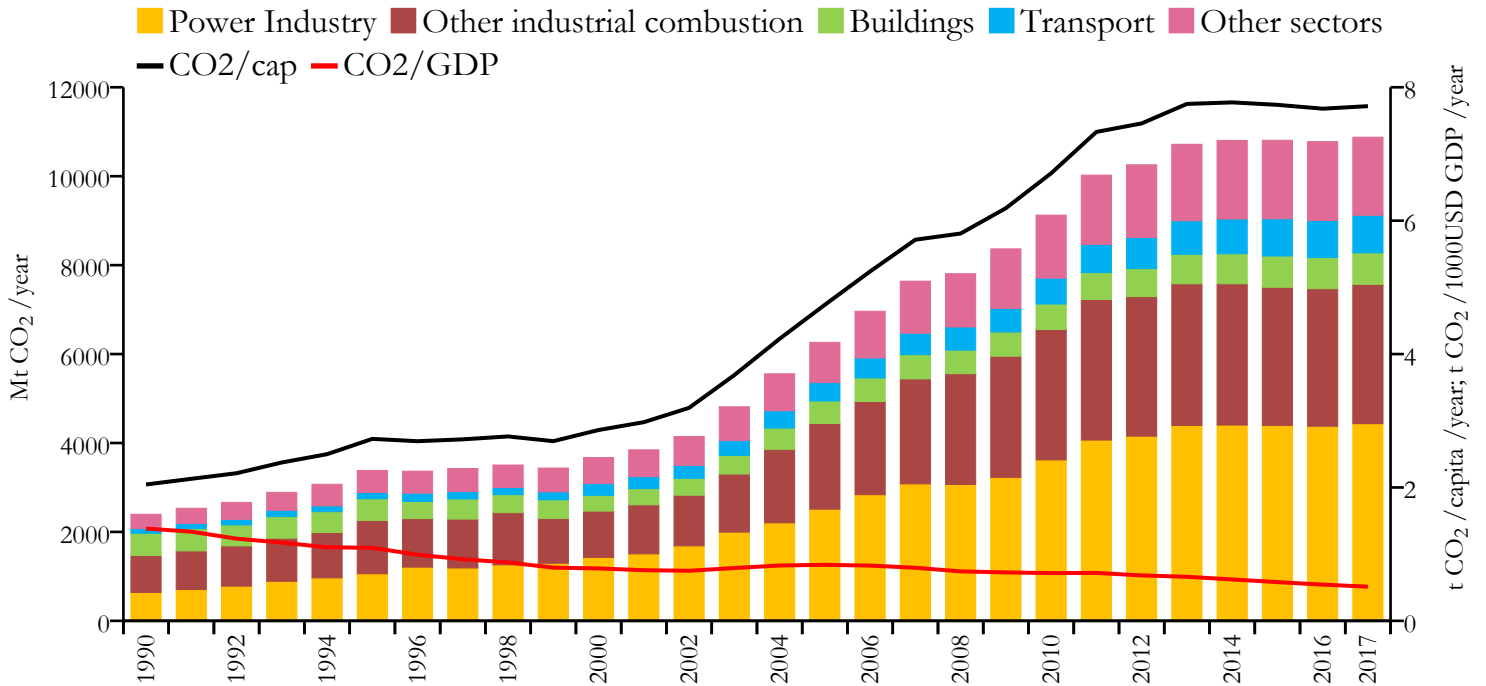


### 2017 vs 2005





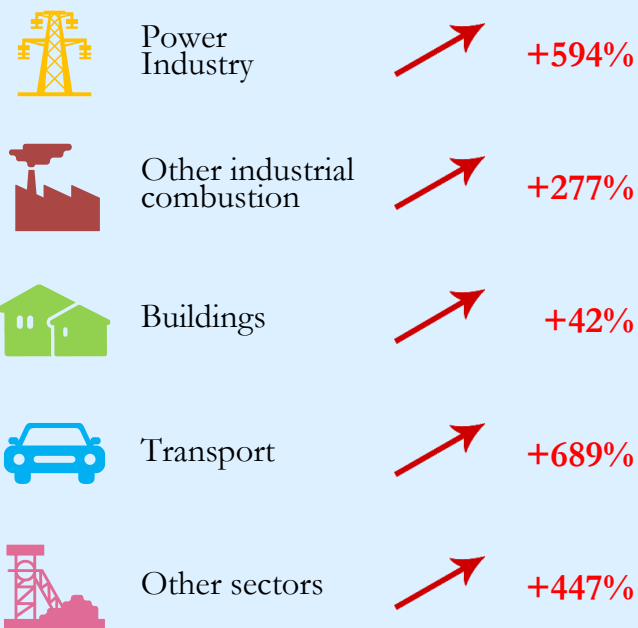
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	10877.218	7.717	0.512	1409517397
2005	6263.064	4.739	0.840	1321623490
1990	2397.048	2.044	1.383	1172445200



### 2017 vs 1990



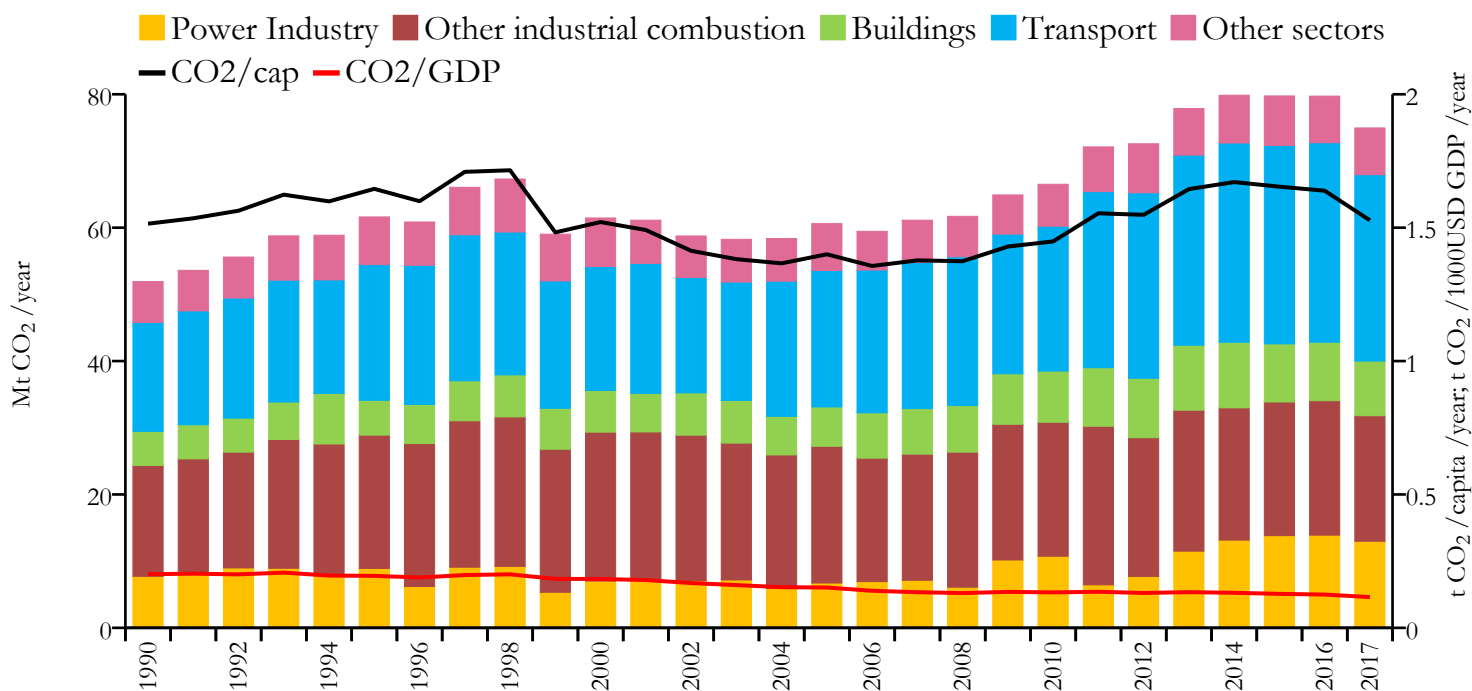
### 2017 vs 2005



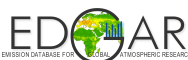
# Colombia



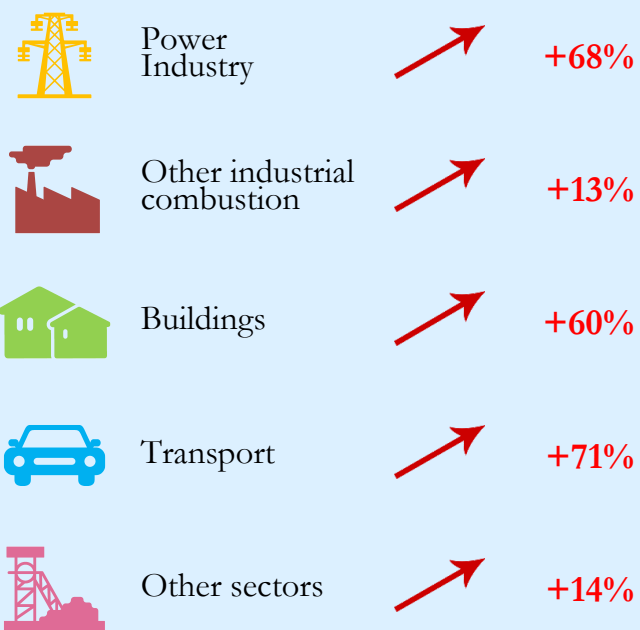
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	74.954	1.528	0.115	49065615
2005	60.610	1.400	0.151	43285634
1990	51.919	1.515	0.201	34271565



### 2017 vs 1990



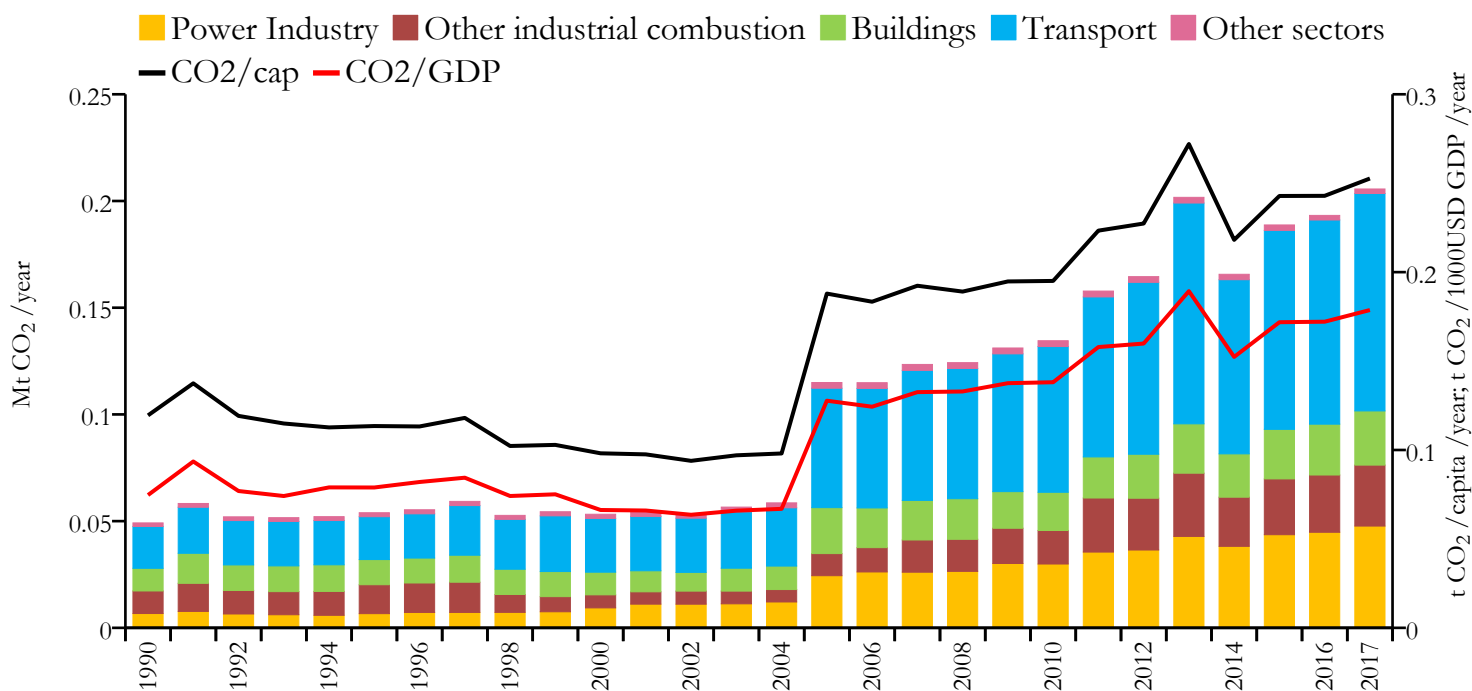
### 2017 vs 2005



# Comoros



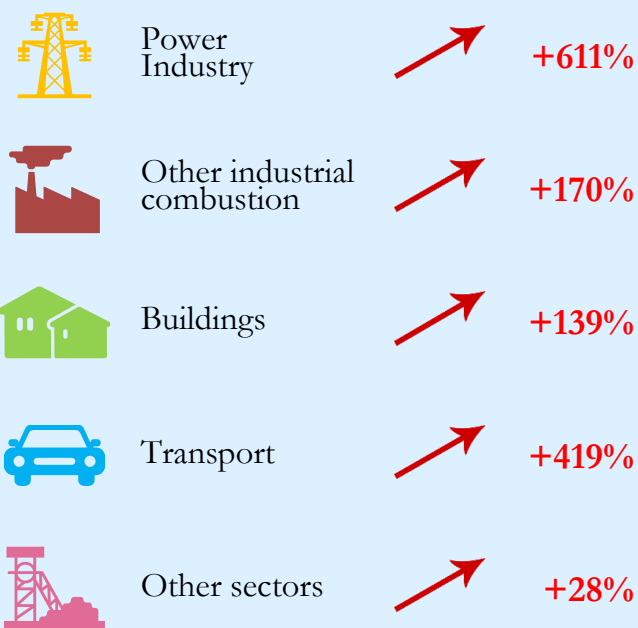
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.206	0.253	0.179	813912
2005	0.115	0.188	0.128	611627
1990	0.049	0.119	0.075	411594



### 2017 vs 1990



### 2017 vs 2005

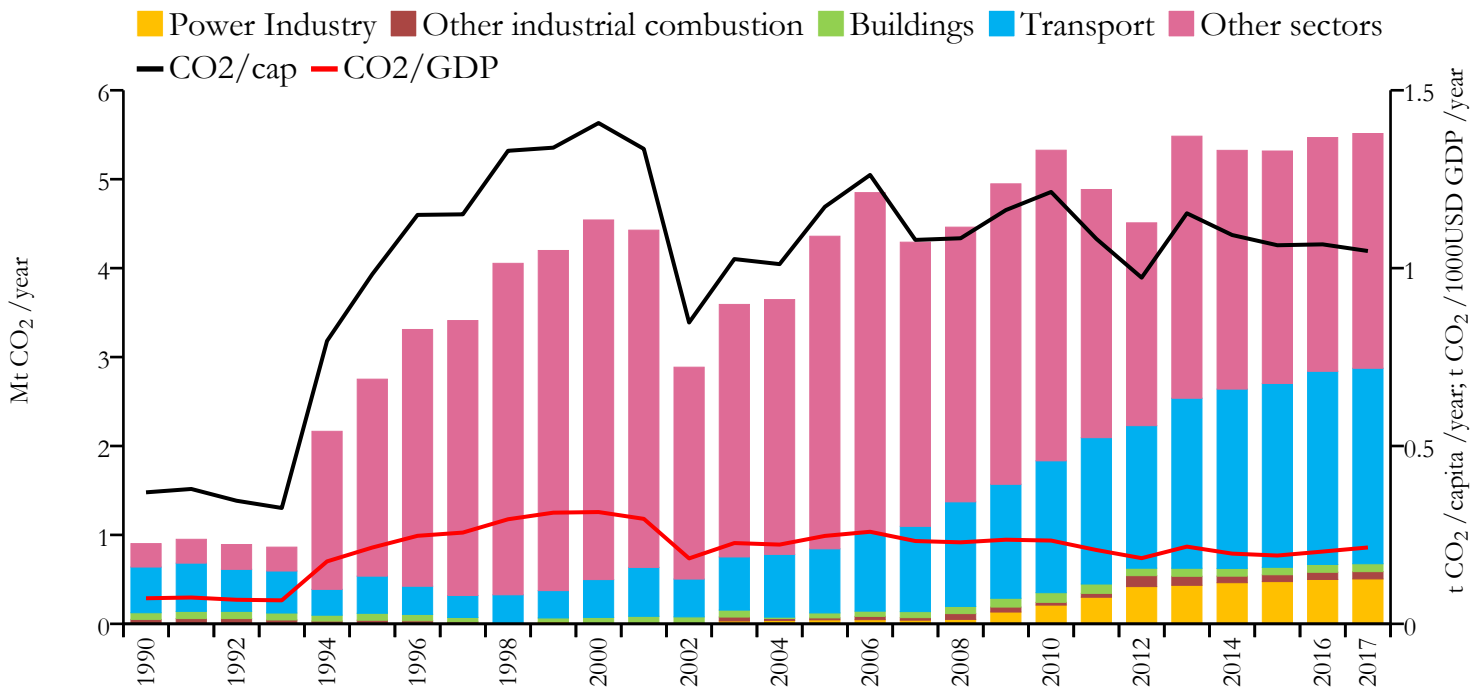




# Congo



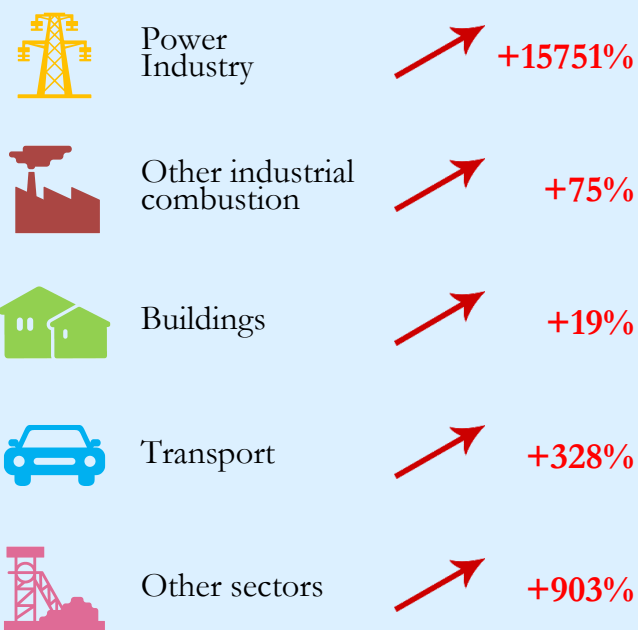
## Fossil CO<sub>2</sub> emissions by sector



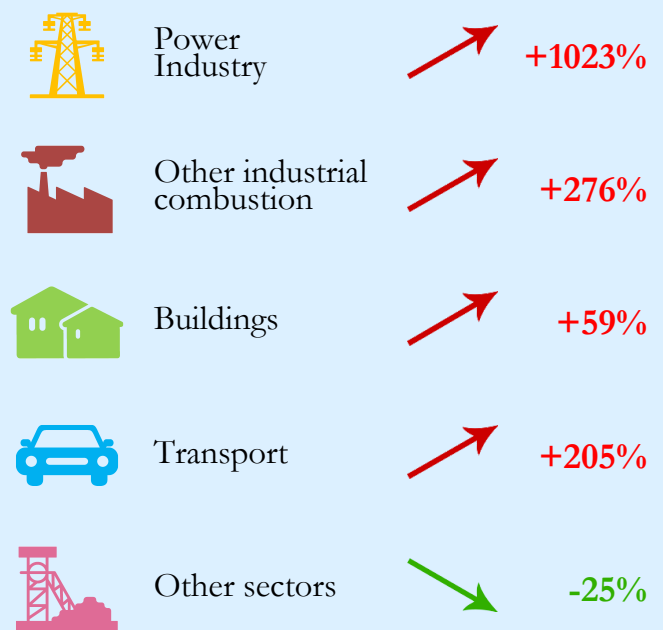
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.514	1.048	0.215	5260750
2005	4.359	1.172	0.247	3718243
1990	0.902	0.370	0.072	2440457



### 2017 vs 1990



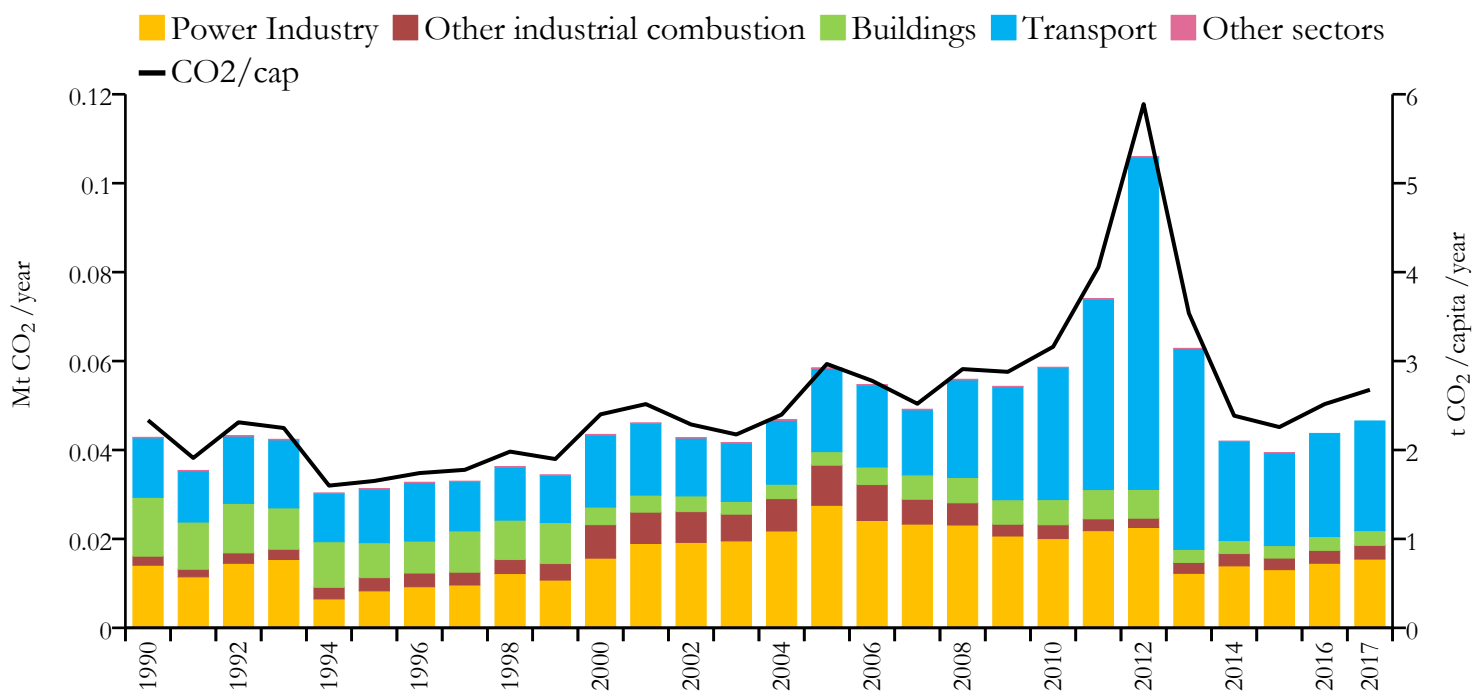
### 2017 vs 2005



# Cook Islands



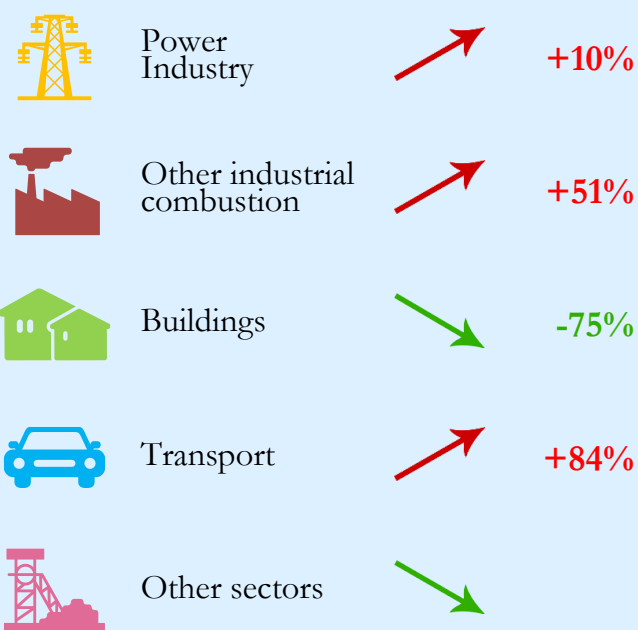
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.047	2.677	n/a	17380
2005	0.058	2.967	n/a	19710
1990	0.043	2.334	n/a	18356



### 2017 vs 1990



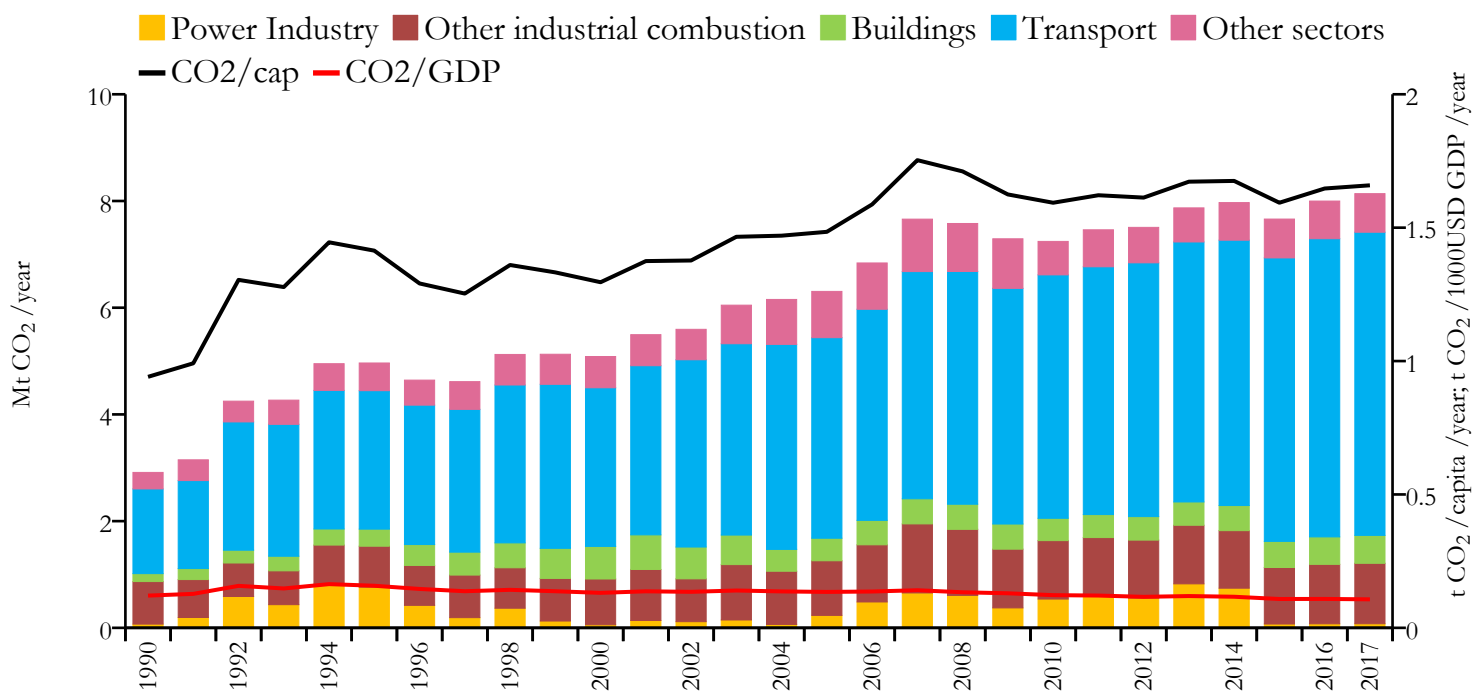
### 2017 vs 2005



# Costa Rica



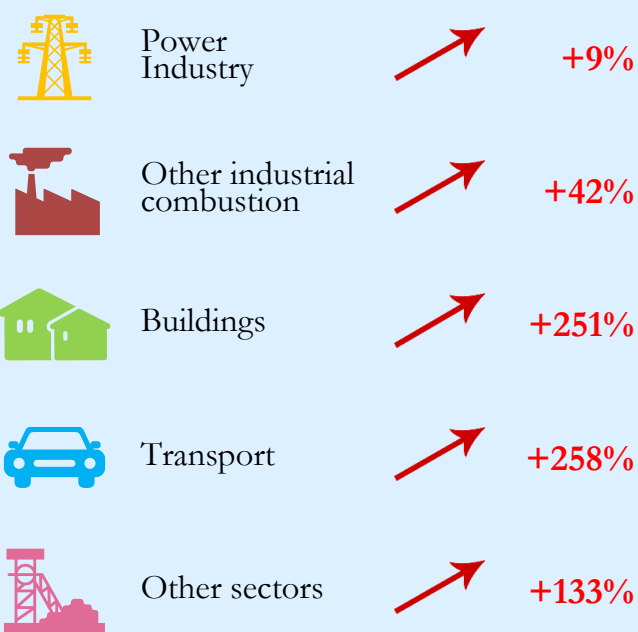
## Fossil CO<sub>2</sub> emissions by sector



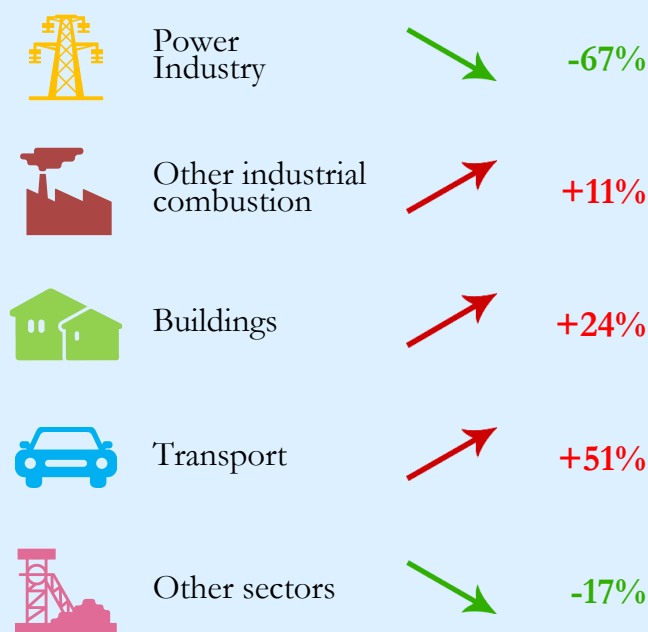
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	8.138	1.659	0.107	4905769
2005	6.306	1.484	0.135	4247841
1990	2.913	0.941	0.121	3095995

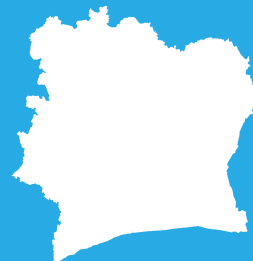


### 2017 vs 1990

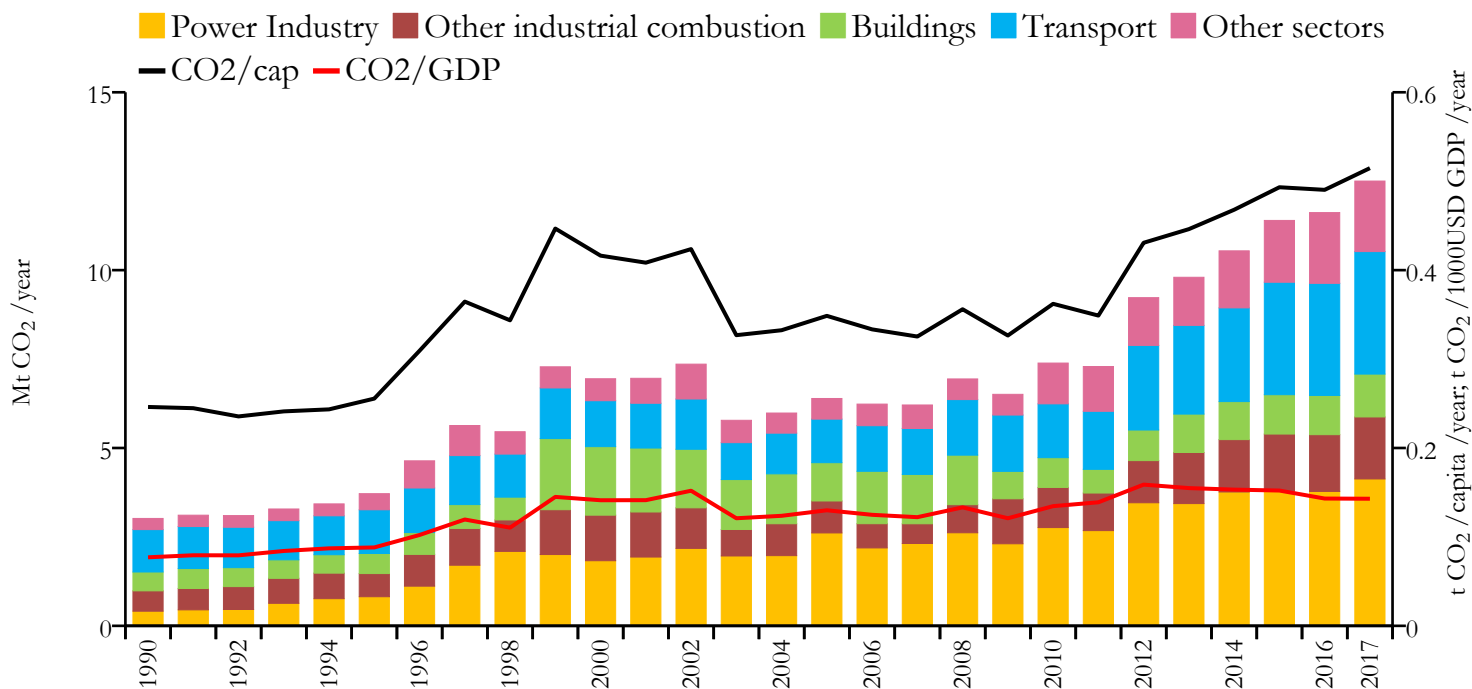


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	12.505	0.515	0.143	24294750
2005	6.392	0.349	0.130	18336303
1990	3.020	0.246	0.077	12267754



### 2017 vs 1990



Power Industry



**+903%**



Other industrial combustion



**+205%**



Buildings



**+127%**



Transport



**+189%**



Other sectors



**+531%**

### 2017 vs 2005



Power Industry



**+58%**



Other industrial combustion



**+94%**



Buildings



**+12%**



Transport



**+181%**



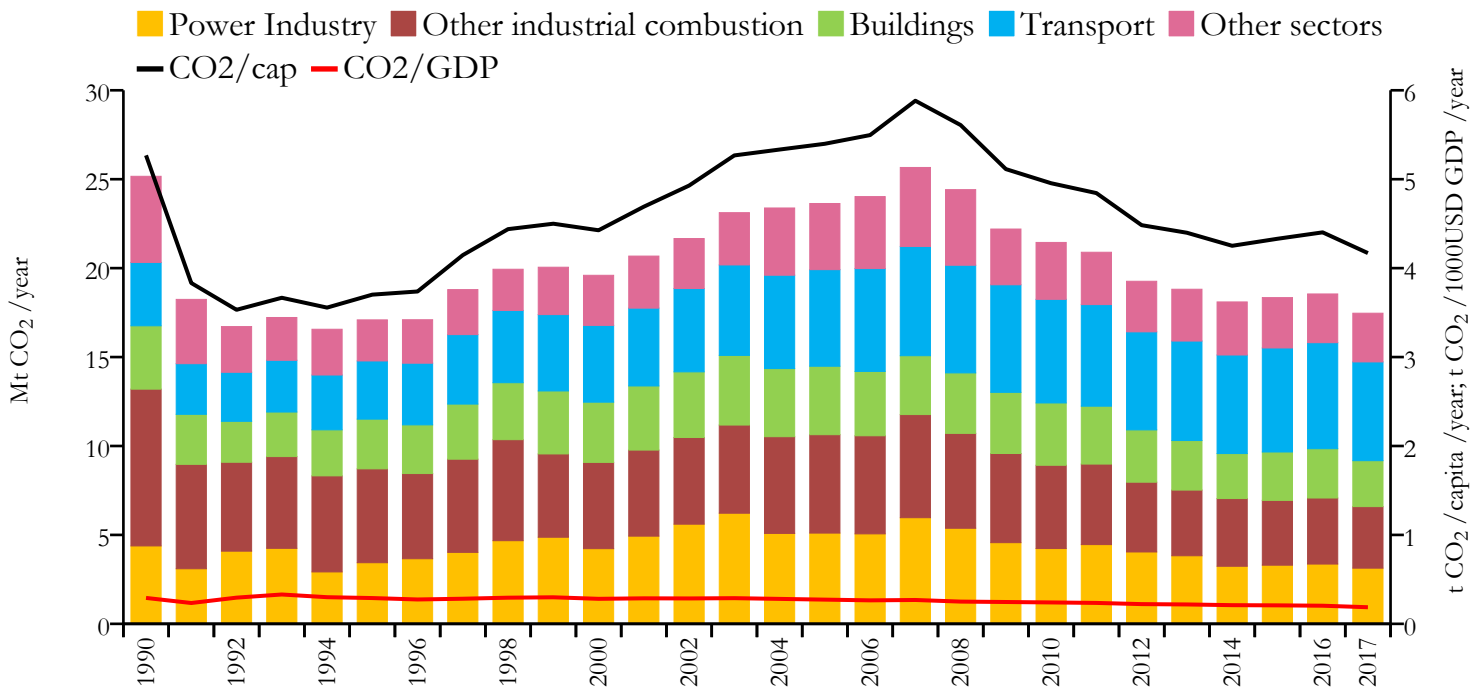
Other sectors



**+242%**



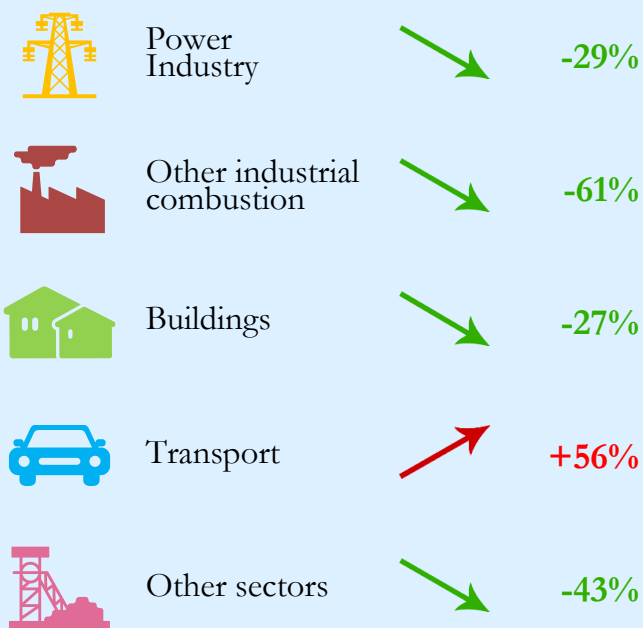
## Fossil CO<sub>2</sub> emissions by sector



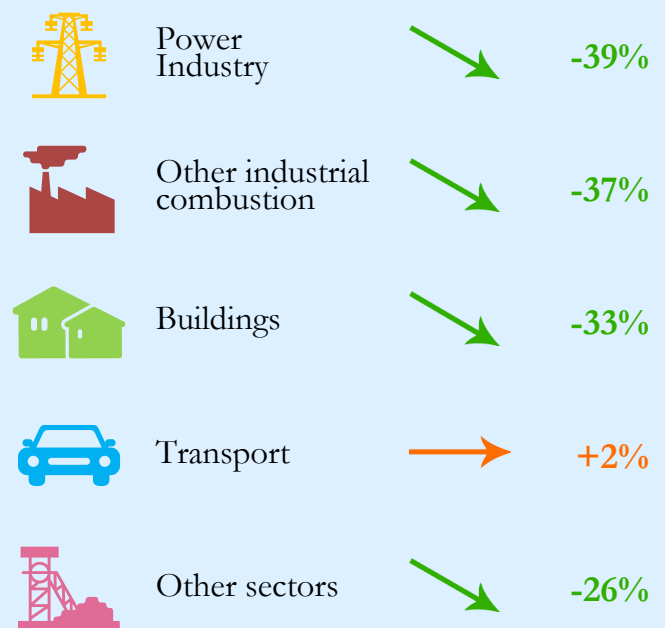
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	17.466	4.169	0.187	4189353
2005	23.634	5.398	0.272	4378057
1990	25.164	5.268	0.291	4776372



### 2017 vs 1990

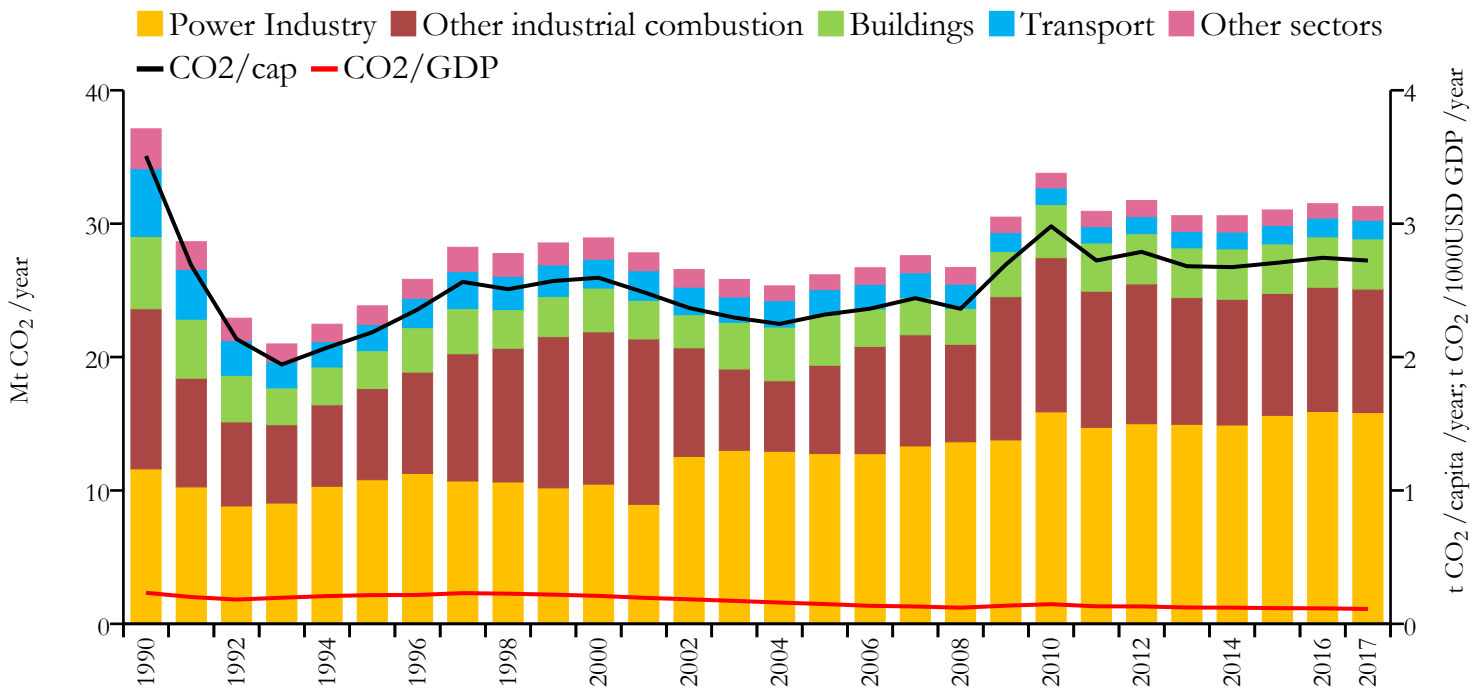


### 2017 vs 2005





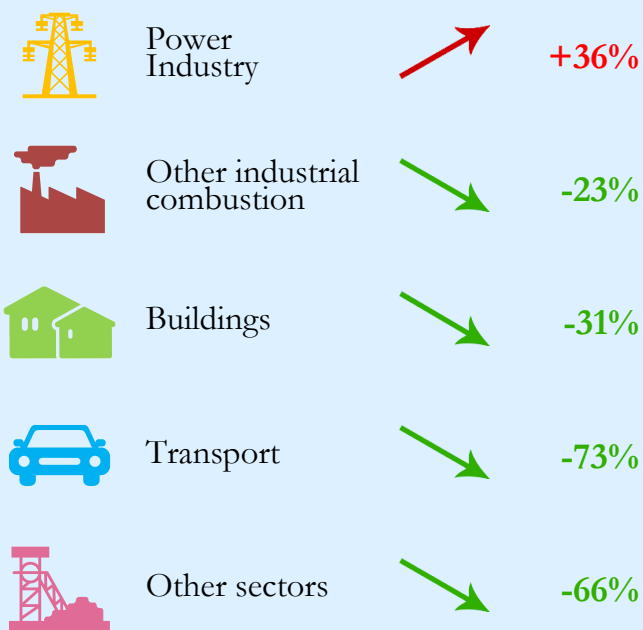
## Fossil CO<sub>2</sub> emissions by sector



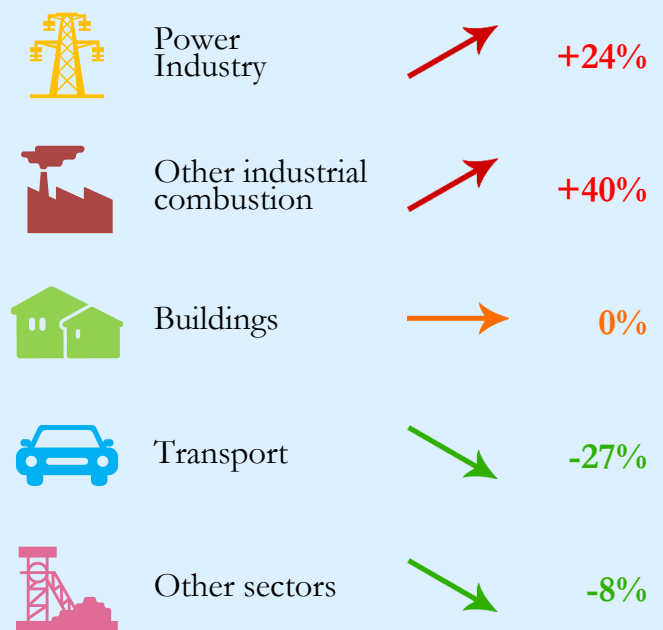
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	31.277	2.723	0.111	11484636
2005	26.165	2.319	0.148	11284253
1990	37.109	3.507	0.233	10582081



### 2017 vs 1990

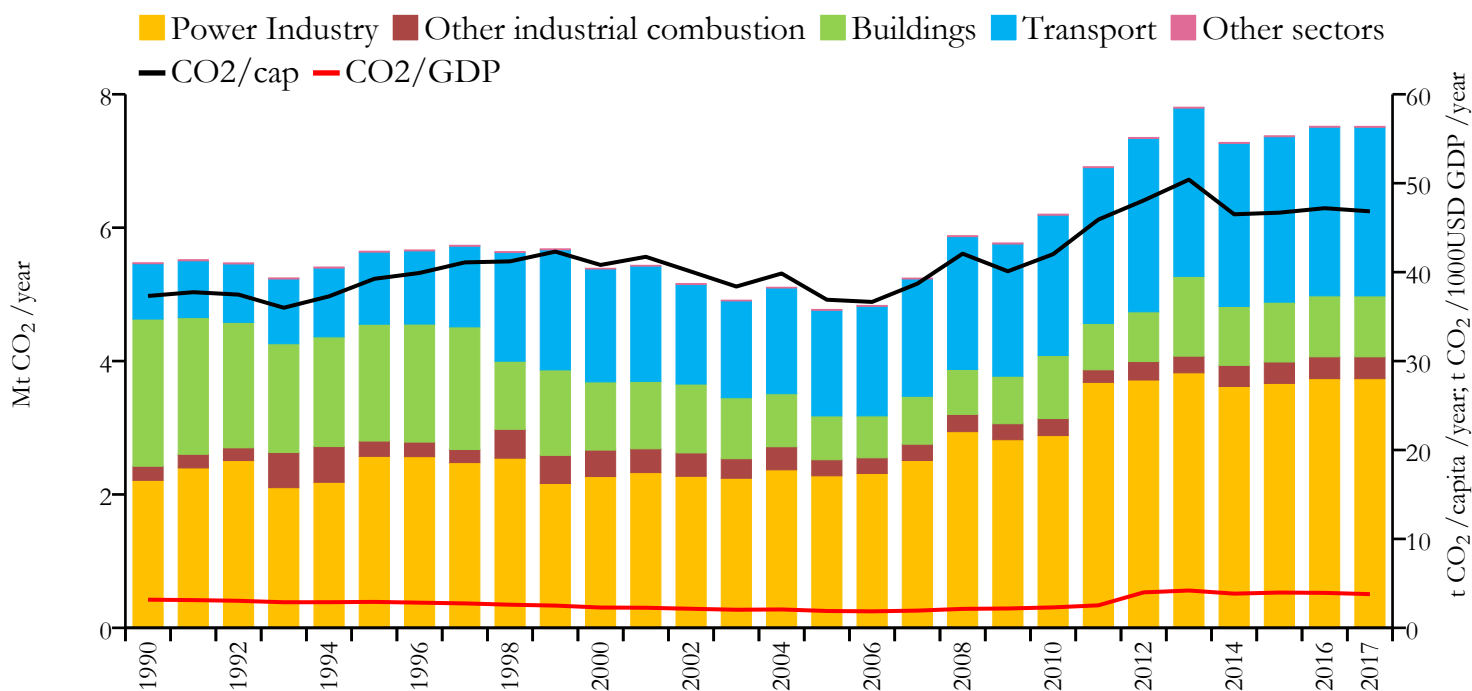


### 2017 vs 2005





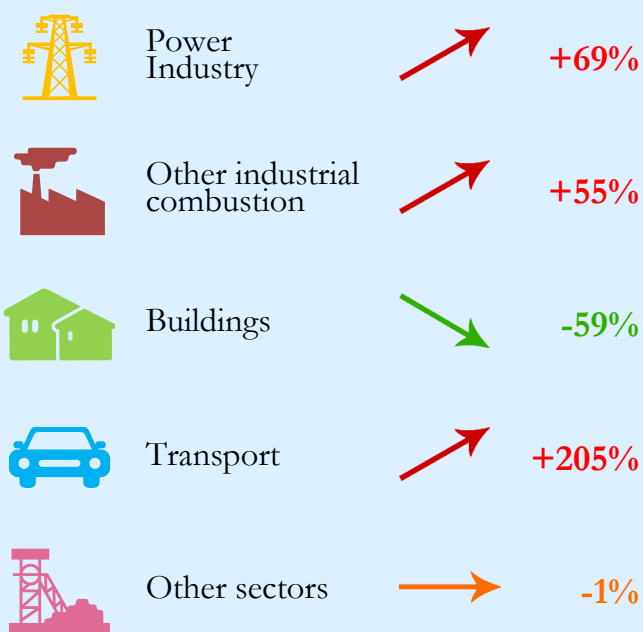
## Fossil CO<sub>2</sub> emissions by sector



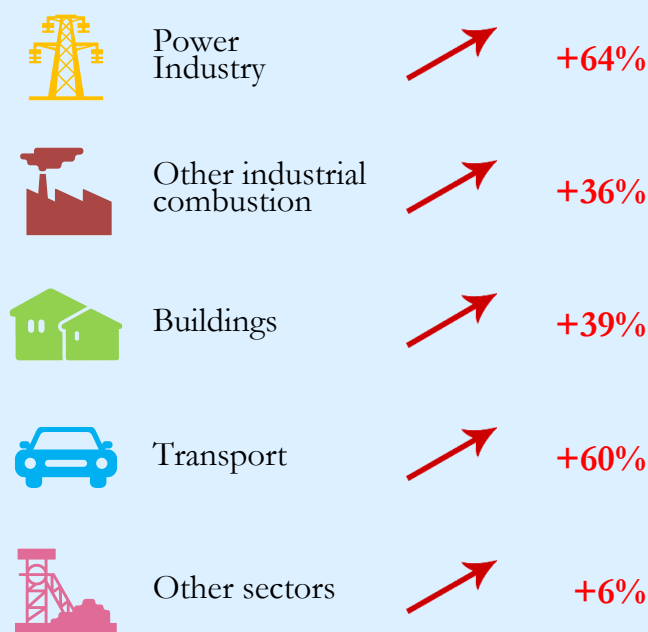
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.519	46.837	3.792	160539
2005	4.774	36.897	1.894	129394
1990	5.474	37.321	3.167	146671



### 2017 vs 1990

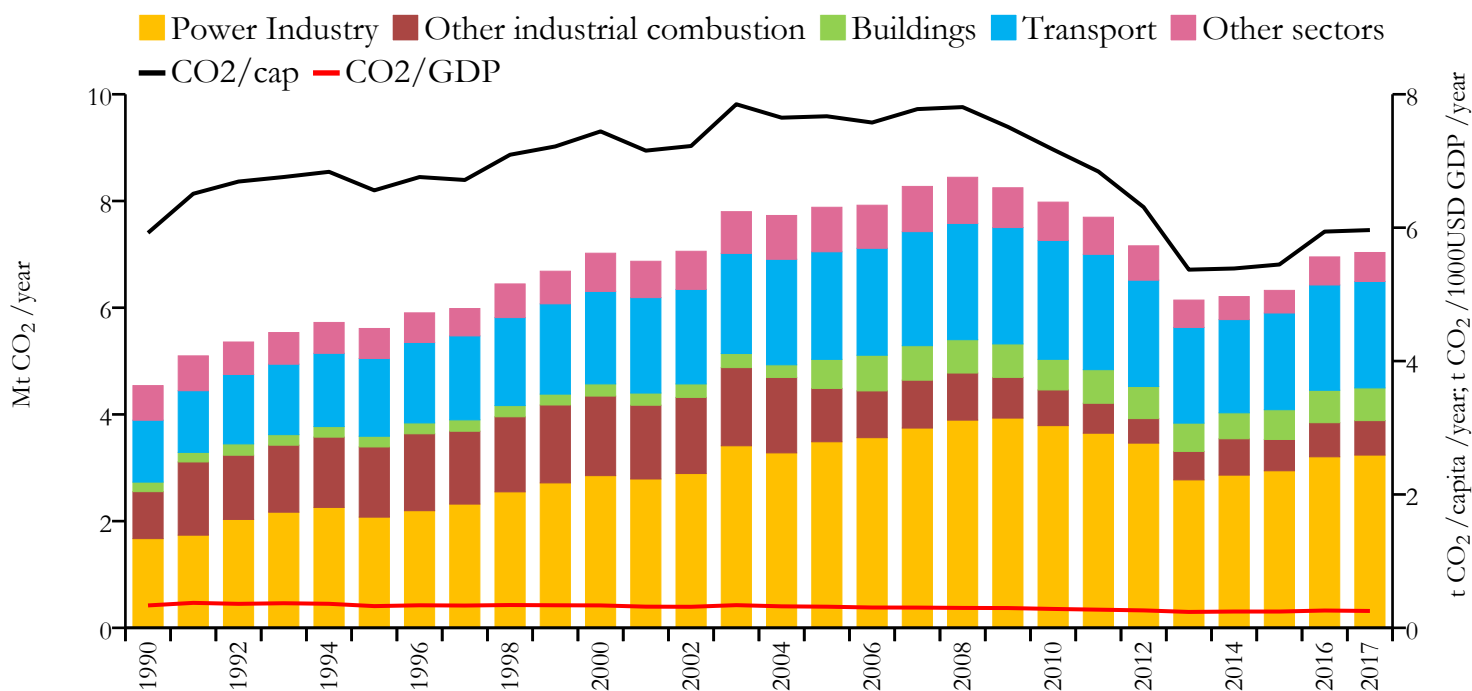


### 2017 vs 2005





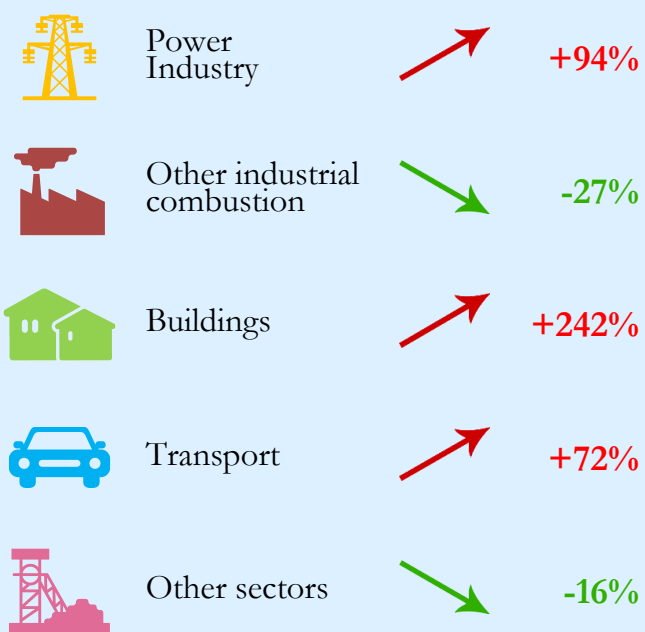
## Fossil CO<sub>2</sub> emissions by sector



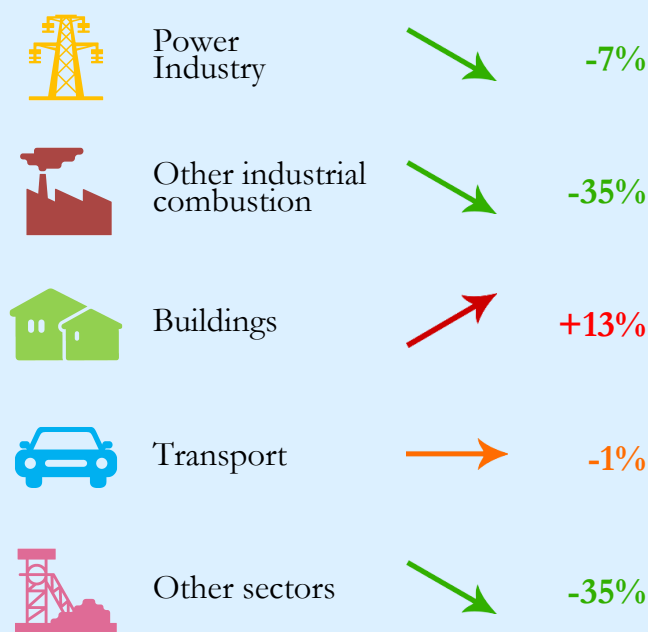
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.035	5.964	0.253	1179551
2005	7.883	7.670	0.317	1027658
1990	4.540	5.922	0.336	766614



### 2017 vs 1990



### 2017 vs 2005

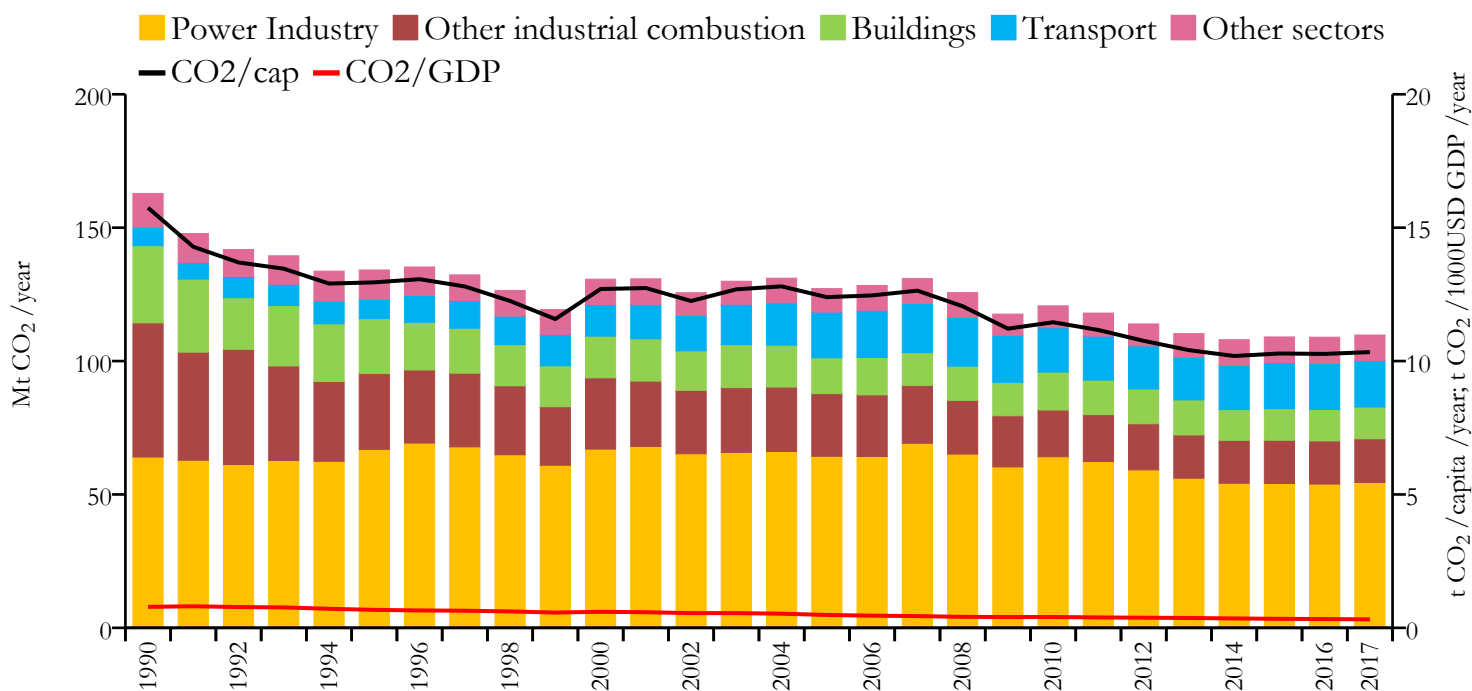




# Czechia



## Fossil CO<sub>2</sub> emissions by sector



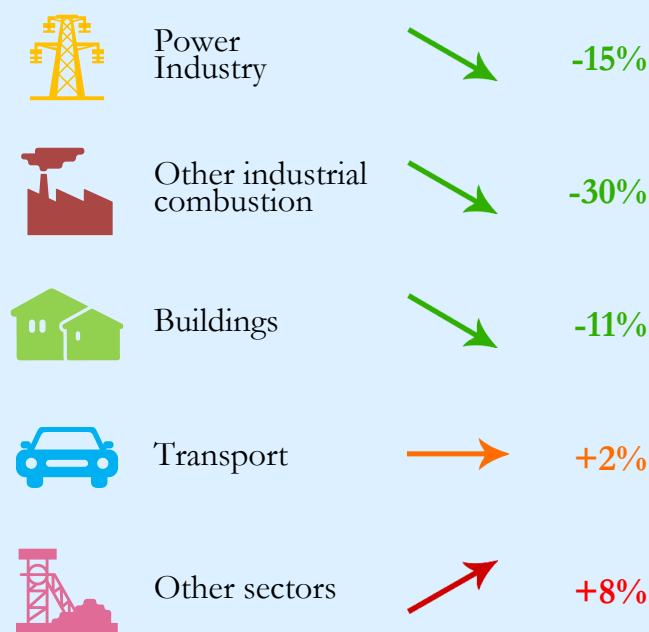
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	109.756	10.336	0.318	10618303
2005	127.157	12.396	0.483	10258176
1990	162.835	15.746	0.787	10341169



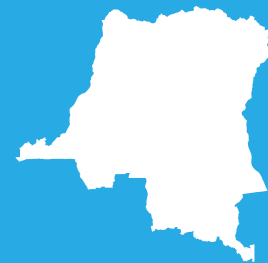
### 2017 vs 1990



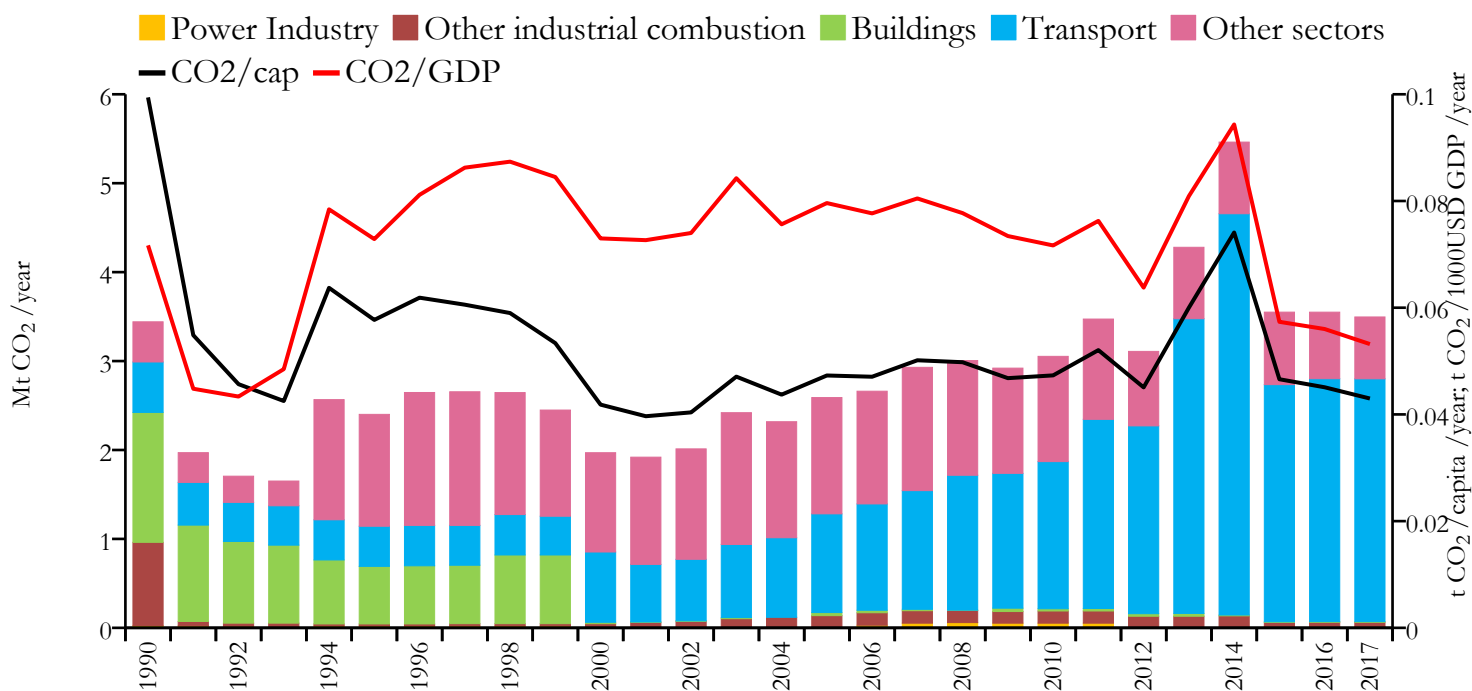
### 2017 vs 2005



# Democratic Republic of the Congo



## Fossil CO<sub>2</sub> emissions by sector



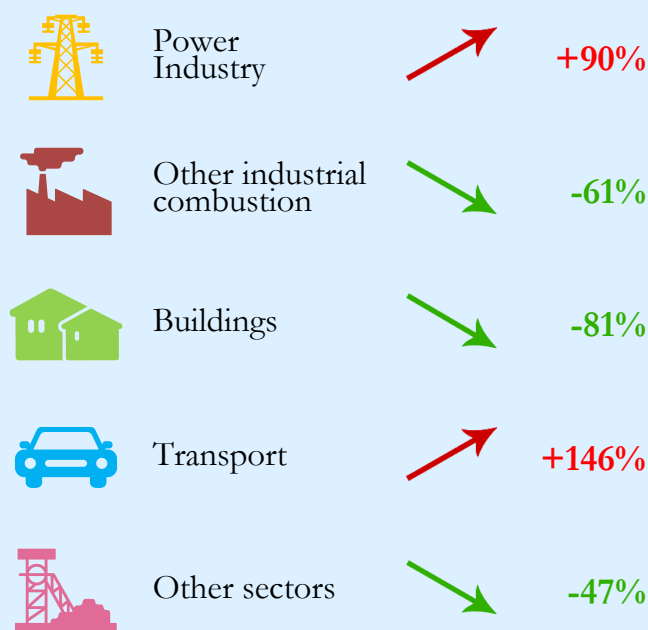
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3.496	0.043	0.053	81339988
2005	2.589	0.047	0.080	54751476
1990	3.441	0.099	0.072	34614581



### 2017 vs 1990



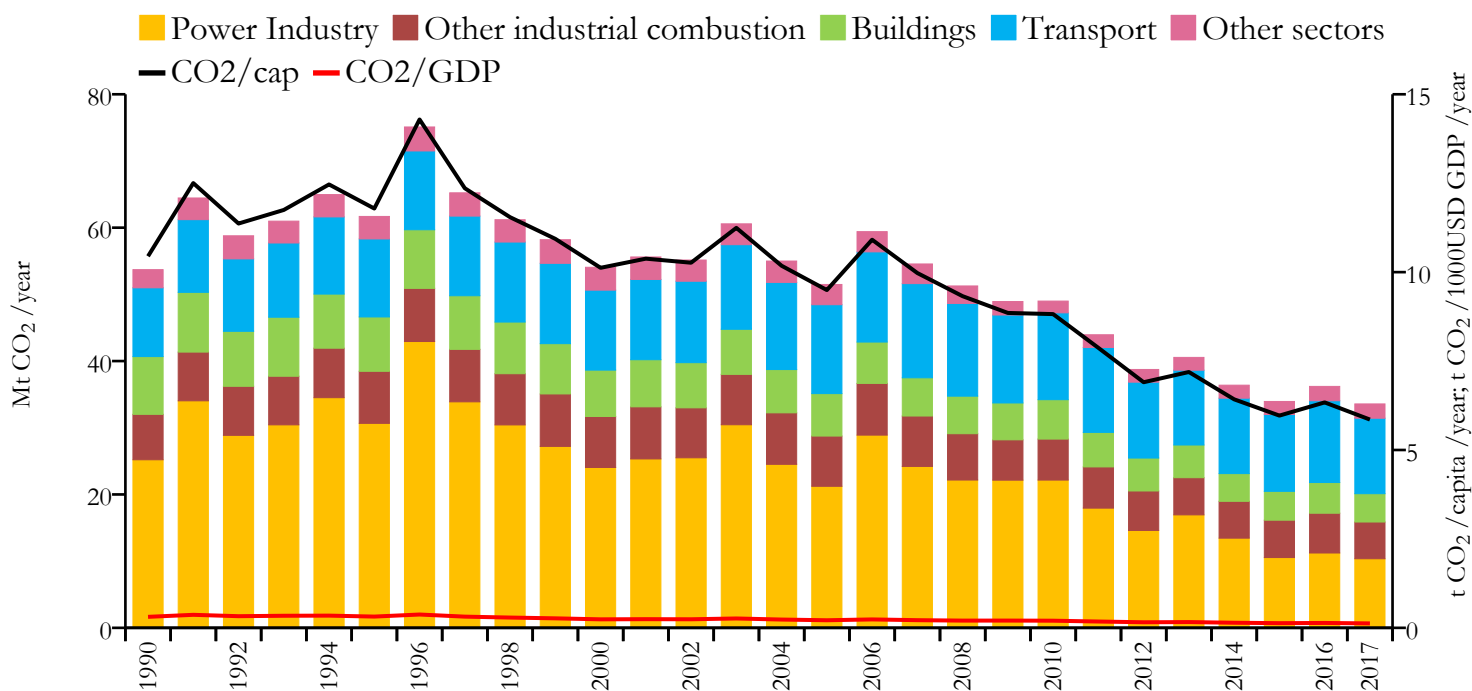
### 2017 vs 2005



# Denmark



## Fossil CO<sub>2</sub> emissions by sector



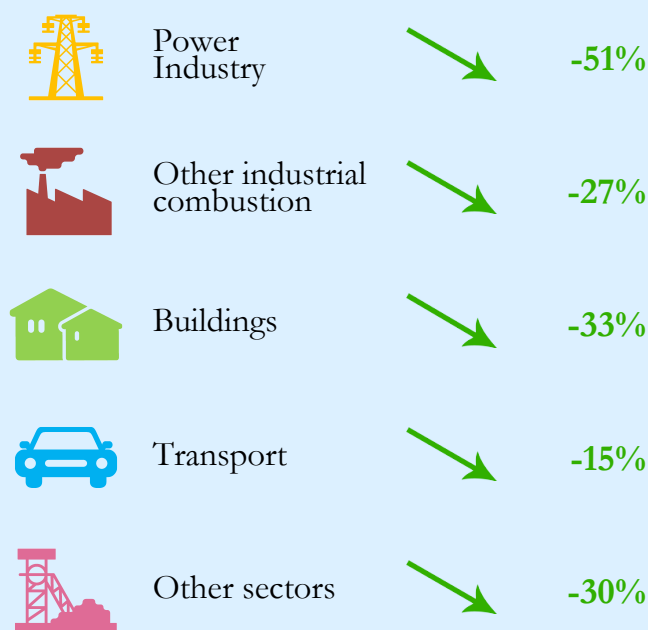
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	33.573	5.855	0.125	5733551
2005	51.485	9.496	0.213	5421702
1990	53.705	10.446	0.309	5141115



### 2017 vs 1990

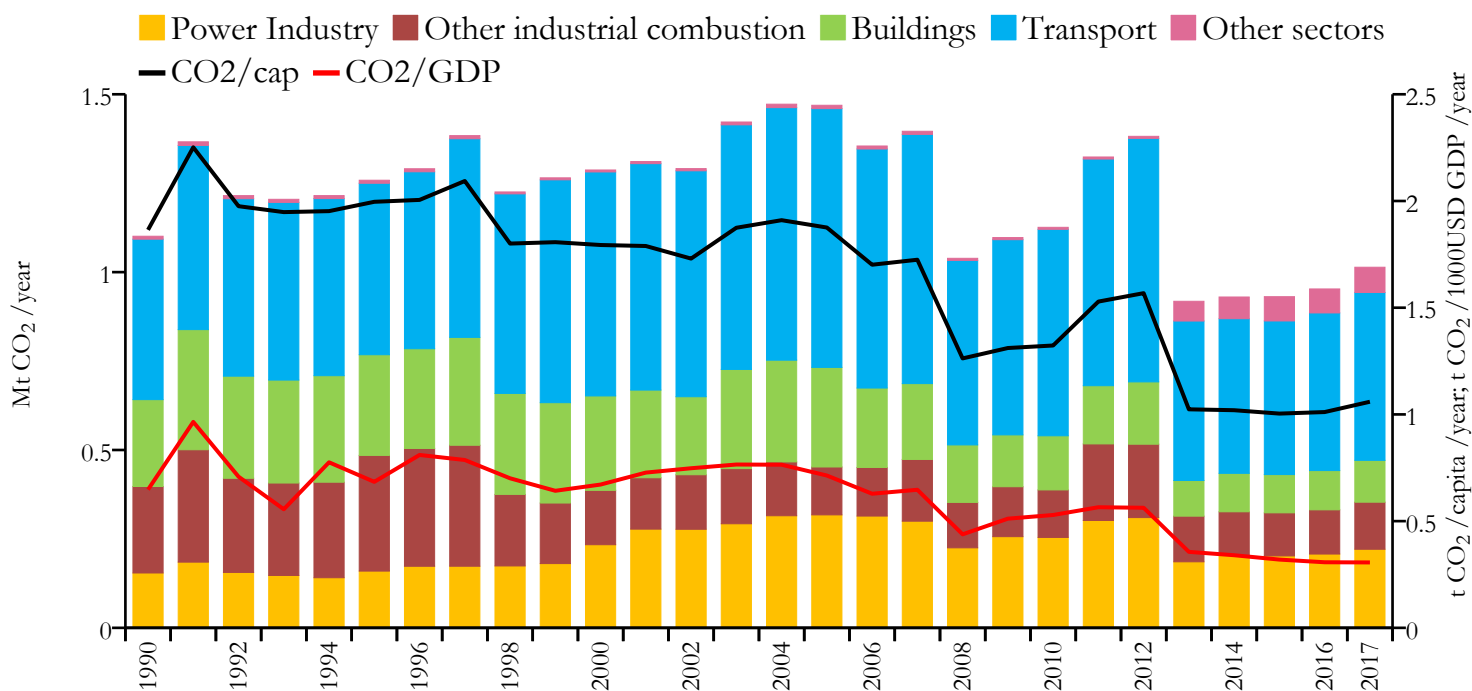


### 2017 vs 2005





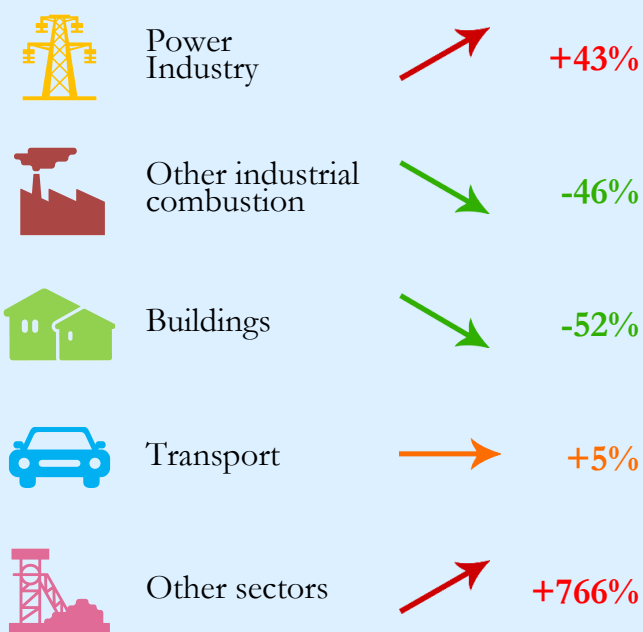
## Fossil CO<sub>2</sub> emissions by sector



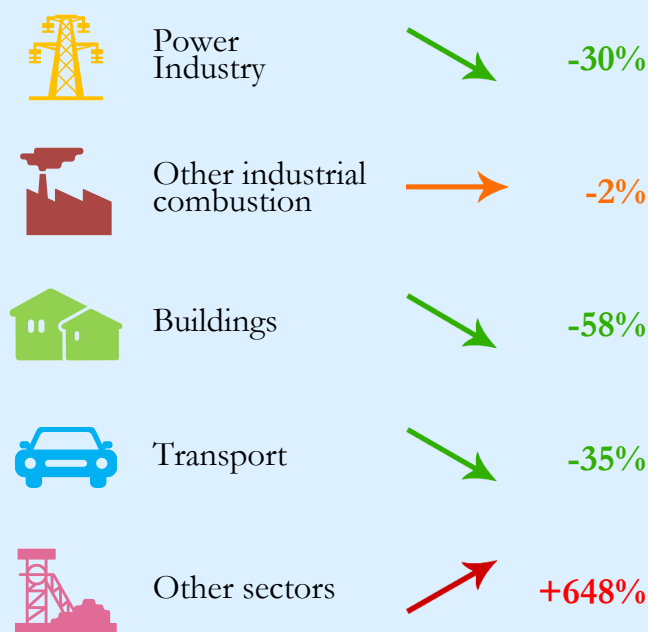
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.014	1.059	0.306	956985
2005	1.469	1.876	0.714	783254
1990	1.101	1.865	0.648	590398



### 2017 vs 1990

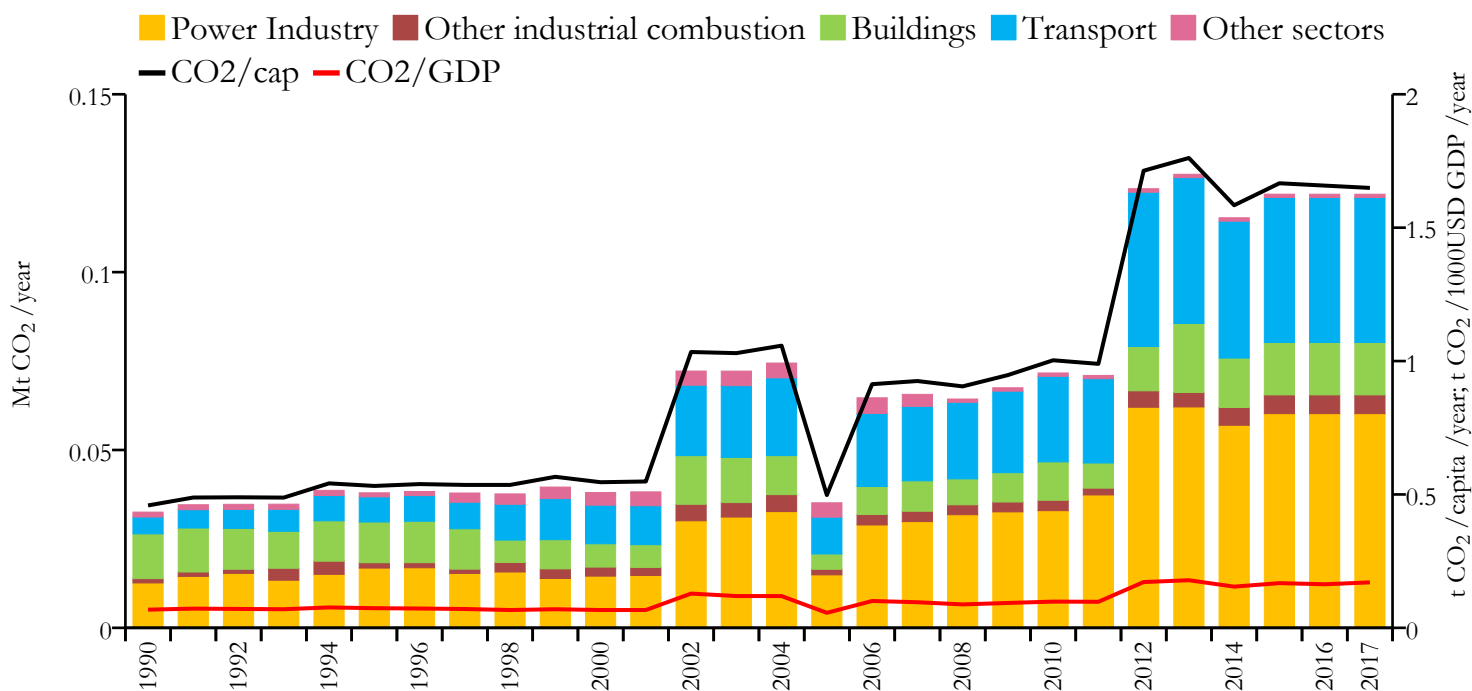


### 2017 vs 2005

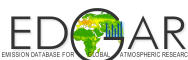




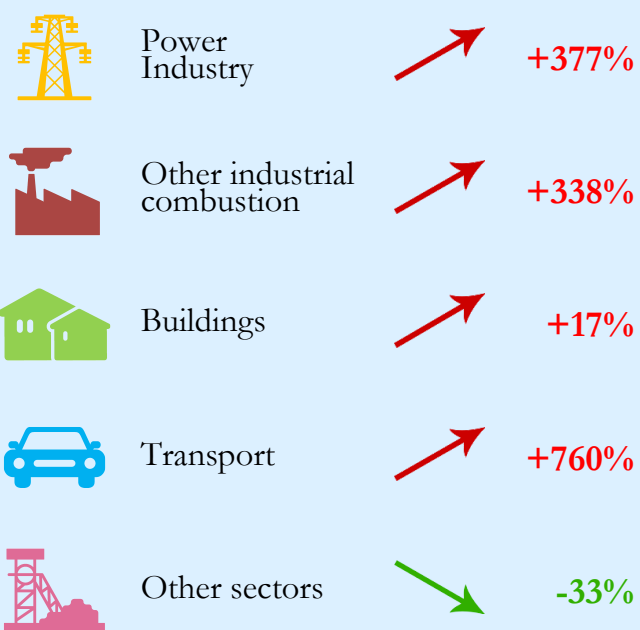
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.122	1.649	0.170	73925
2005	0.035	0.498	0.056	70627
1990	0.033	0.459	0.068	70926



### 2017 vs 1990



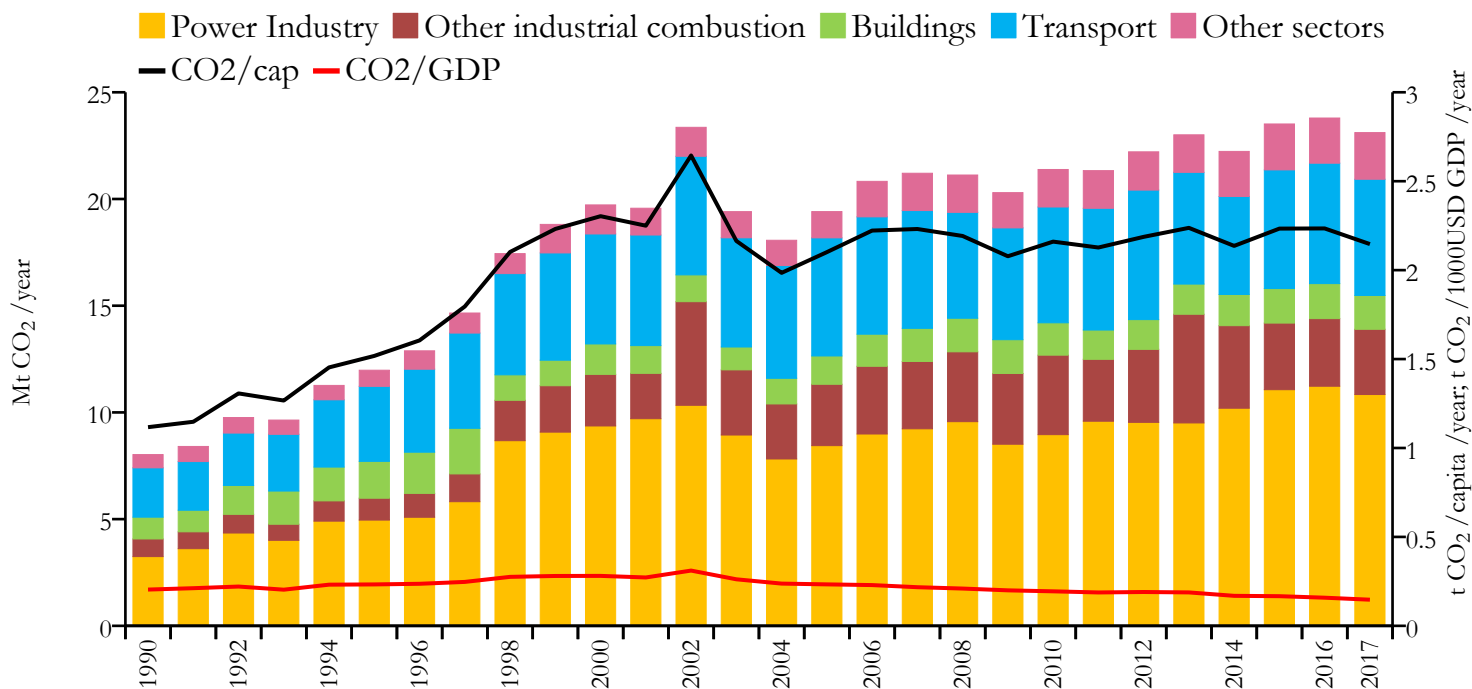
### 2017 vs 2005



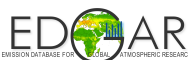
# Dominican Republic



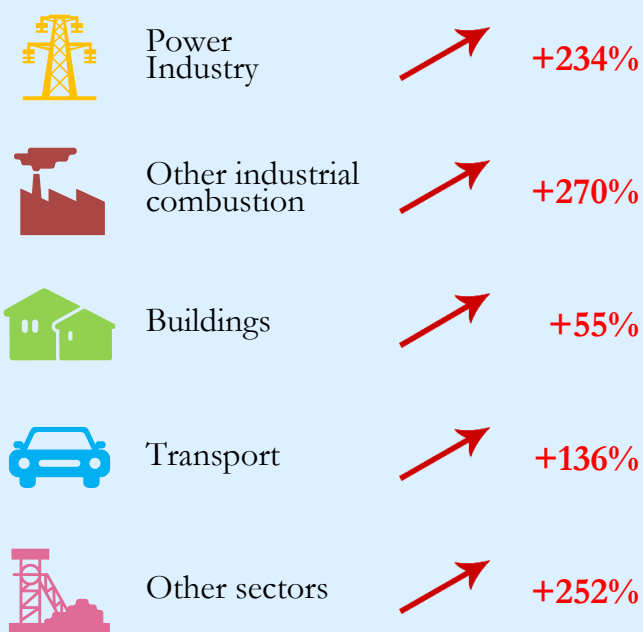
## Fossil CO<sub>2</sub> emissions by sector



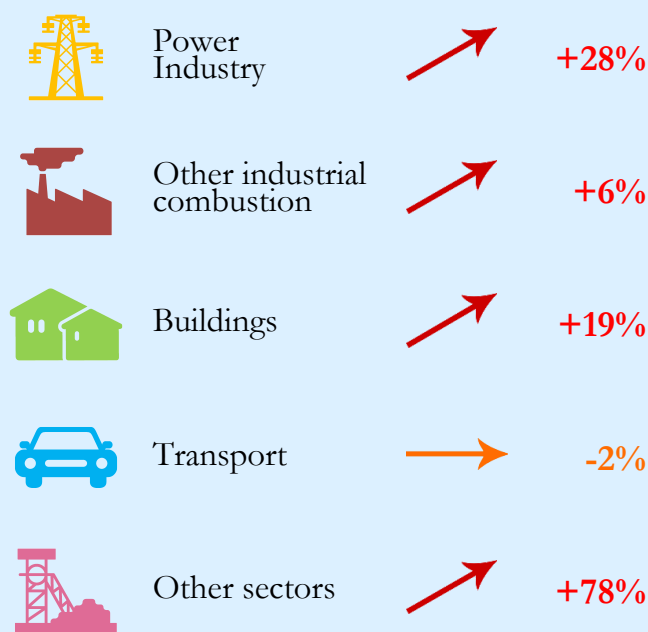
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	23.111	2.146	0.147	10766998
2005	19.409	2.101	0.233	9237566
1990	8.024	1.117	0.204	7183647



### 2017 vs 1990



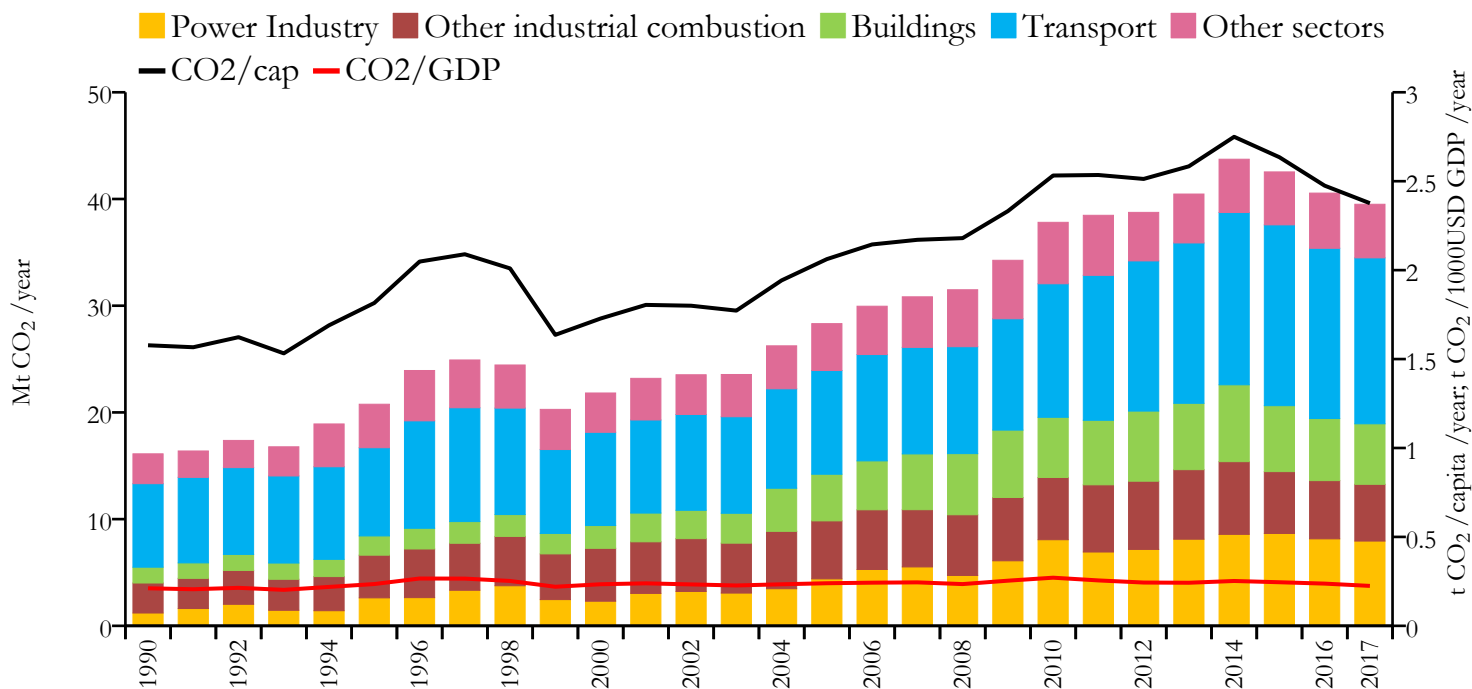
### 2017 vs 2005



# Ecuador



## Fossil CO<sub>2</sub> emissions by sector



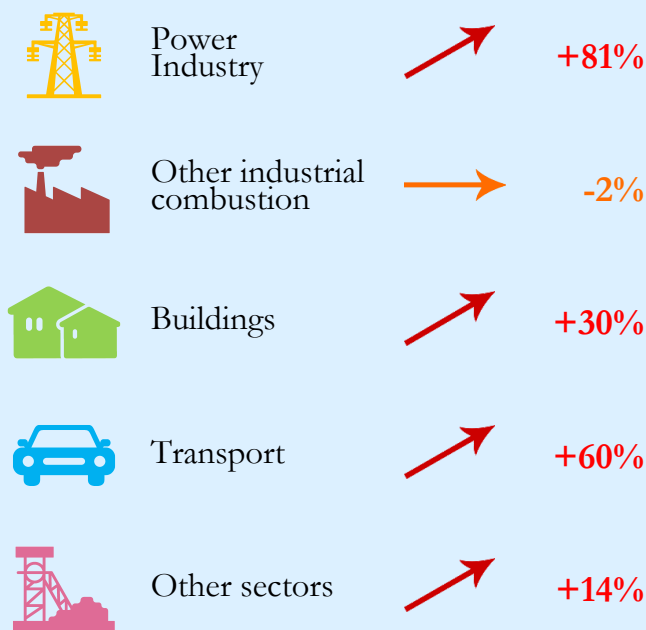
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	39.507	2.376	0.225	16624858
2005	28.320	2.062	0.240	13735233
1990	16.119	1.578	0.211	10218091



### 2017 vs 1990

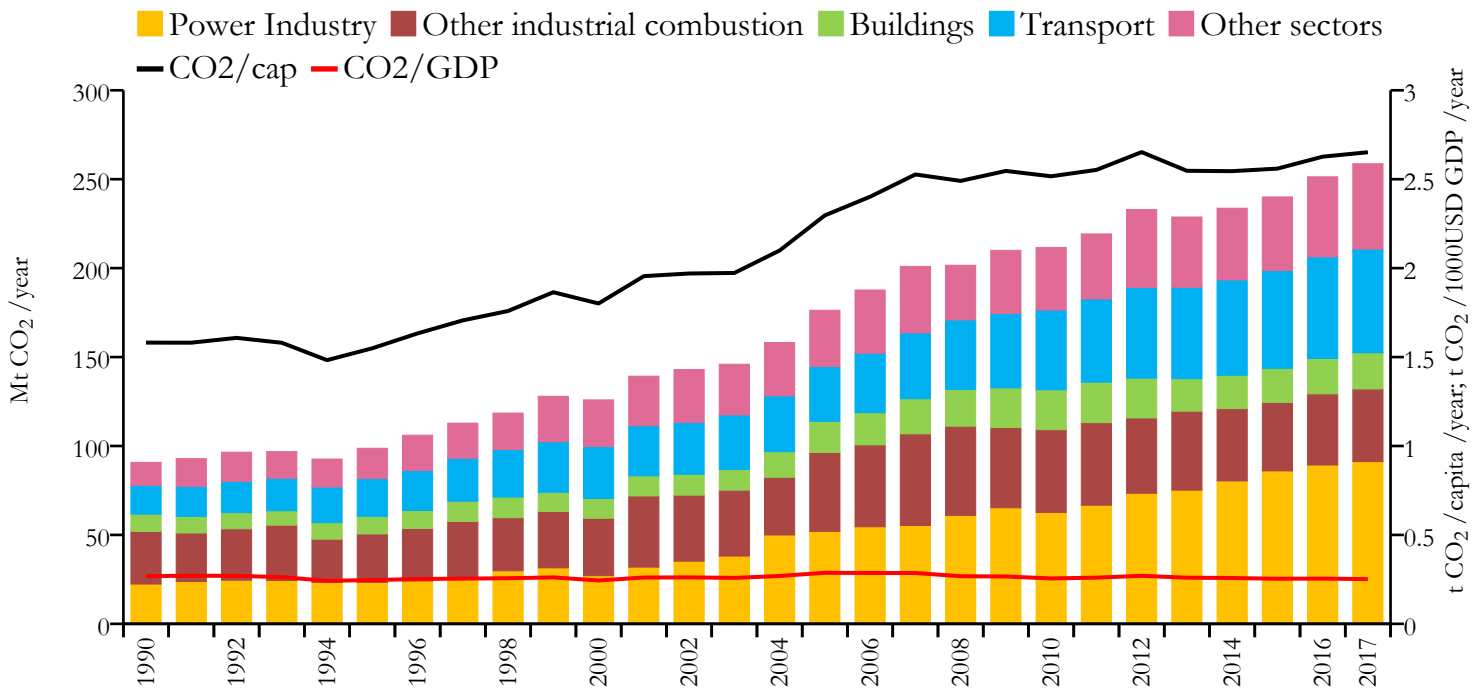


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



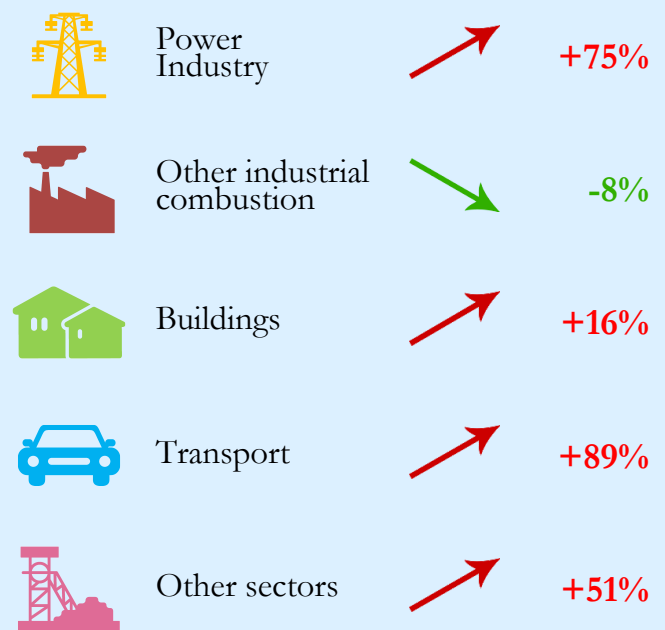
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	258.668	2.652	0.251	97553151
2005	176.329	2.297	0.287	76778149
1990	90.783	1.581	0.268	57412215



### 2017 vs 1990



### 2017 vs 2005

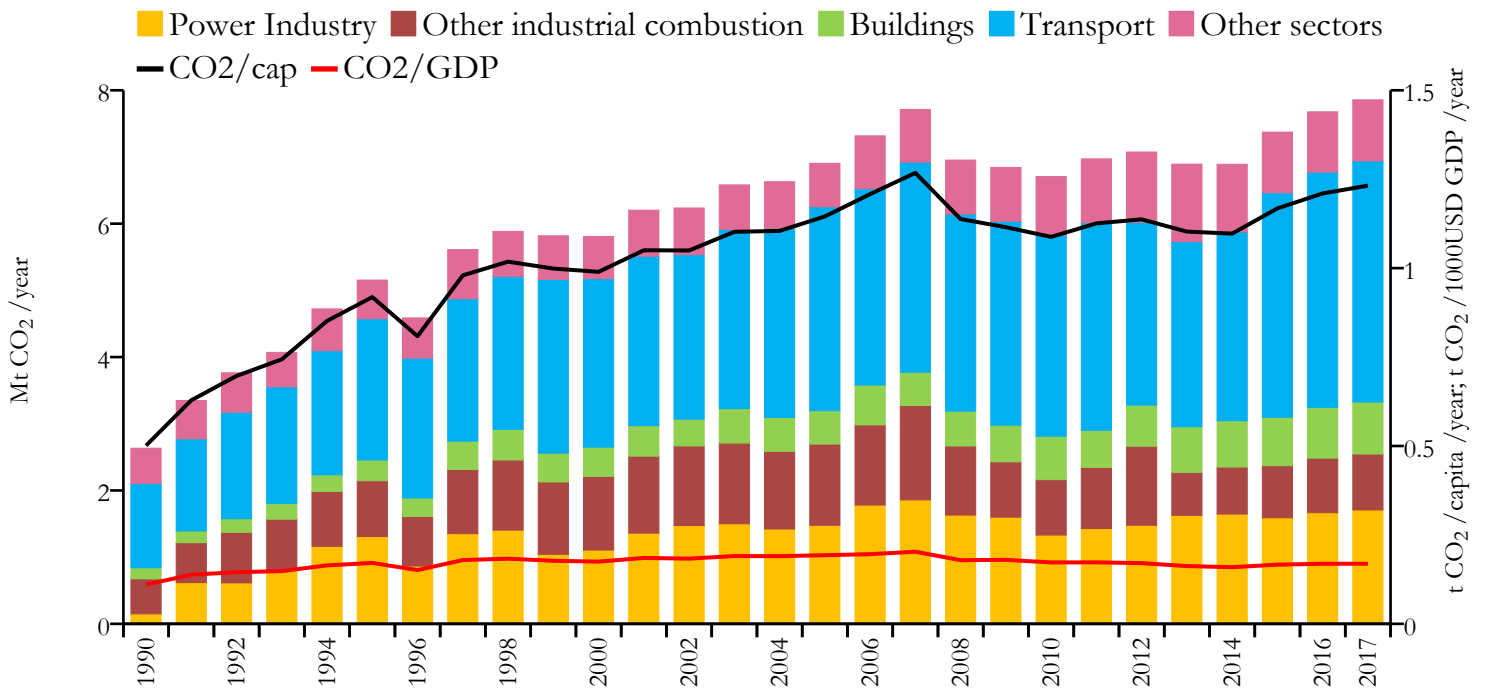




# El Salvador



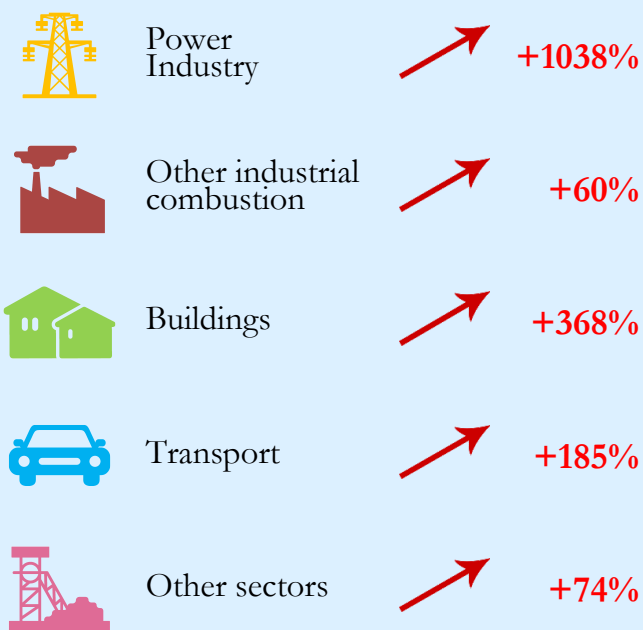
## Fossil CO<sub>2</sub> emissions by sector



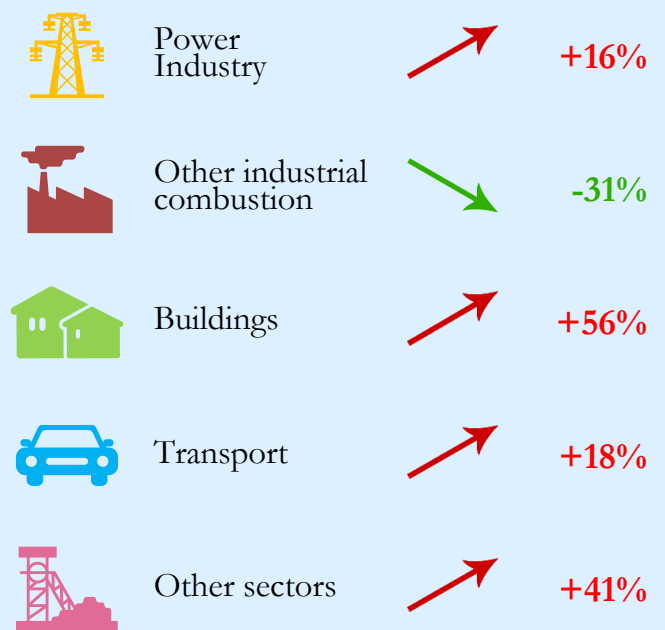
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.857	1.232	0.169	6377853
2005	6.905	1.145	0.193	6028961
1990	2.633	0.501	0.110	5254984



### 2017 vs 1990



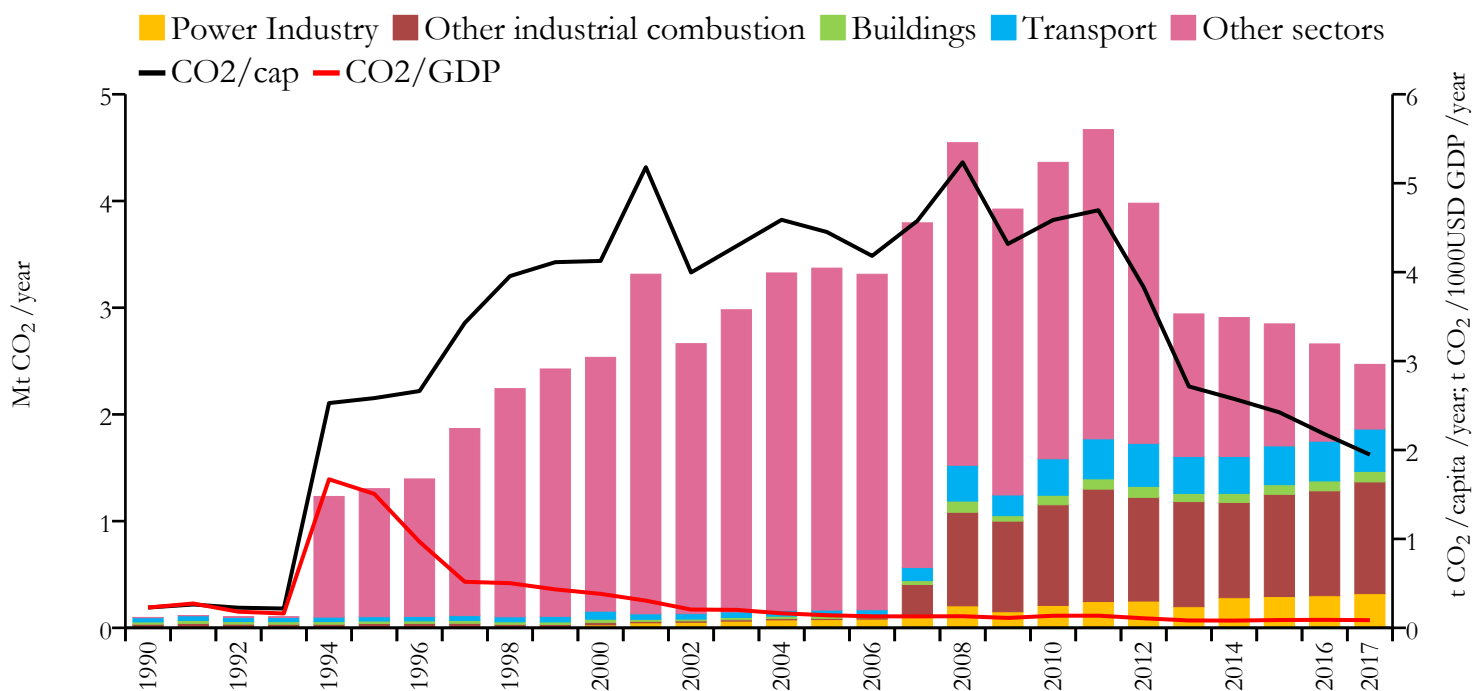
### 2017 vs 2005



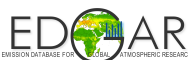
# Equatorial Guinea



## Fossil CO<sub>2</sub> emissions by sector



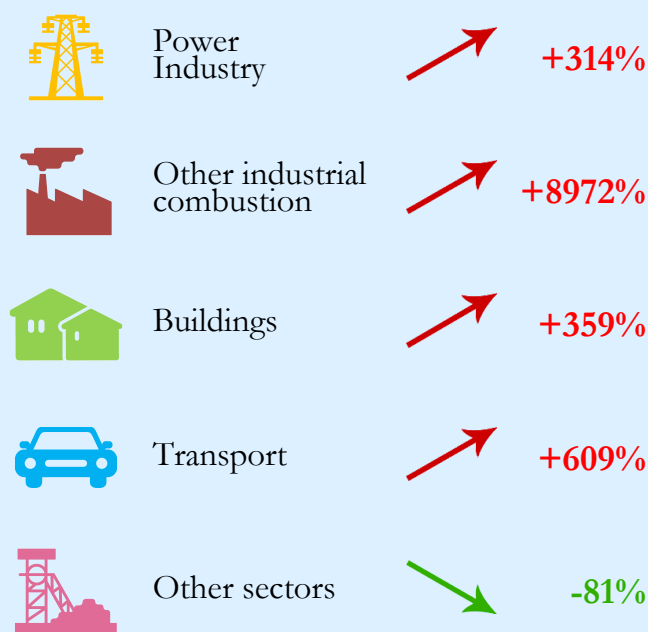
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.469	1.948	0.086	1267689
2005	3.371	4.451	0.142	757317
1990	0.097	0.228	0.228	426846

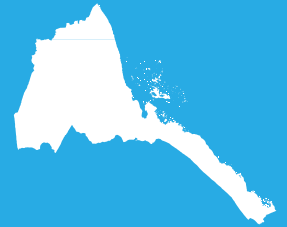


### 2017 vs 1990

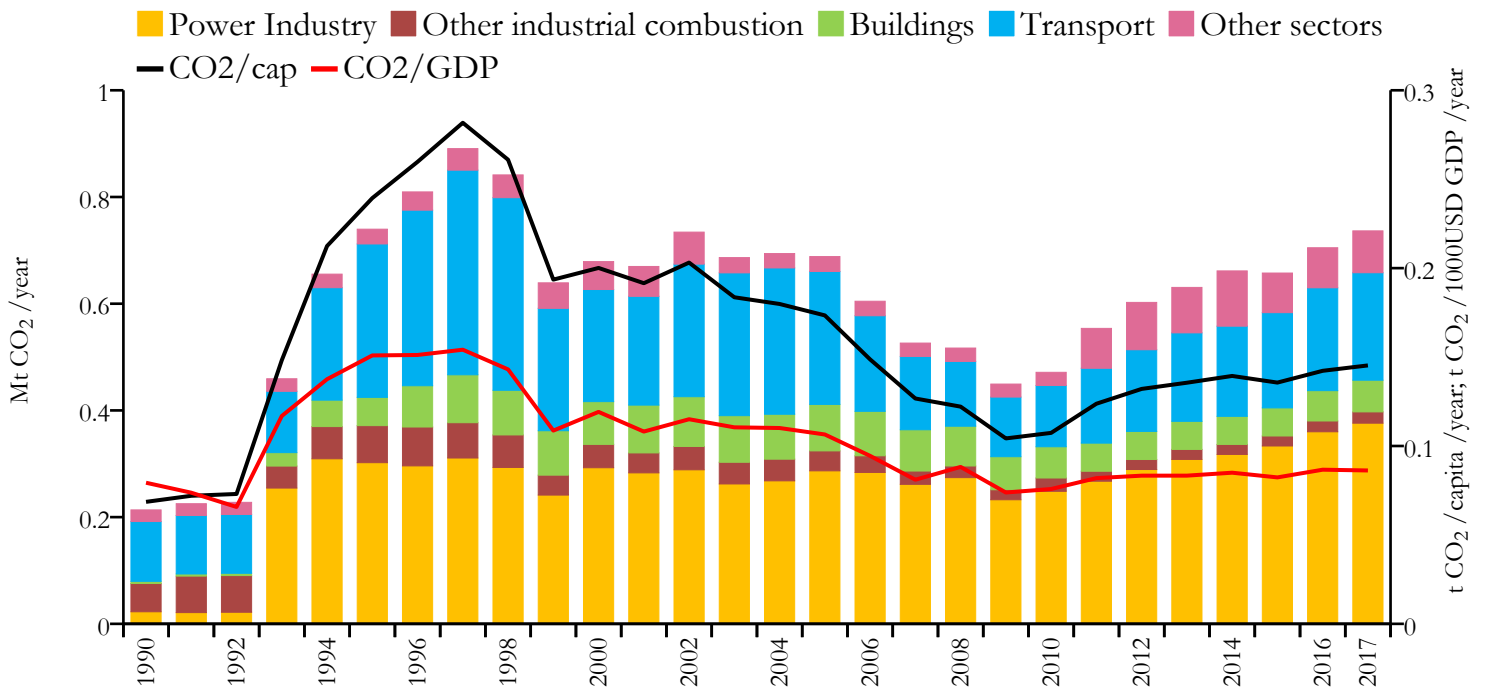


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



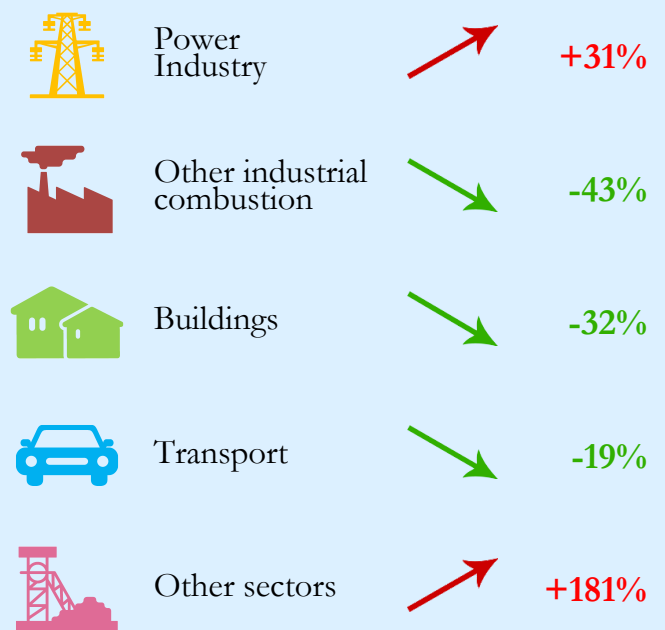
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.737	0.145	0.086	5068831
2005	0.688	0.173	0.106	3969007
1990	0.214	0.069	0.079	3113311



### 2017 vs 1990



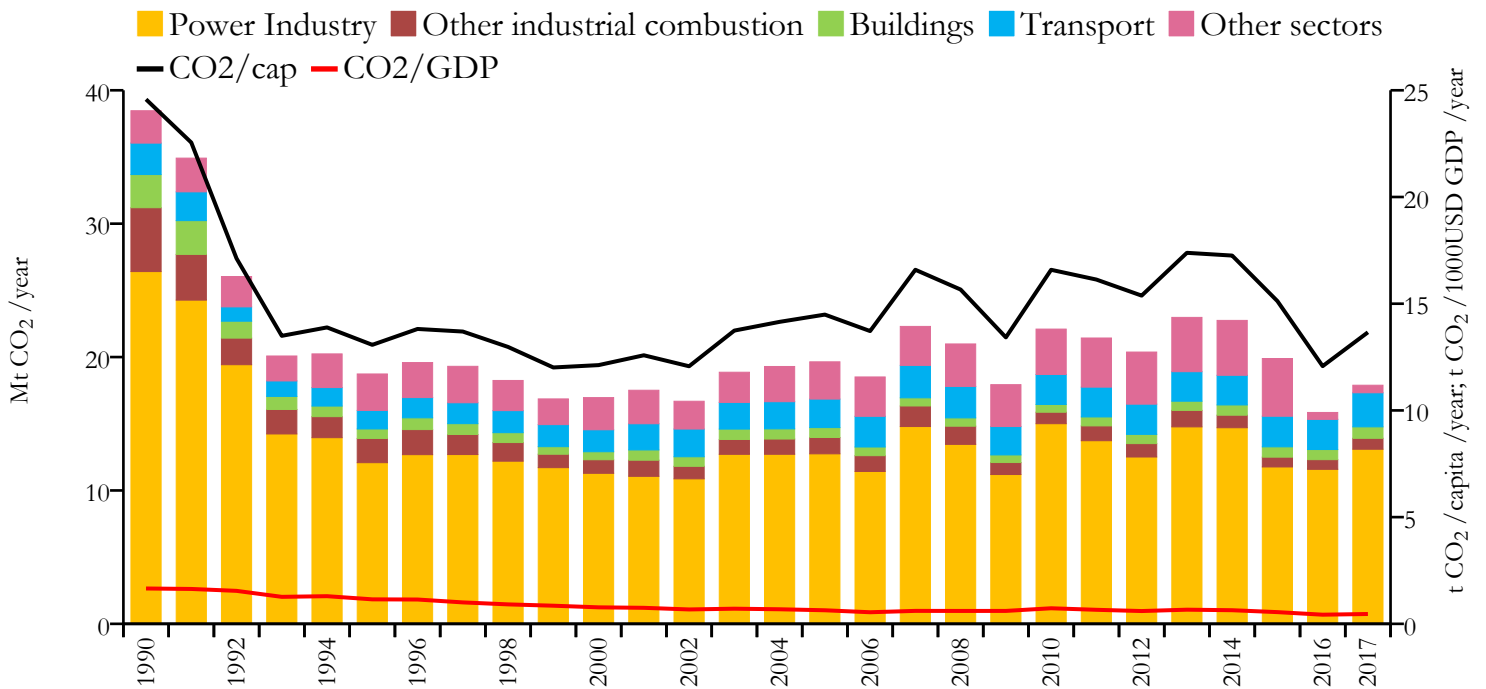
### 2017 vs 2005



# Estonia



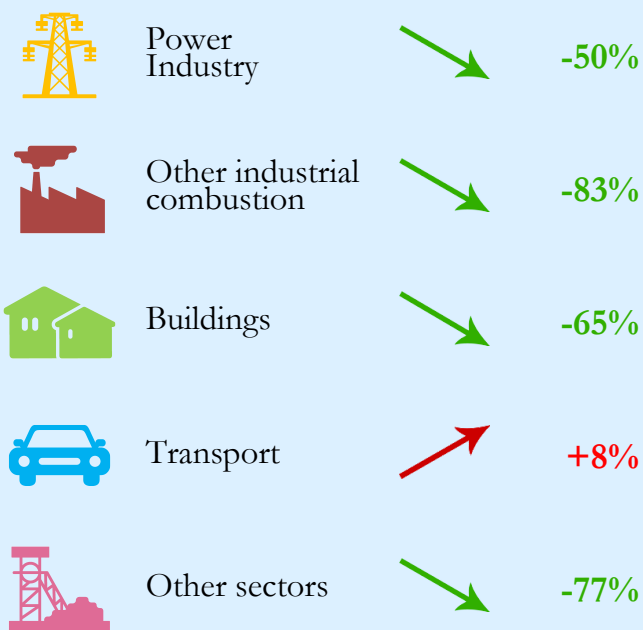
## Fossil CO<sub>2</sub> emissions by sector



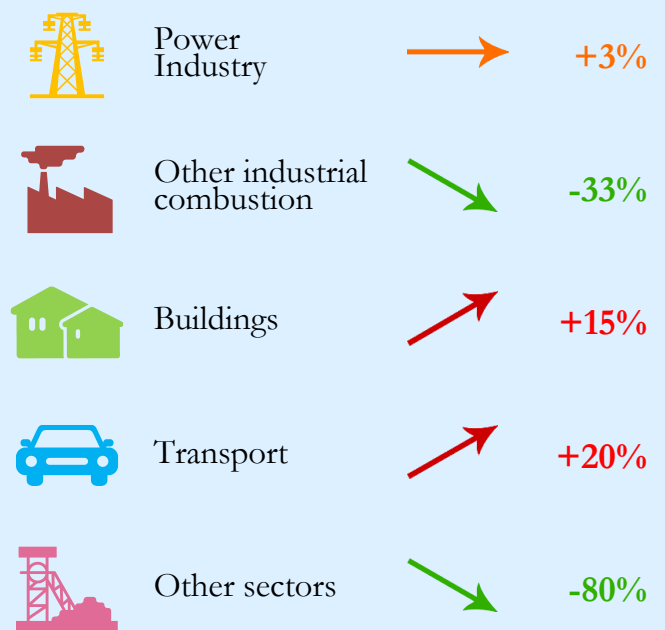
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	17.890	13.660	0.461	1309632
2005	19.643	14.489	0.636	1355648
1990	38.467	24.576	1.656	1565242



### 2017 vs 1990

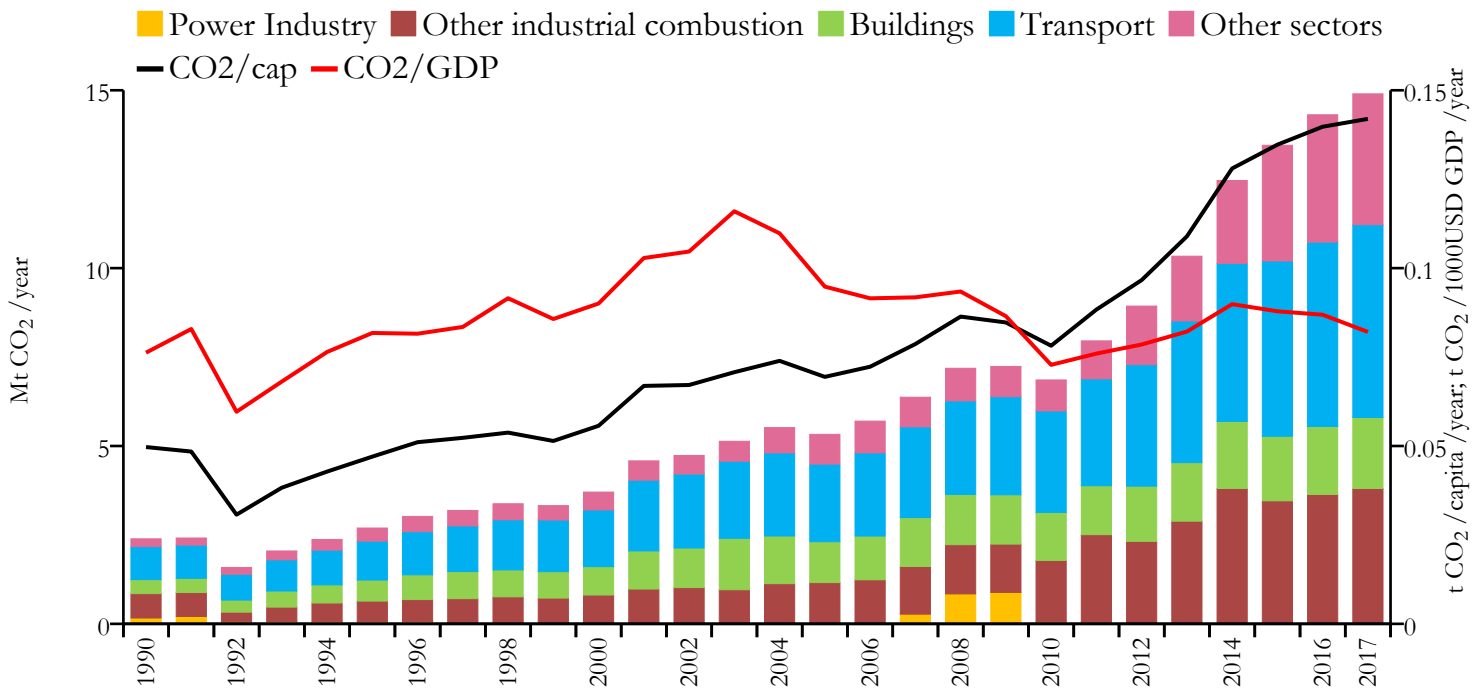


### 2017 vs 2005





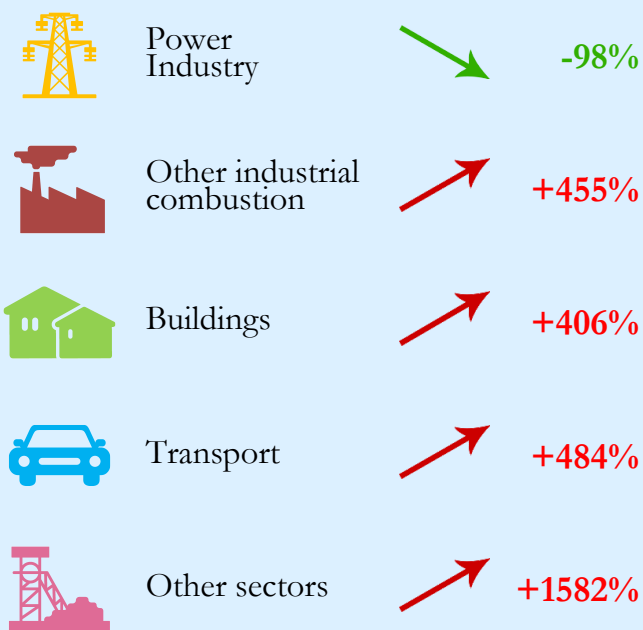
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	14.900	0.142	0.082	104957438
2005	5.327	0.069	0.095	76727083
1990	2.390	0.050	0.076	48086516



### 2017 vs 1990



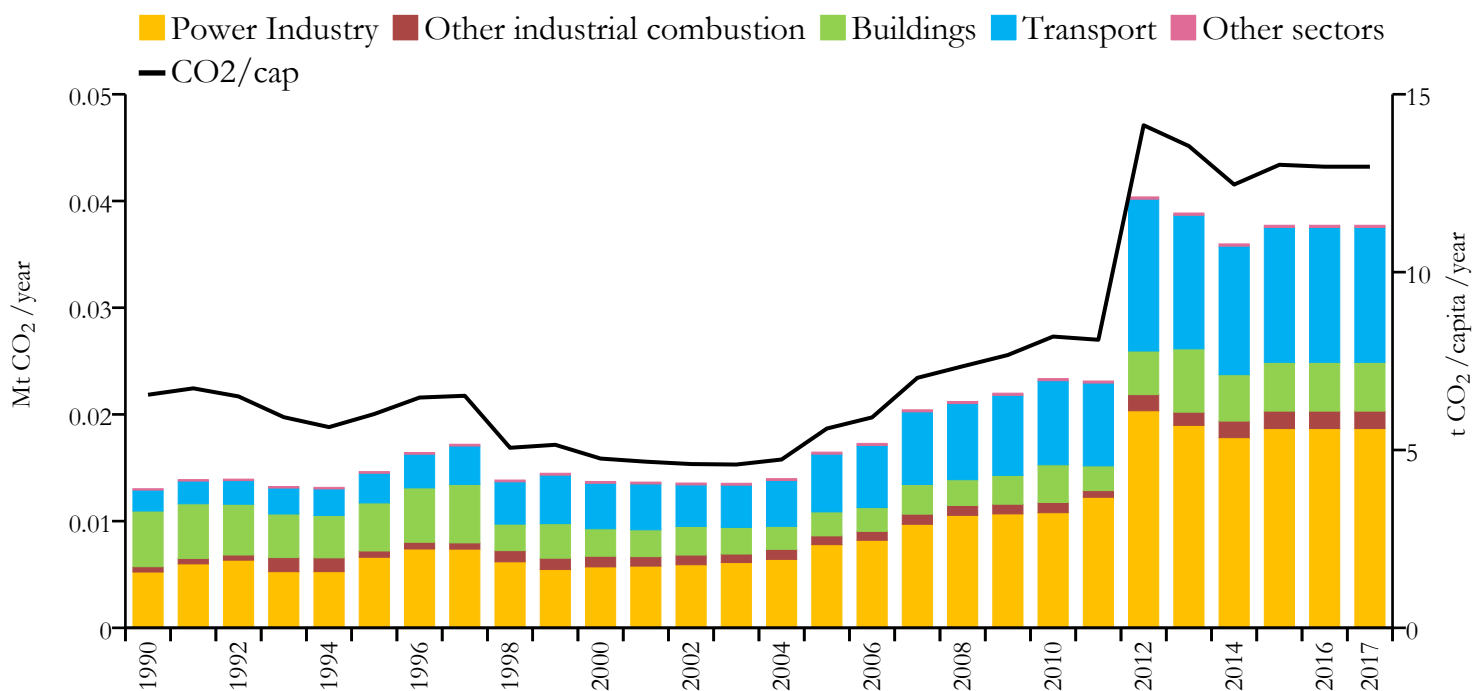
### 2017 vs 2005



# Falkland Islands



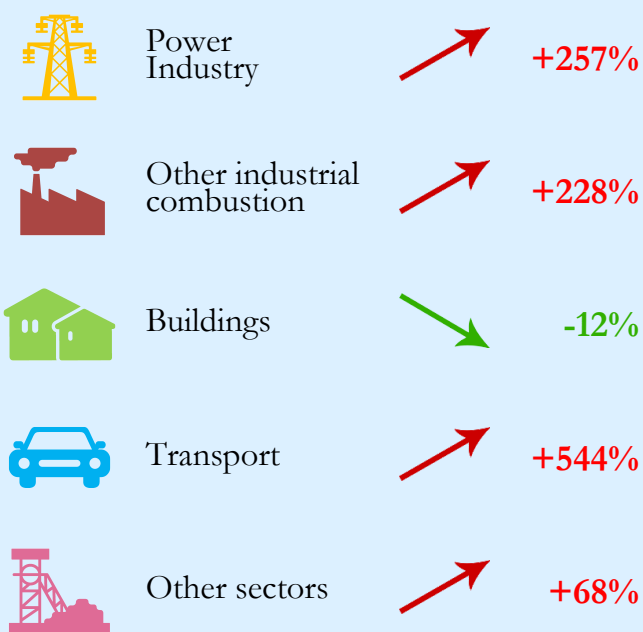
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.038	12.964	n/a	2910
2005	0.016	5.603	n/a	2939
1990	0.013	6.553	n/a	1989



### 2017 vs 1990

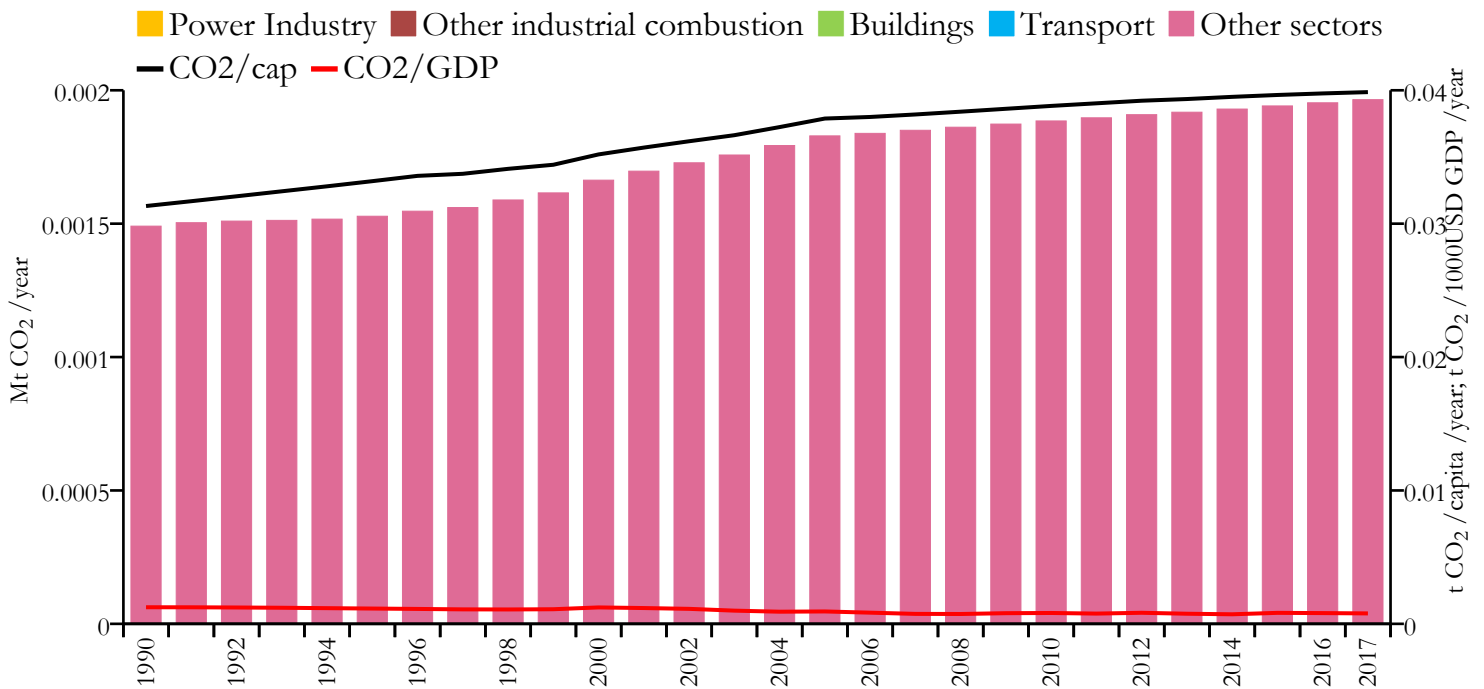


### 2017 vs 2005





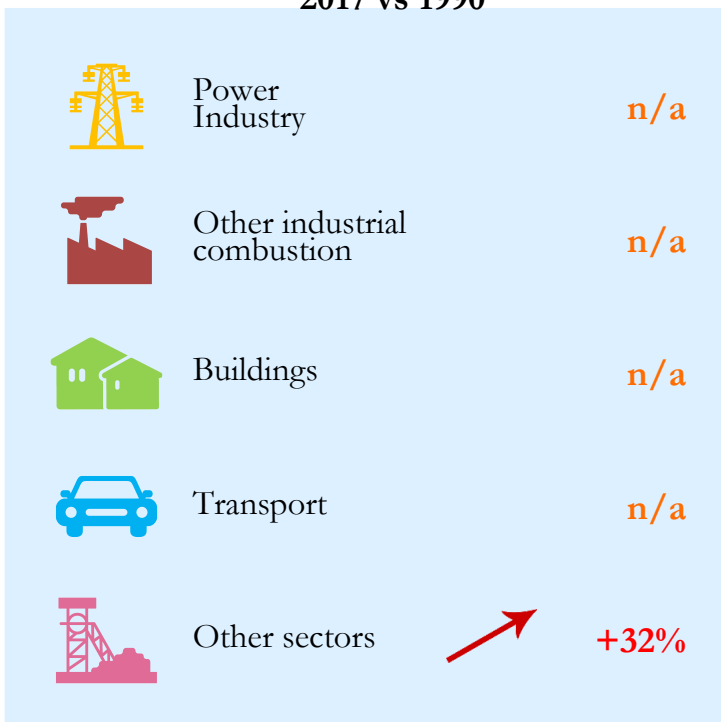
## Fossil CO<sub>2</sub> emissions by sector



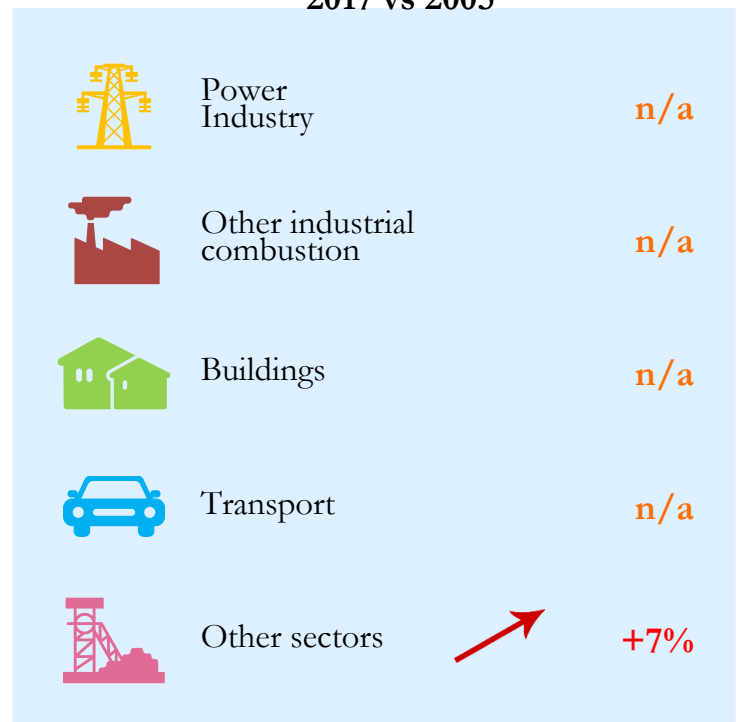
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.002	0.040	0.001	49290
2005	0.002	0.038	0.001	48285
1990	0.001	0.031	0.001	47594



### 2017 vs 1990

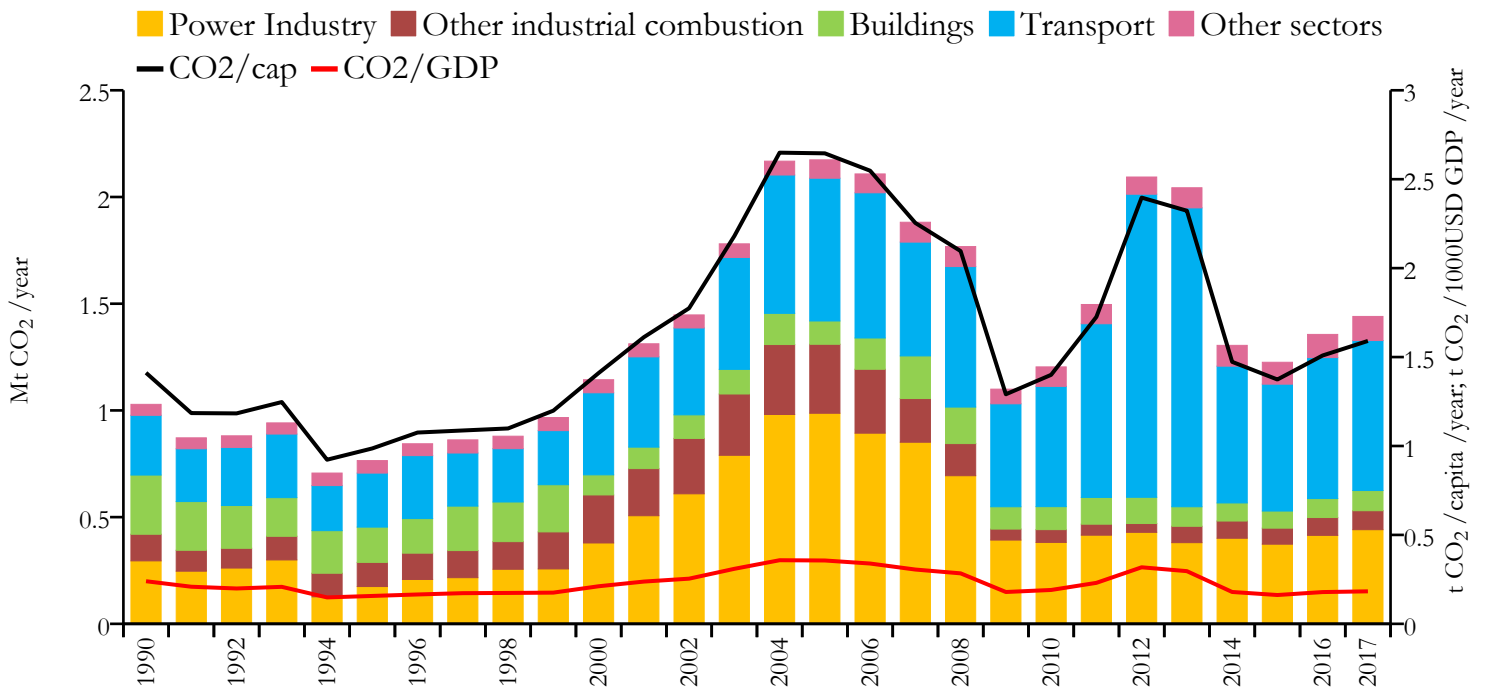


### 2017 vs 2005





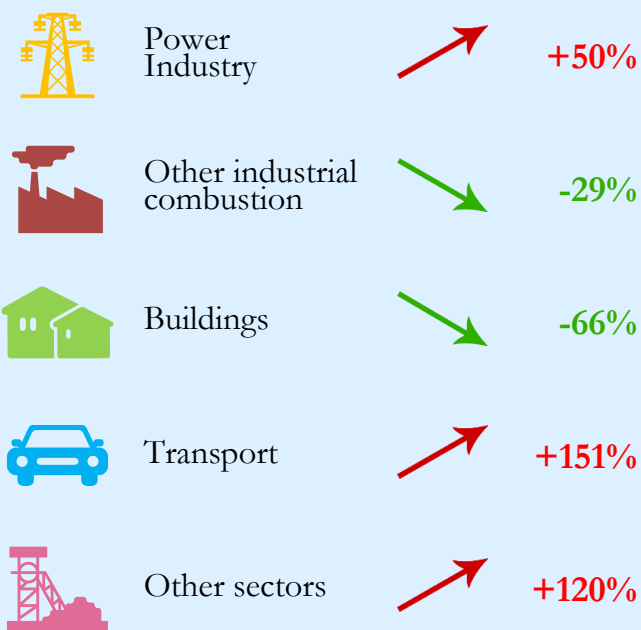
## Fossil CO<sub>2</sub> emissions by sector



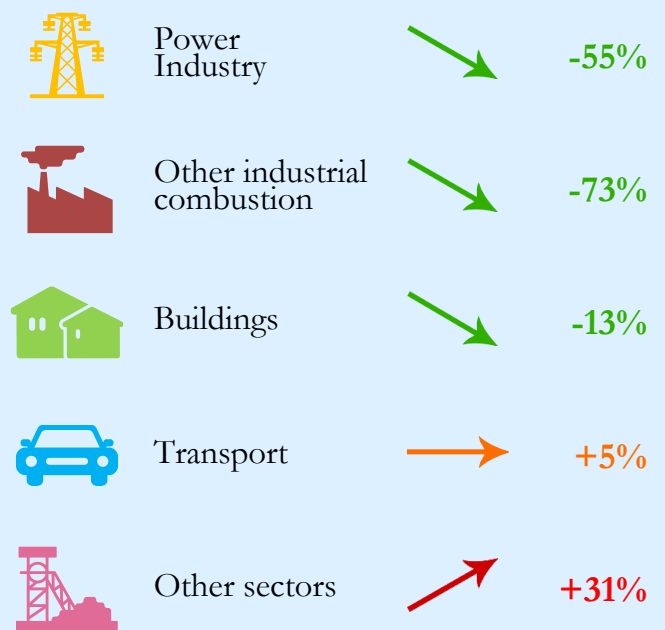
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.440	1.591	0.183	905502
2005	2.174	2.645	0.356	821817
1990	1.028	1.412	0.240	728628



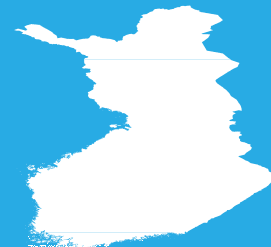
### 2017 vs 1990



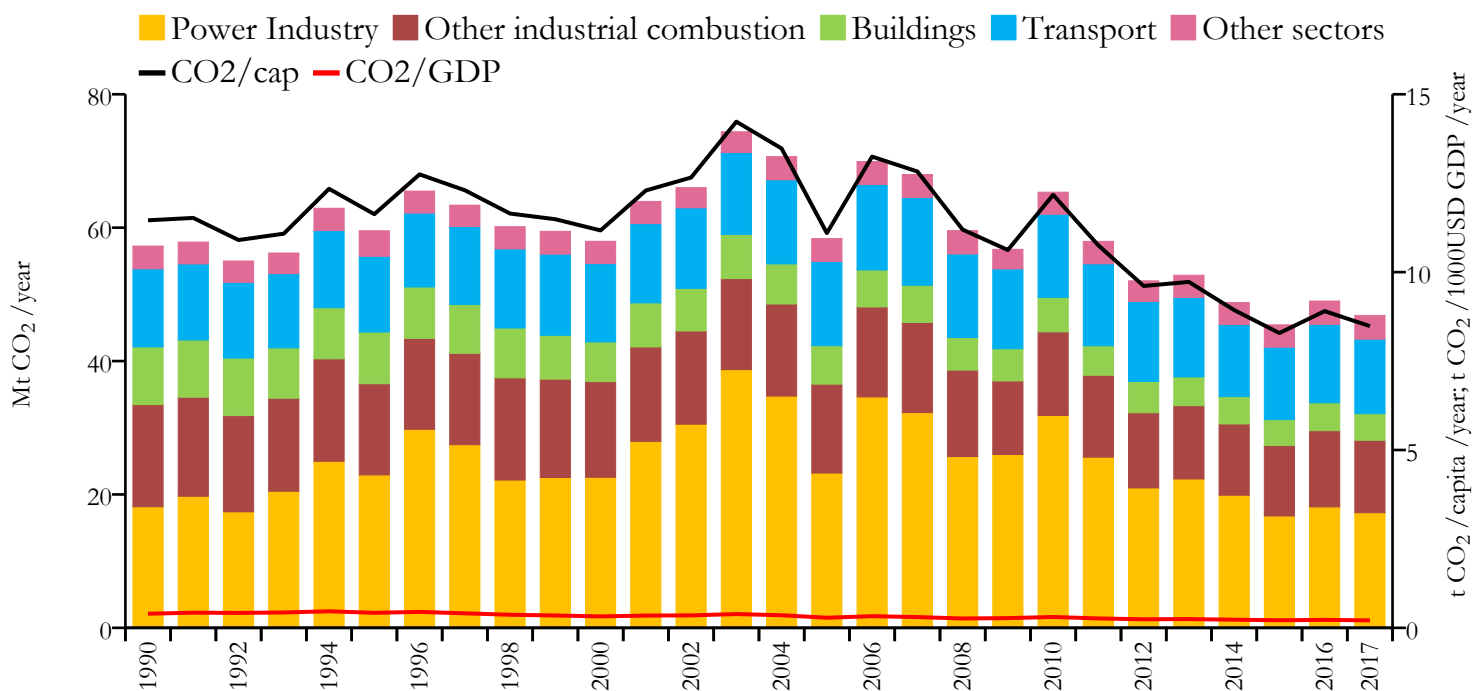
### 2017 vs 2005







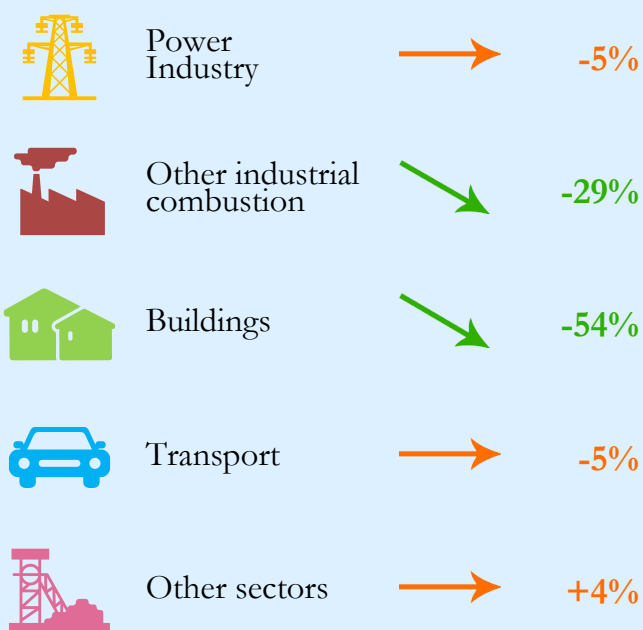
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	46.846	8.482	0.209	5523231
2005	58.360	11.097	0.284	5258927
1990	57.242	11.457	0.397	4996222



### 2017 vs 1990



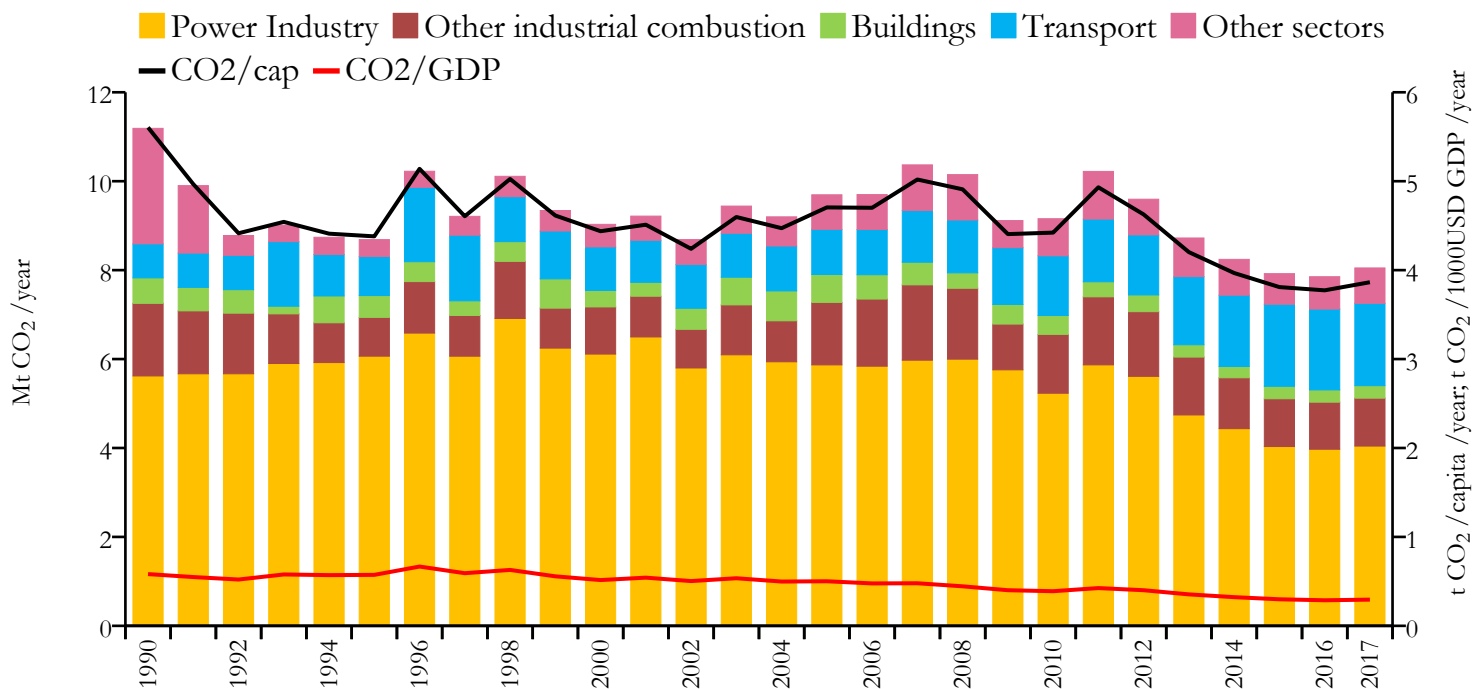
### 2017 vs 2005



# former Yugoslav Republic of Macedonia, the



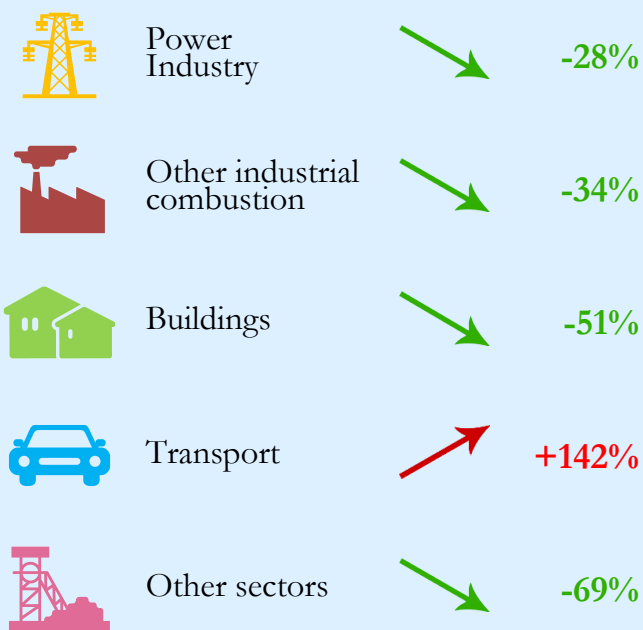
## Fossil CO<sub>2</sub> emissions by sector



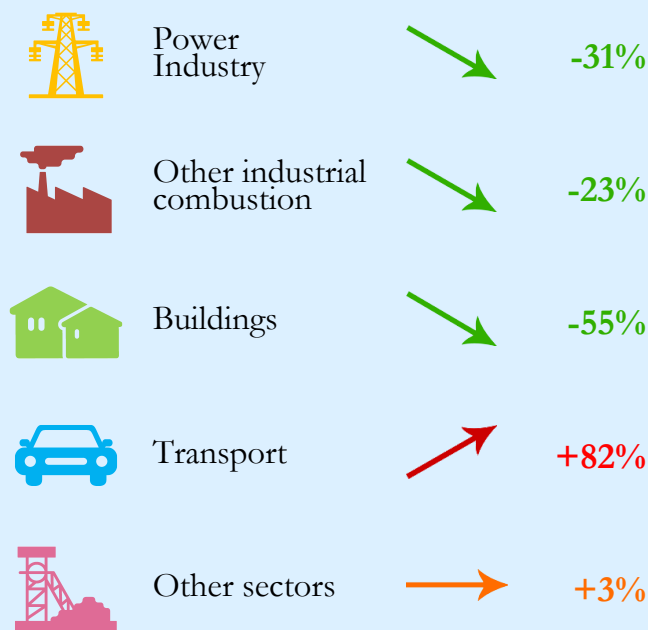
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	8.049	3.864	0.295	2083160
2005	9.694	4.705	0.501	2060272
1990	11.189	5.605	0.582	1996228



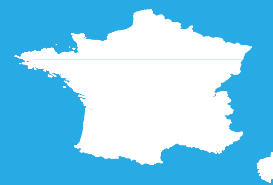
### 2017 vs 1990



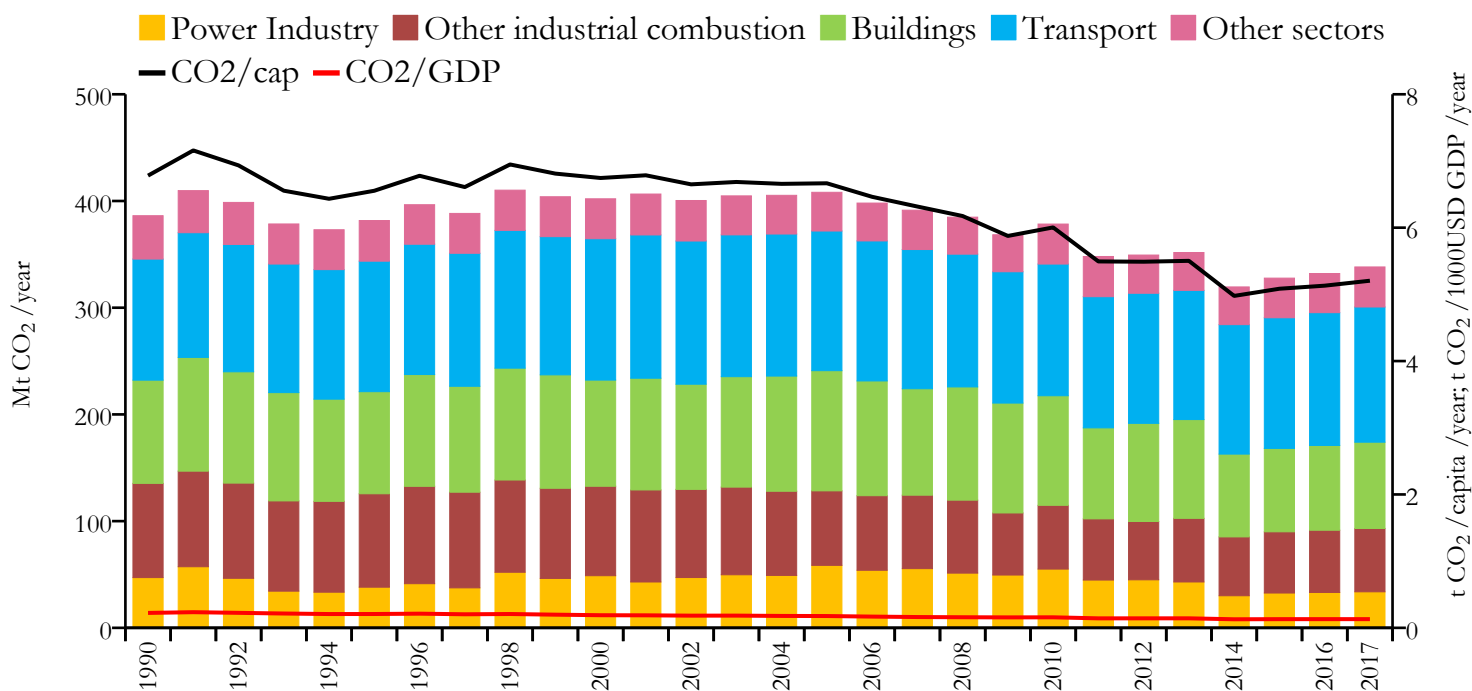
### 2017 vs 2005



# France and Monaco



## Fossil CO<sub>2</sub> emissions by sector



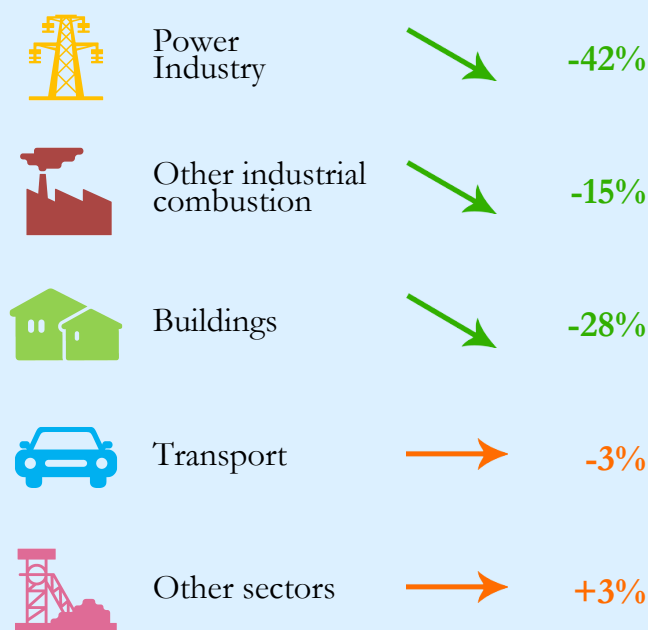
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	338.193	5.205	0.131	64979548
2005	408.158	6.666	0.177	61233900
1990	386.214	6.780	0.224	56960835



### 2017 vs 1990



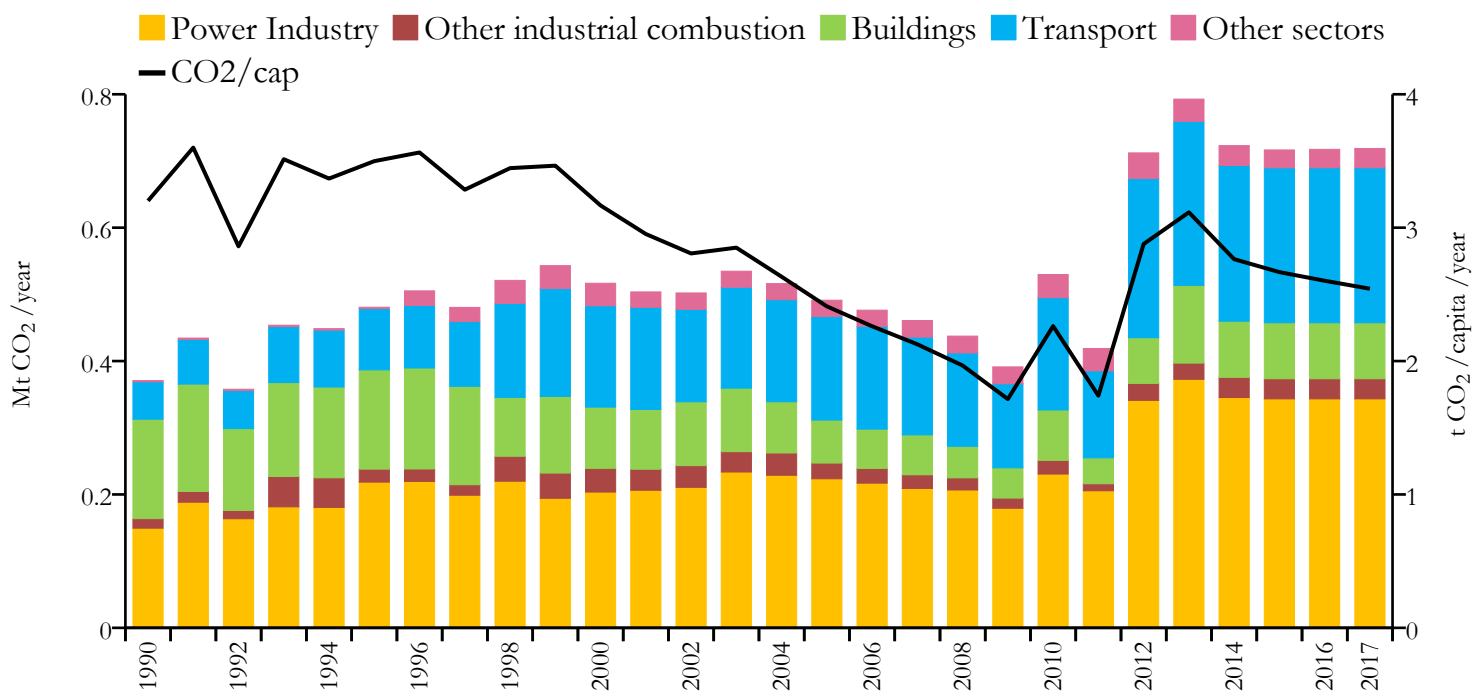
### 2017 vs 2005



# French Guiana



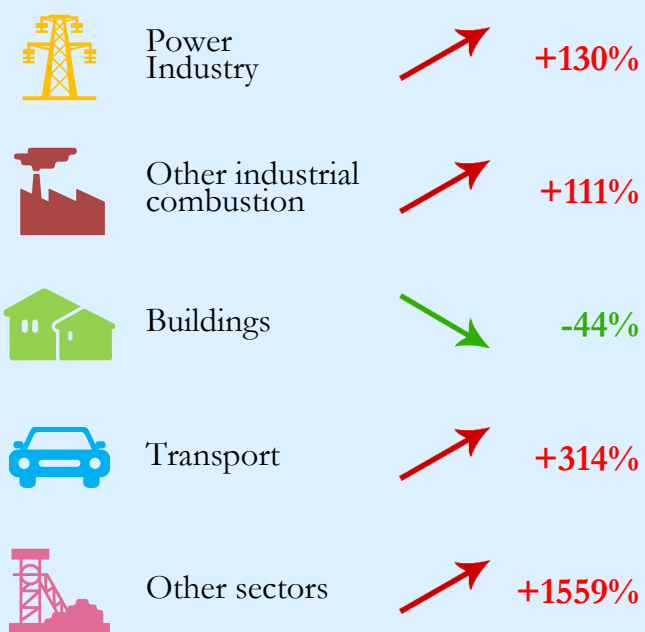
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.719	2.542	n/a	282731
2005	0.491	2.410	n/a	203826
1990	0.371	3.201	n/a	115784



### 2017 vs 1990



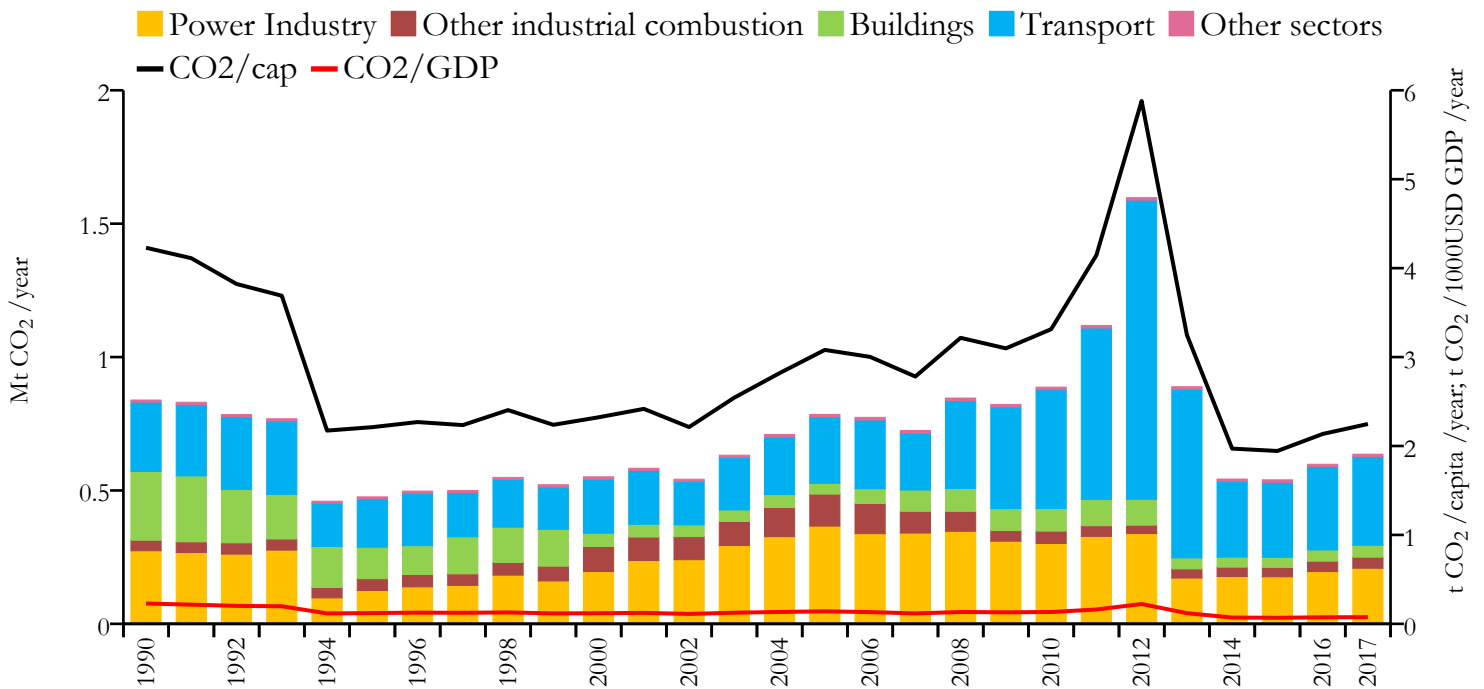
### 2017 vs 2005



# French Polynesia



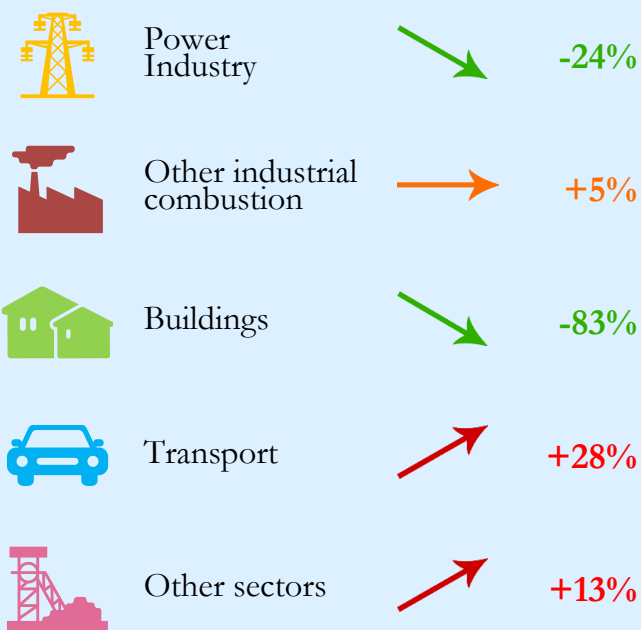
## Fossil CO<sub>2</sub> emissions by sector



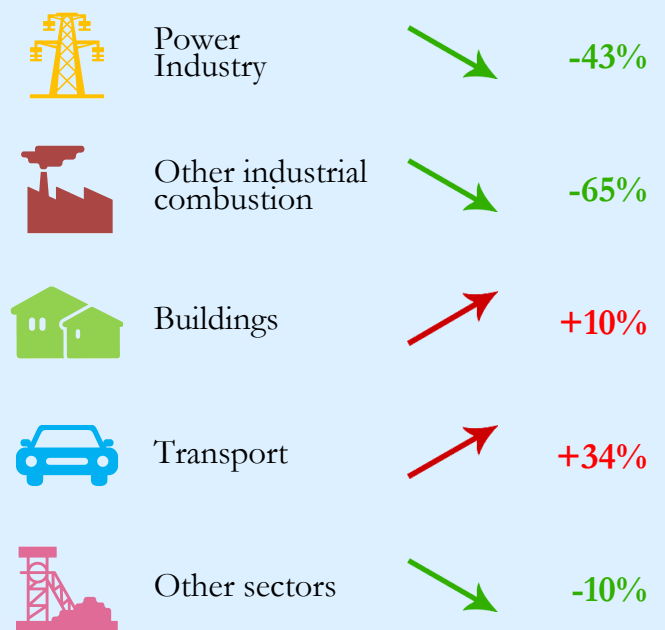
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.636	2.247	0.075	283007
2005	0.785	3.080	0.141	254886
1990	0.839	4.229	0.229	198375



### 2017 vs 1990

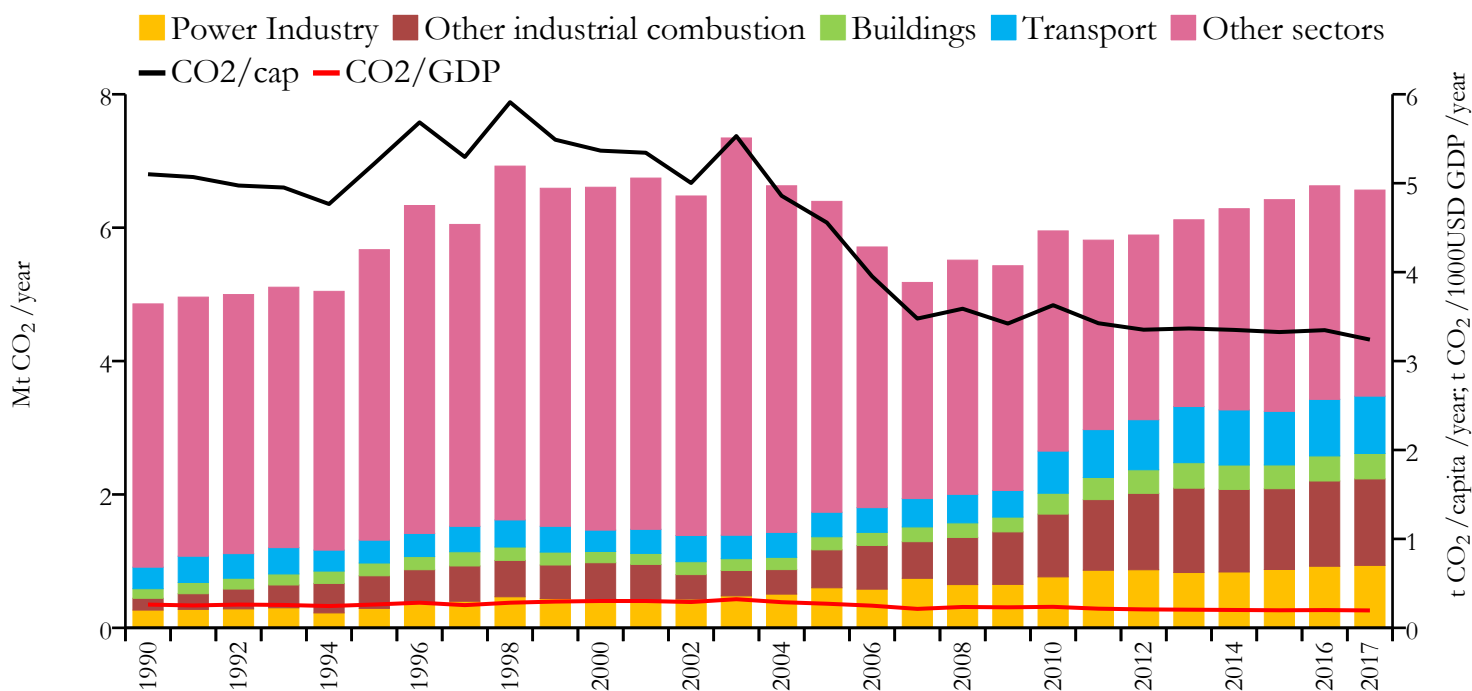


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



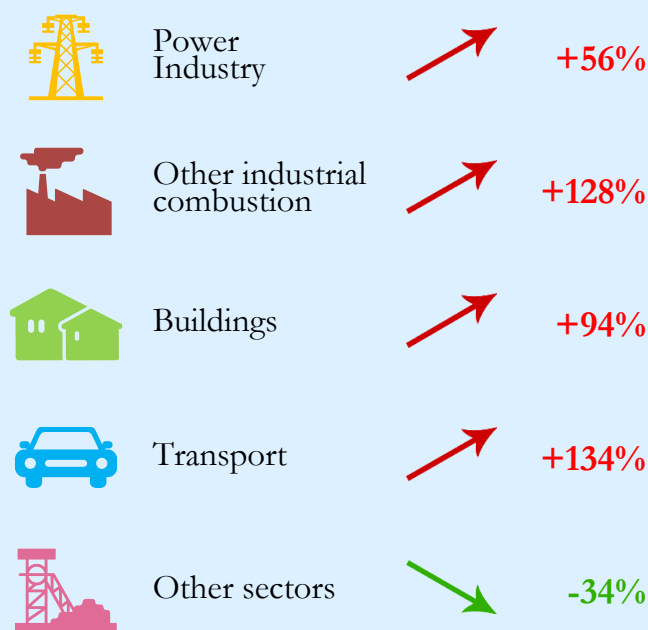
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	6.564	3.241	0.196	2025137
2005	6.394	4.557	0.271	1403126
1990	4.857	5.101	0.262	952212



### 2017 vs 1990

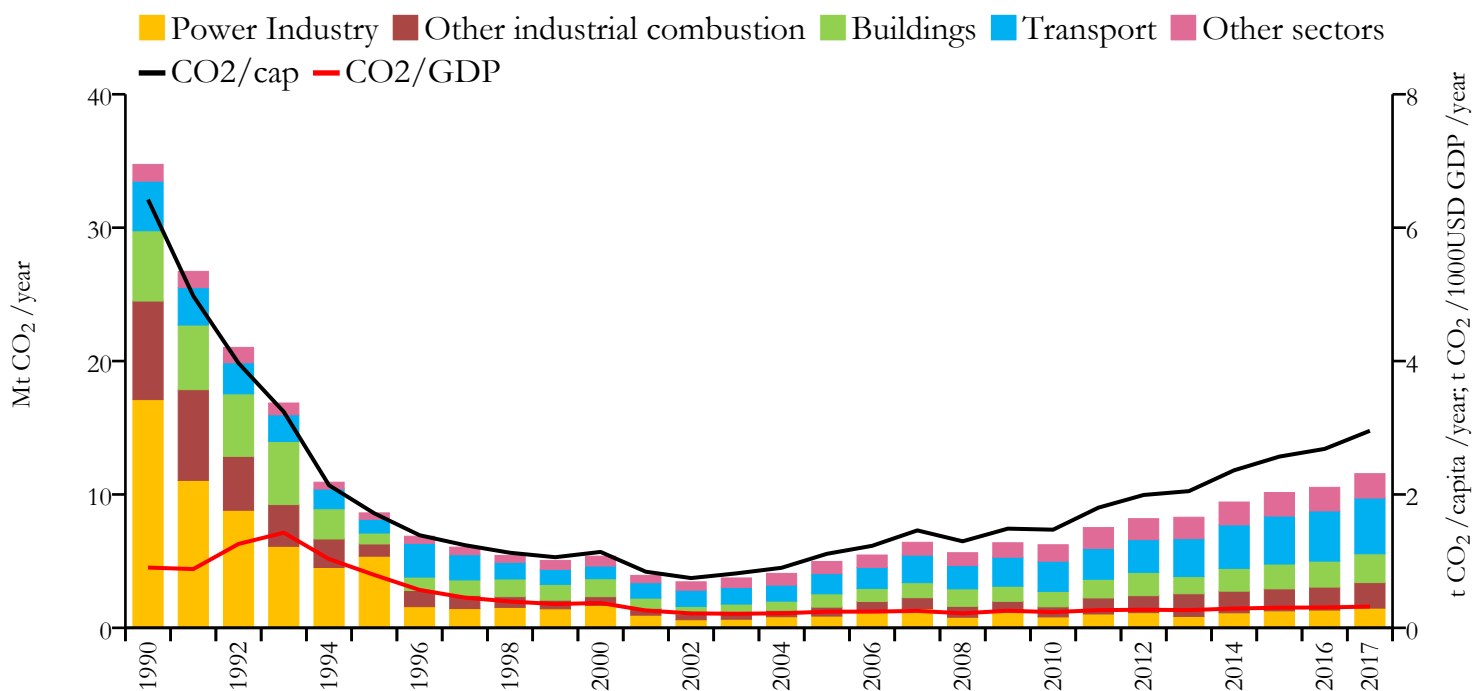


### 2017 vs 2005





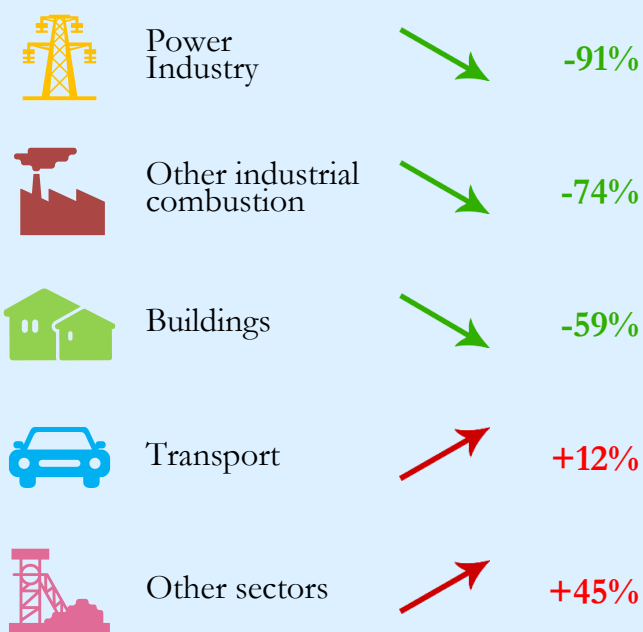
## Fossil CO<sub>2</sub> emissions by sector



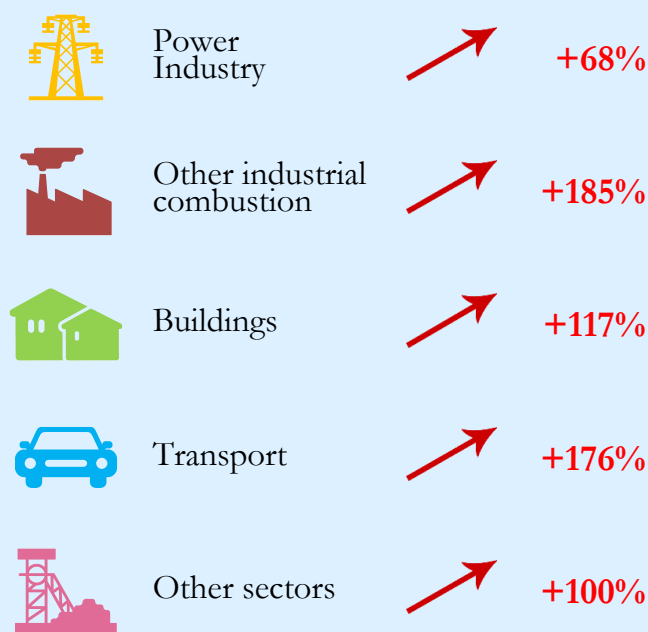
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	11.558	2.954	0.319	3912061
2005	4.979	1.110	0.242	4486547
1990	34.745	6.422	0.904	5410372



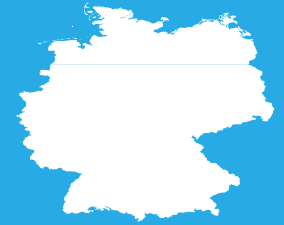
### 2017 vs 1990



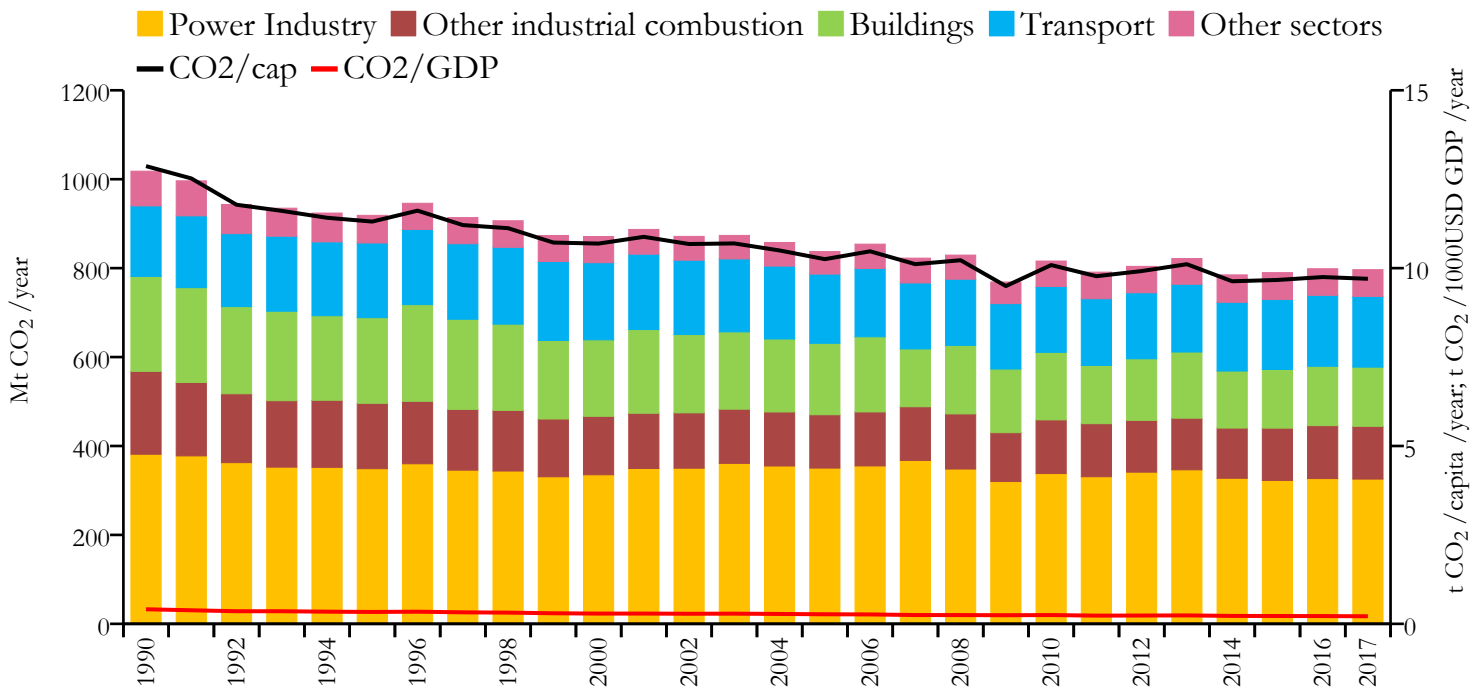
### 2017 vs 2005



# Germany



## Fossil CO<sub>2</sub> emissions by sector



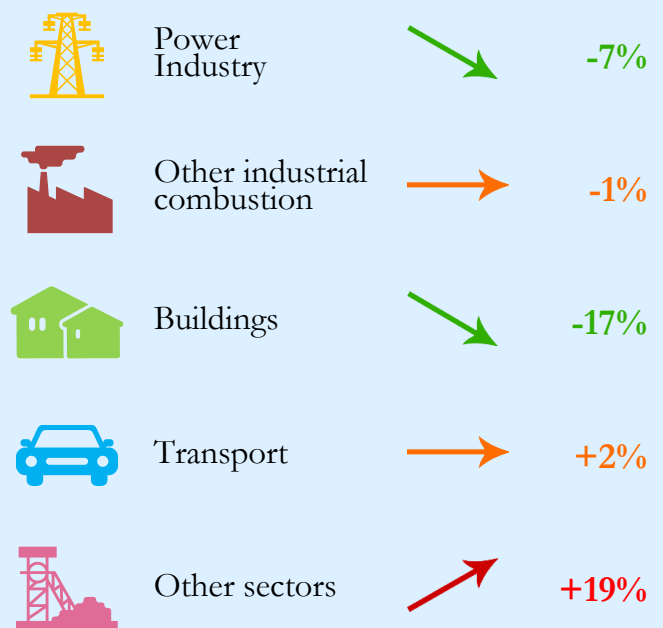
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	796.529	9.700	0.213	82114224
2005	837.284	10.252	0.269	81671234
1990	1018.097	12.868	0.410	79118326



### 2017 vs 1990



### 2017 vs 2005

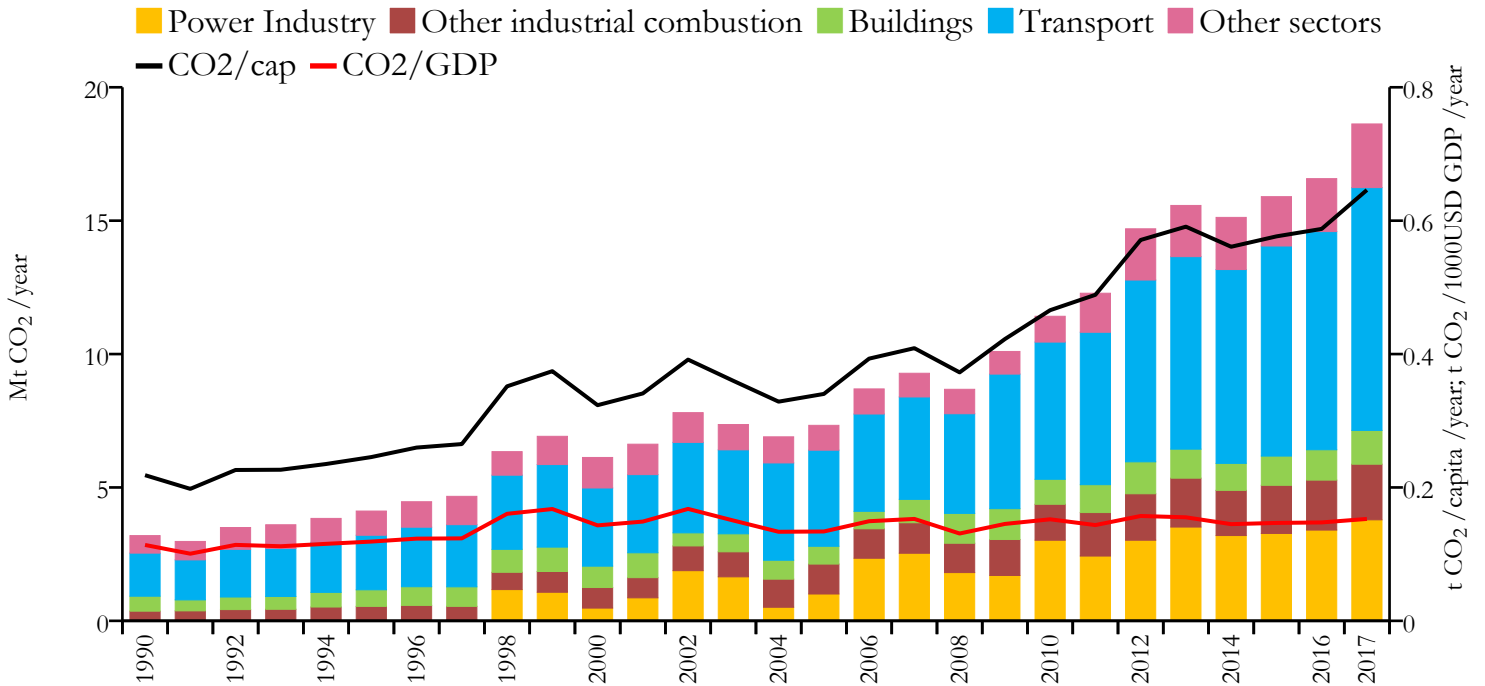




# Ghana



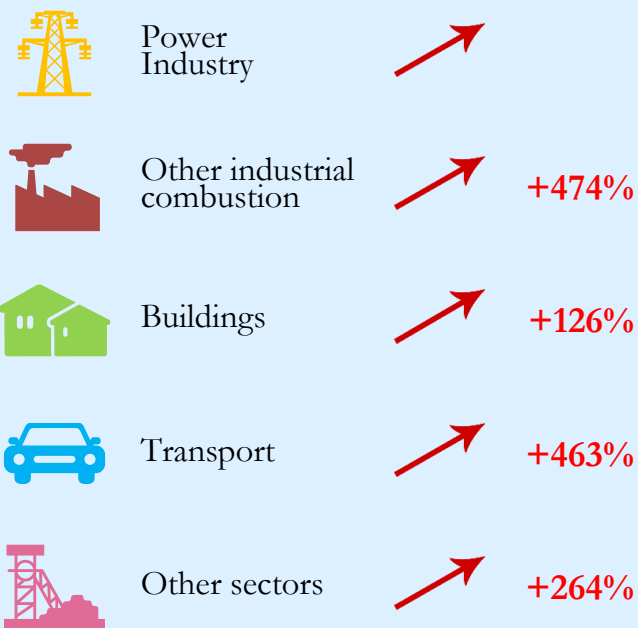
## Fossil CO<sub>2</sub> emissions by sector



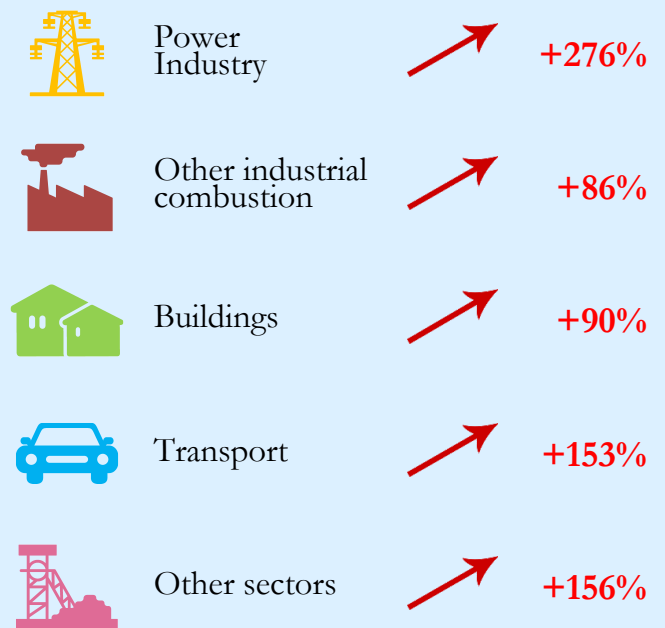
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	18.626	0.646	0.153	28833629
2005	7.329	0.340	0.134	21542009
1990	3.195	0.218	0.114	14628260



### 2017 vs 1990

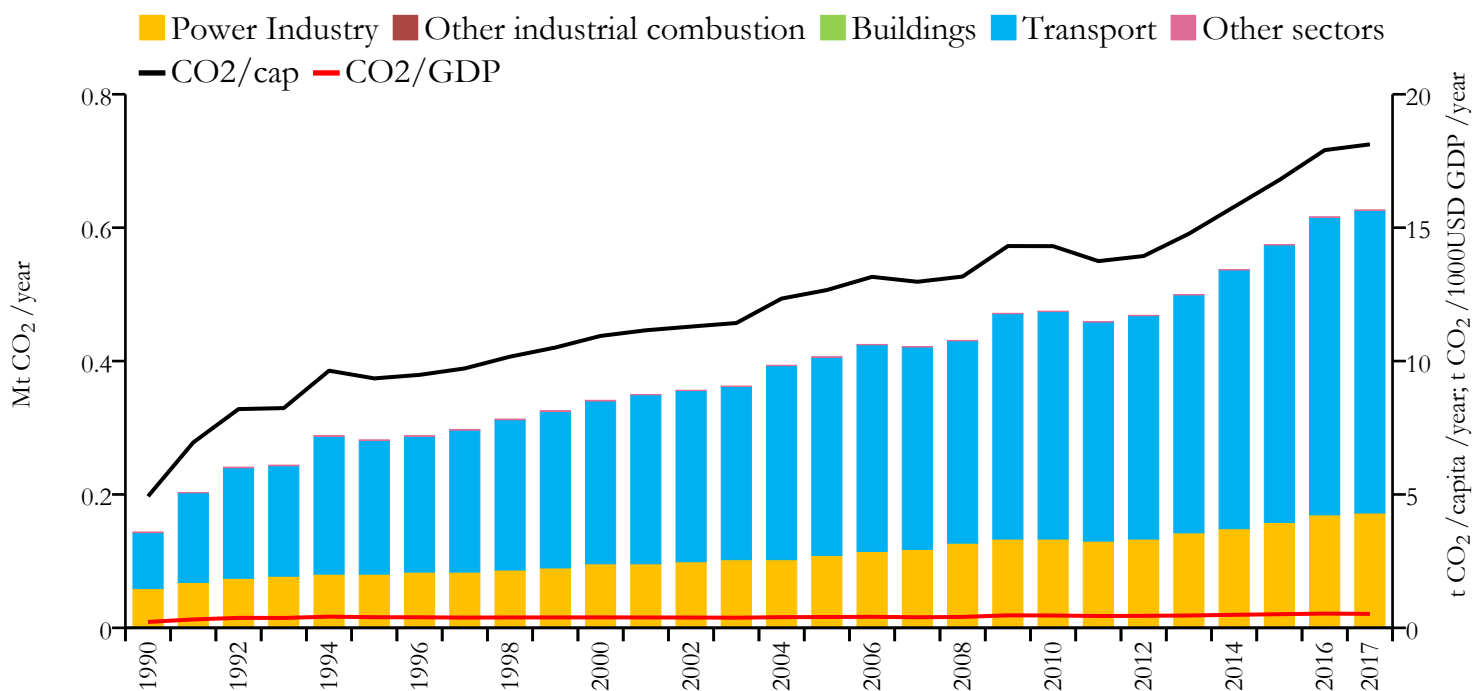


### 2017 vs 2005





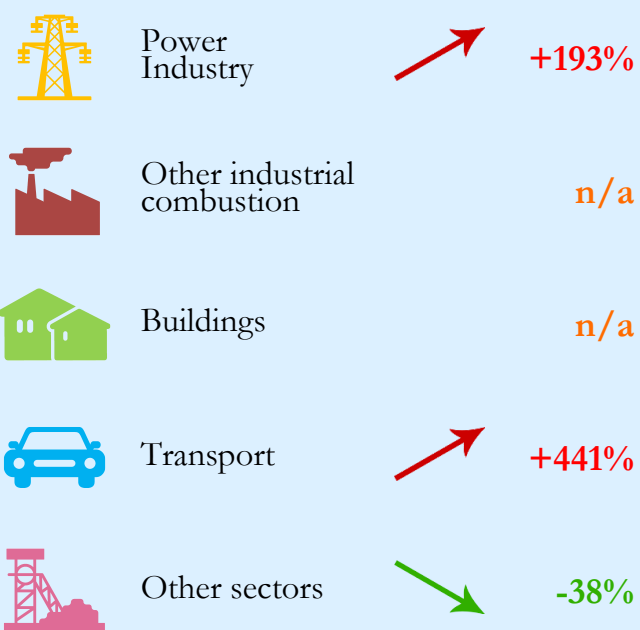
## Fossil CO<sub>2</sub> emissions by sector



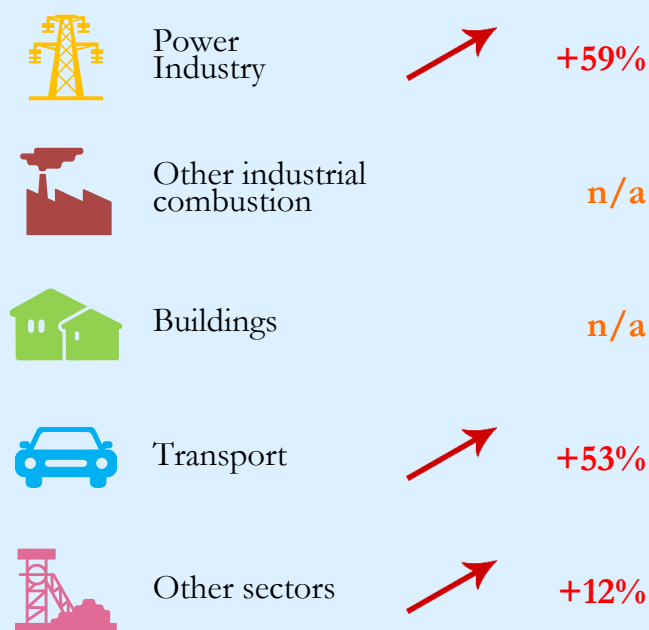
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.627	18.123	0.523	34571
2005	0.406	12.662	0.406	32085
1990	0.144	4.930	0.220	29164



### 2017 vs 1990

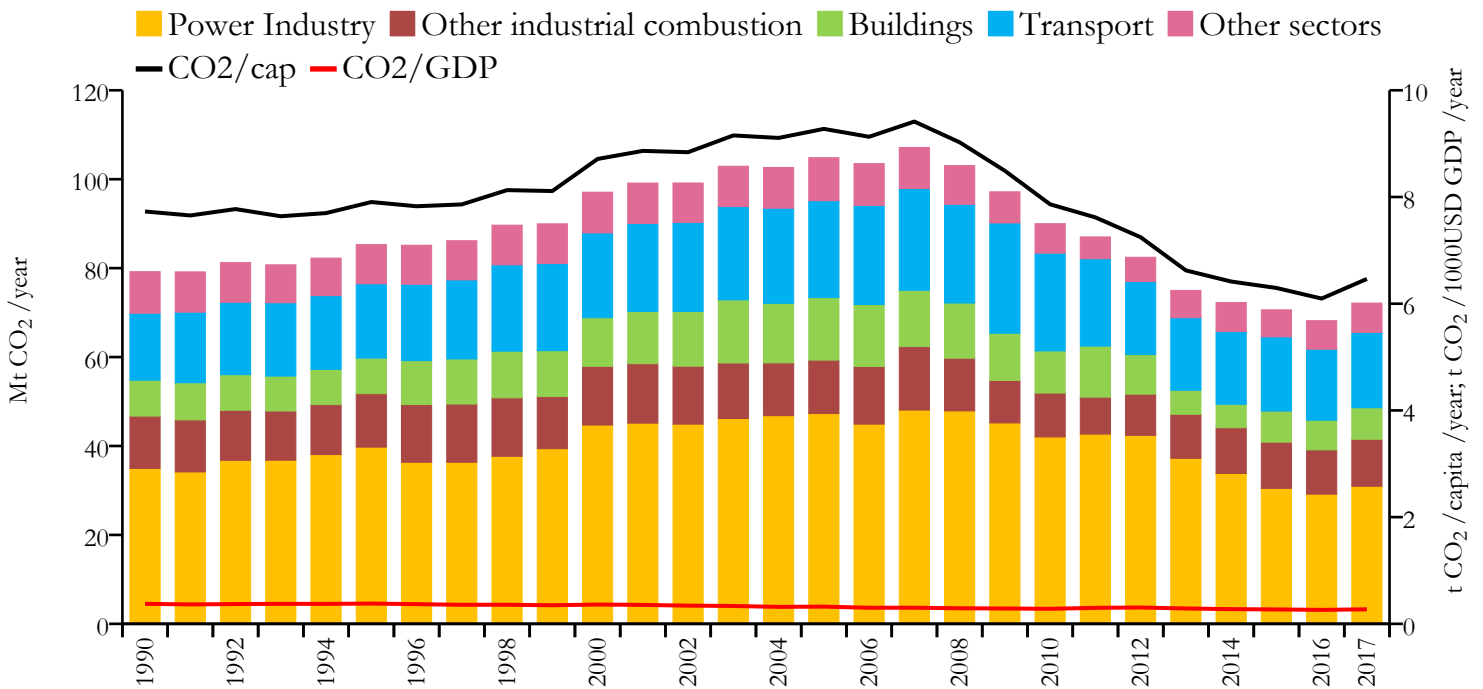


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	72.145	6.465	0.273	11159773
2005	104.835	9.276	0.323	11301204
1990	79.201	7.728	0.375	10248537



### 2017 vs 1990



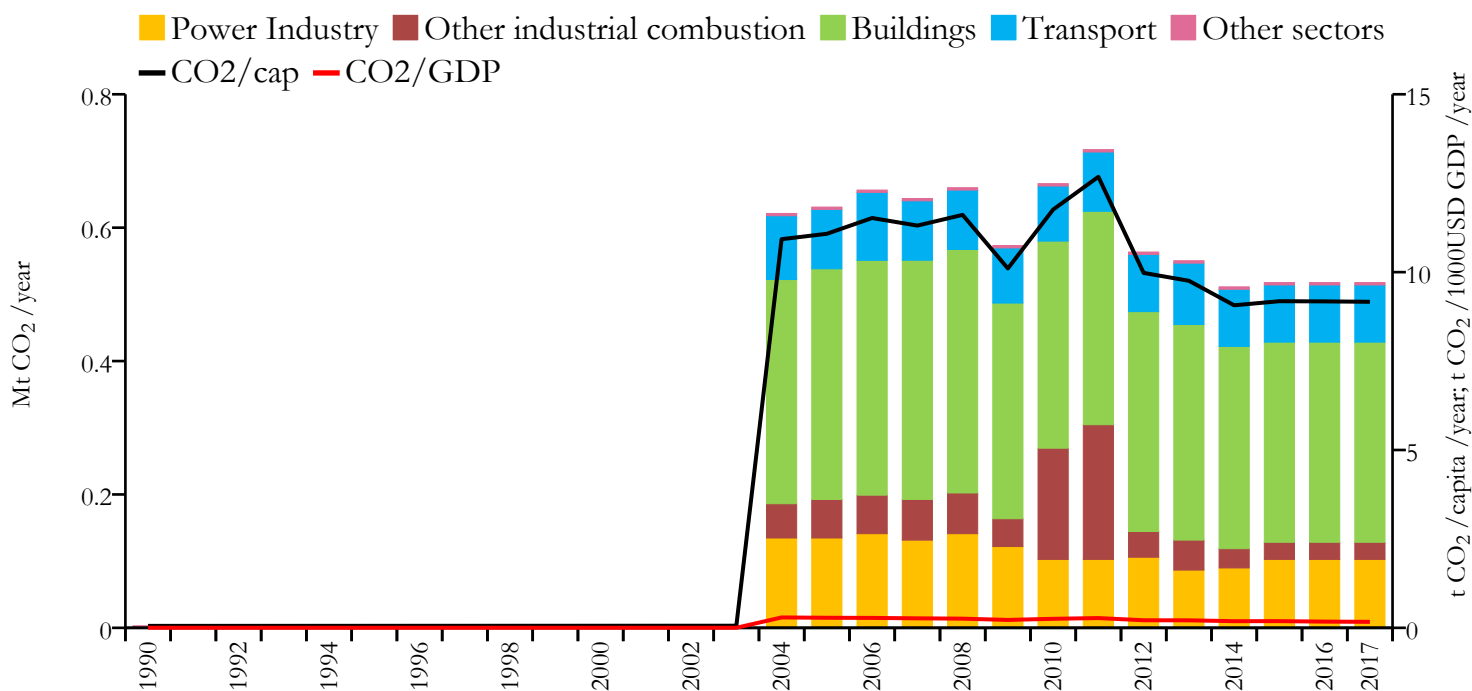
### 2017 vs 2005



# Greenland



## Fossil CO<sub>2</sub> emissions by sector



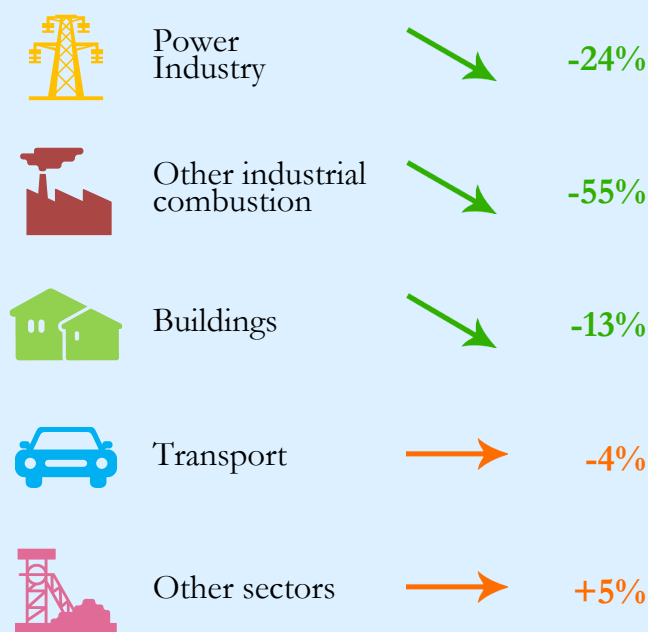
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.518	9.166	0.169	56480
2005	0.631	11.078	0.283	56951
1990	0.003	0.055	0.002	55604

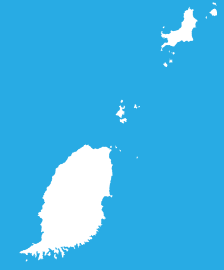


### 2017 vs 1990

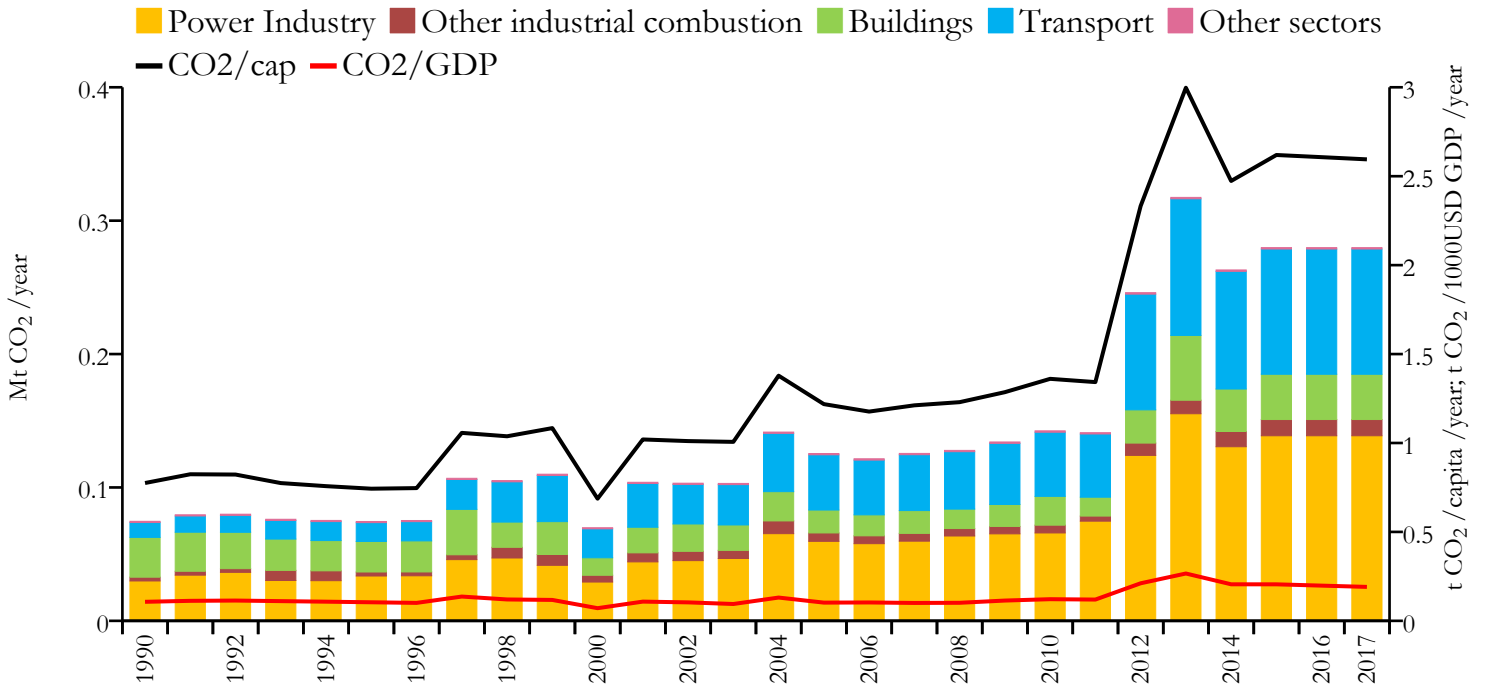


### 2017 vs 2005





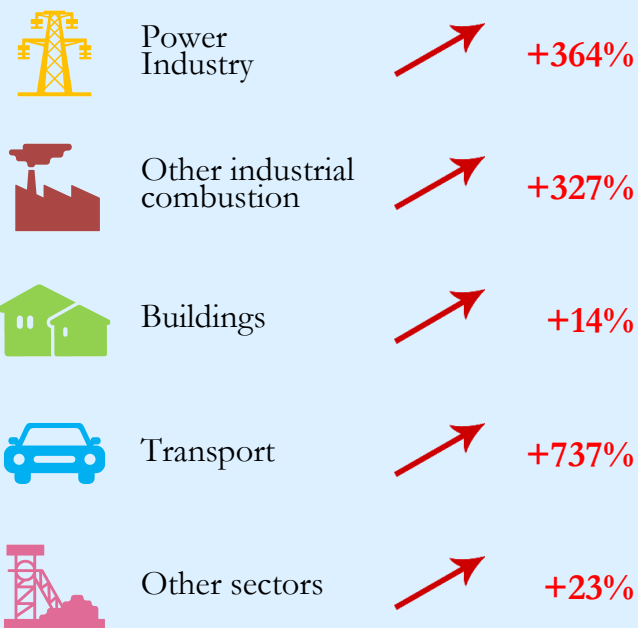
## Fossil CO<sub>2</sub> emissions by sector



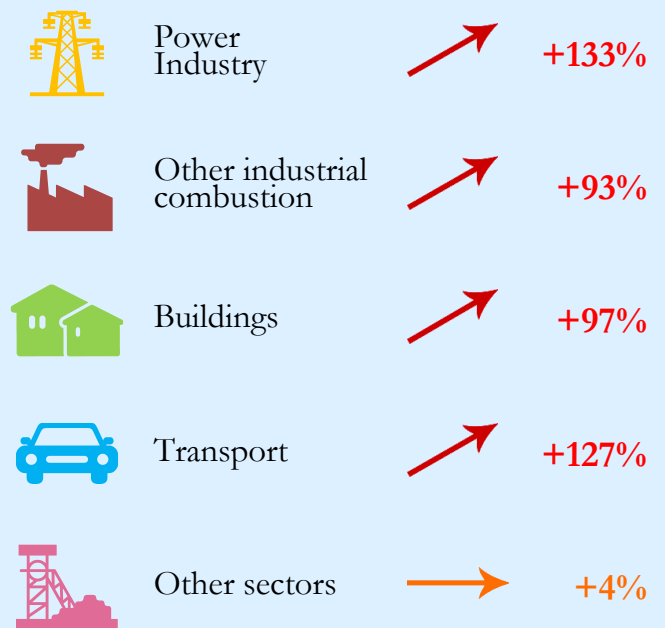
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.280	2.595	0.191	107825
2005	0.125	1.219	0.102	102949
1990	0.075	0.775	0.107	96283



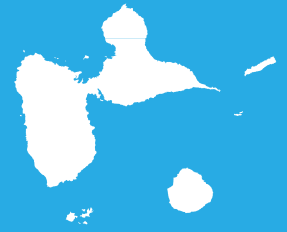
### 2017 vs 1990



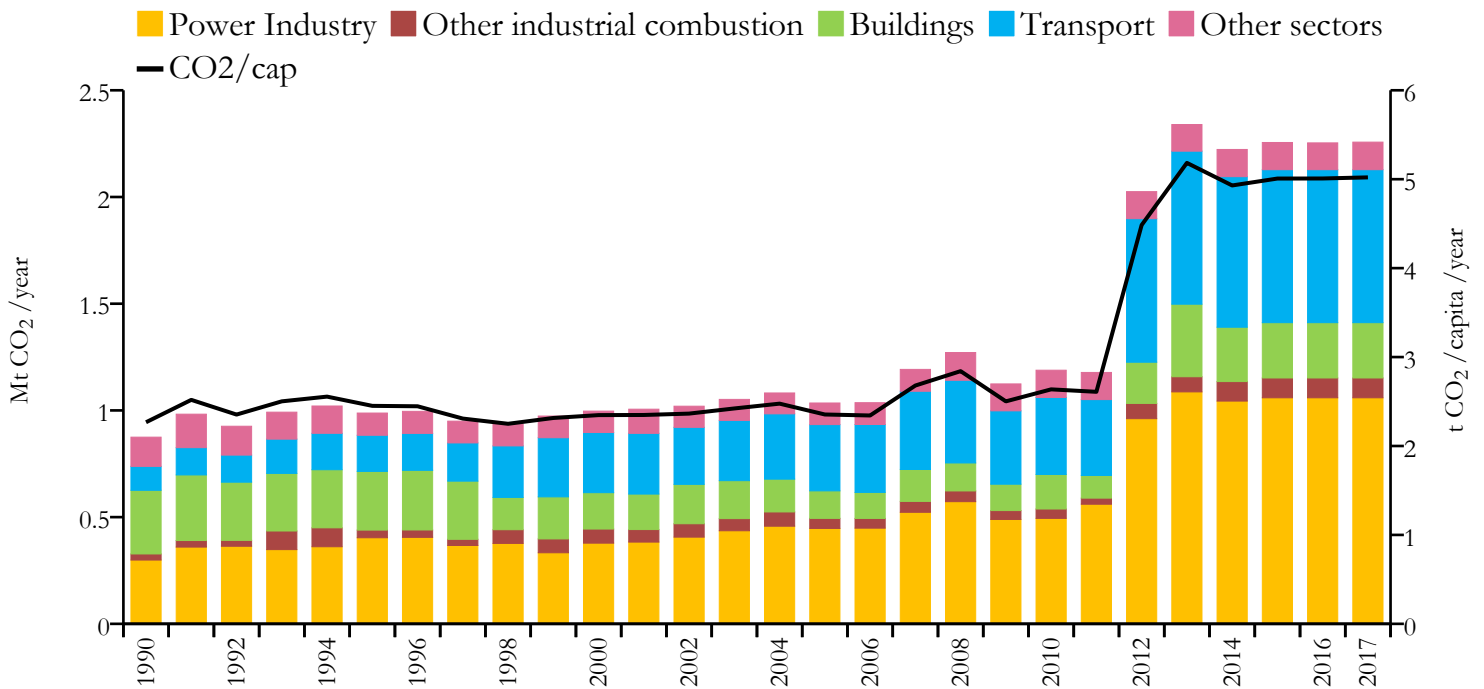
### 2017 vs 2005



# Guadeloupe



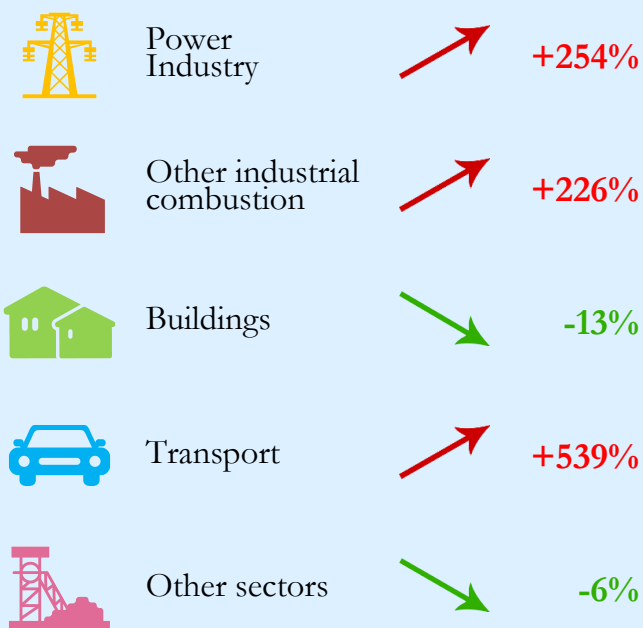
## Fossil CO<sub>2</sub> emissions by sector



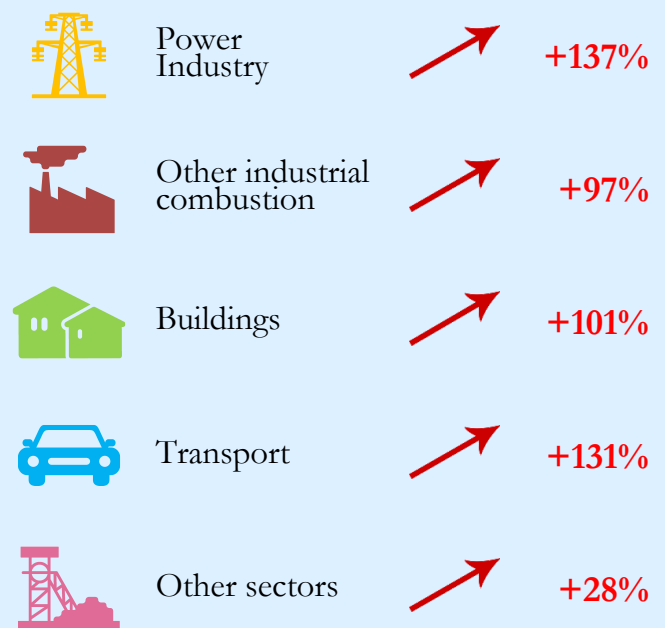
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.257	5.021	n/a	449568
2005	1.035	2.354	n/a	439552
1990	0.875	2.267	n/a	385878



### 2017 vs 1990

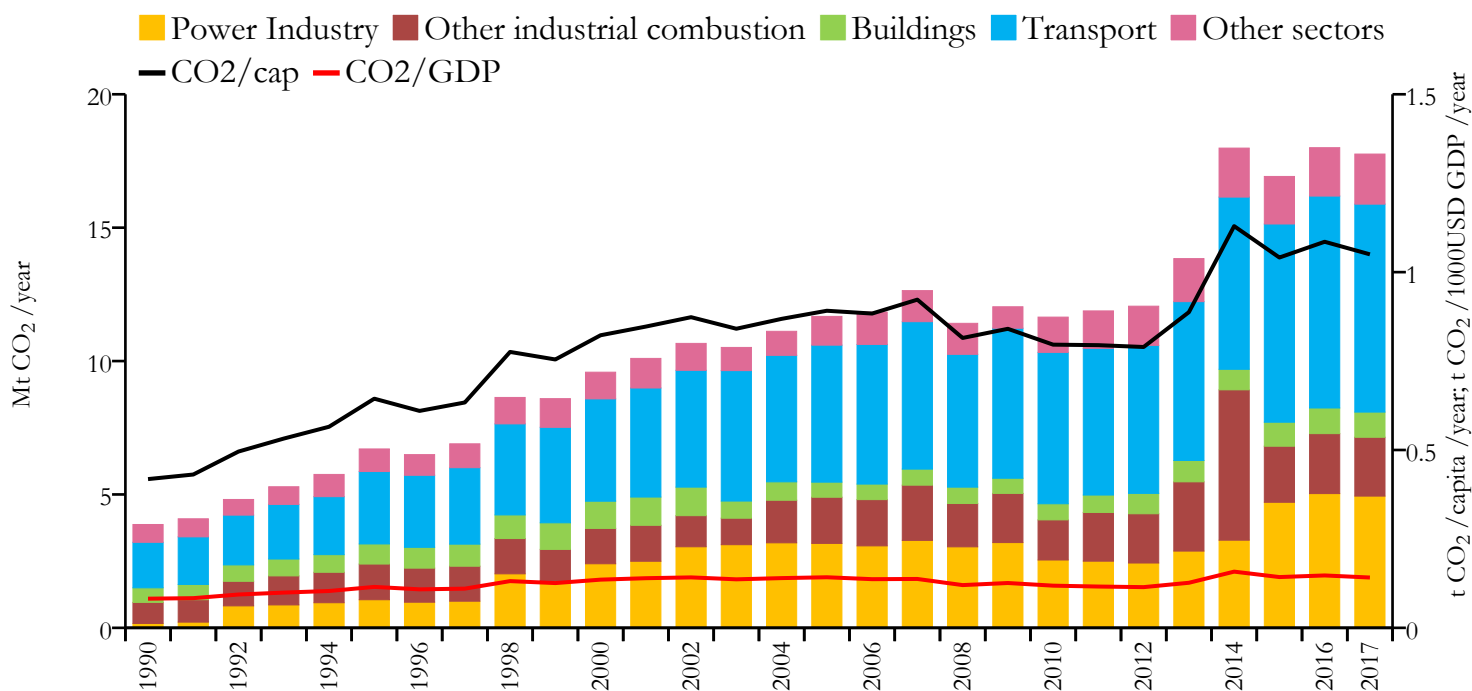


### 2017 vs 2005

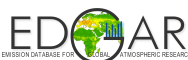




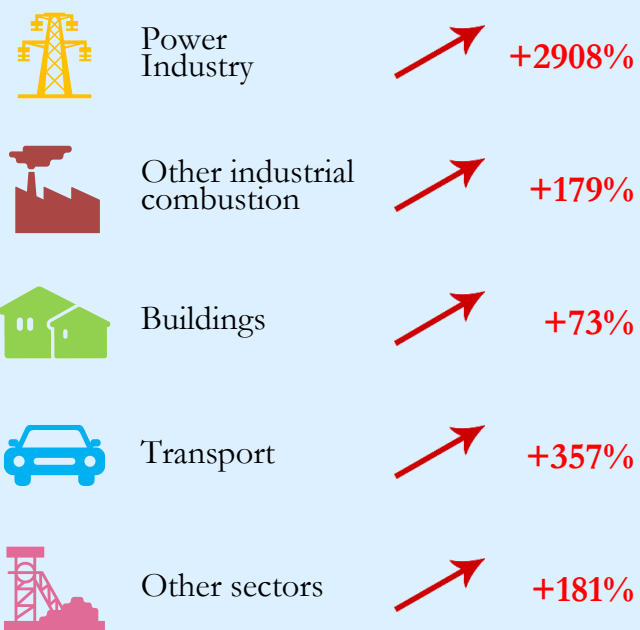
## Fossil CO<sub>2</sub> emissions by sector



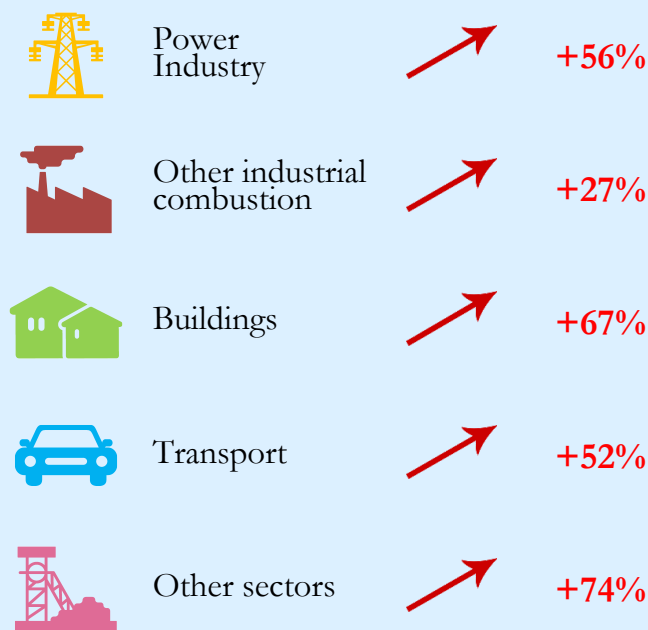
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	17.760	1.050	0.141	16913503
2005	11.674	0.891	0.142	13096028
1990	3.874	0.418	0.082	9263813



### 2017 vs 1990

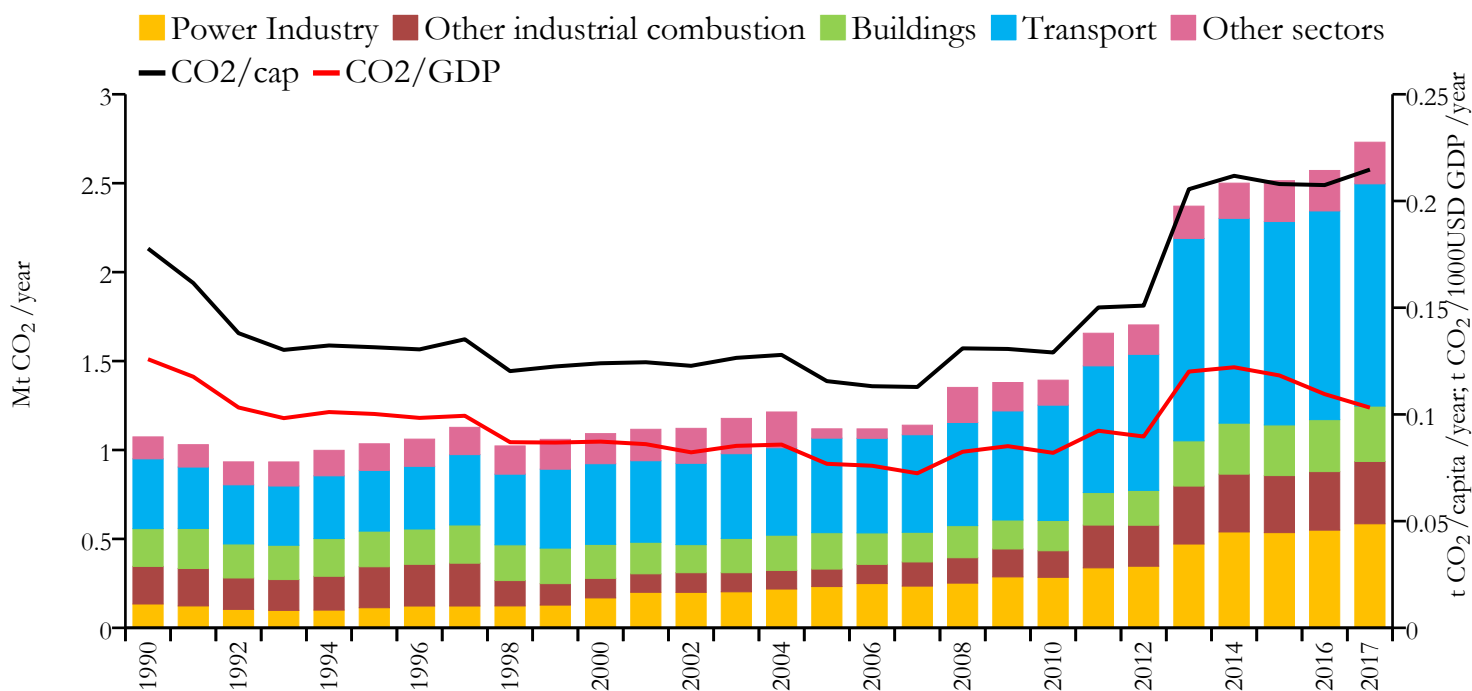


### 2017 vs 2005





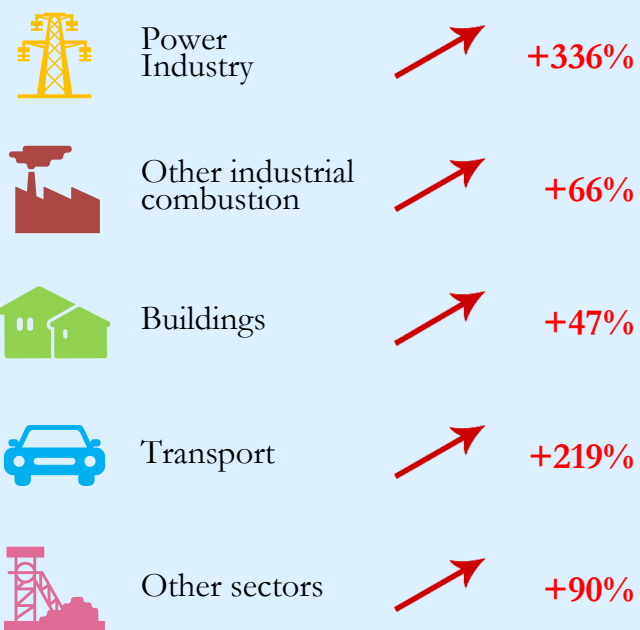
## Fossil CO<sub>2</sub> emissions by sector



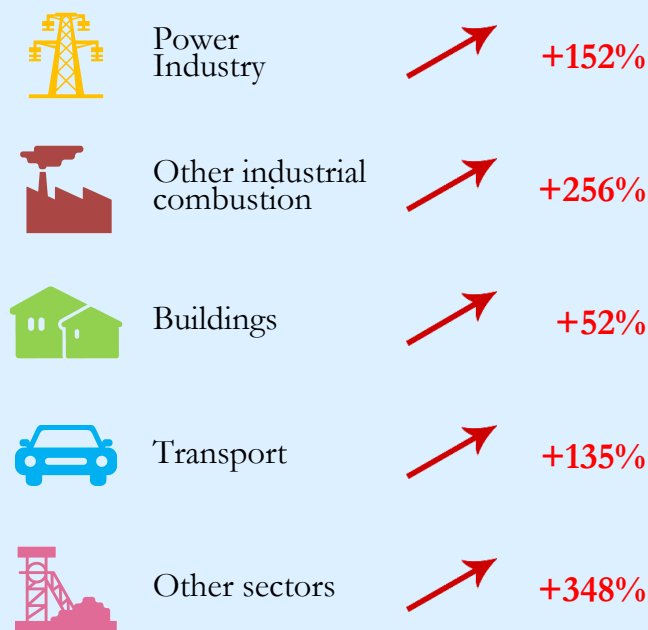
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.731	0.215	0.103	12717176
2005	1.119	0.116	0.077	9679745
1990	1.074	0.178	0.126	6041094



### 2017 vs 1990



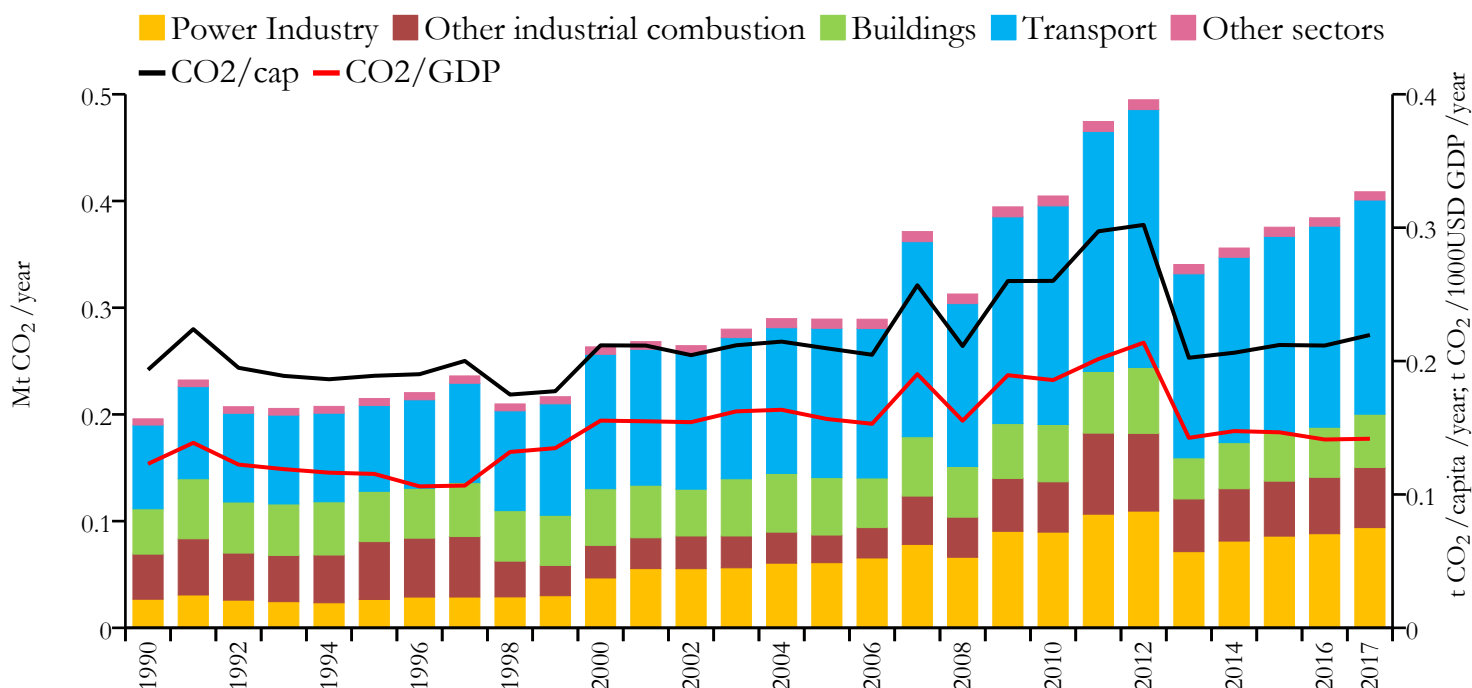
### 2017 vs 2005







## Fossil CO<sub>2</sub> emissions by sector



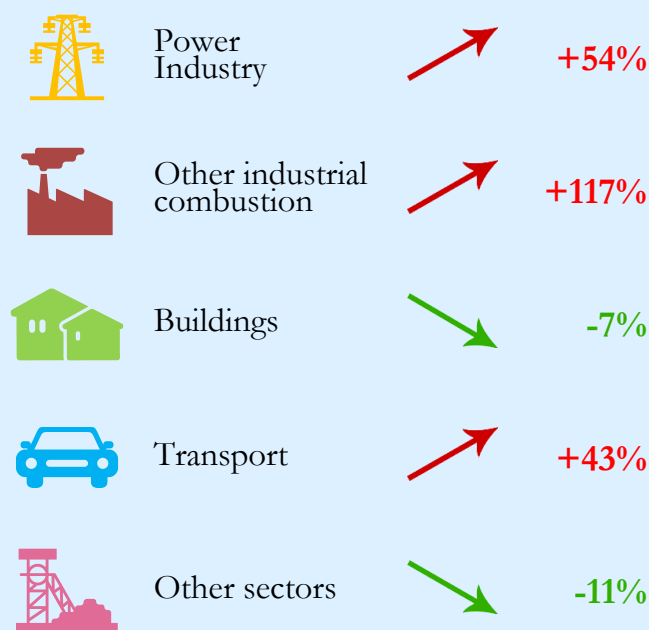
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.409	0.220	0.142	1861283
2005	0.289	0.210	0.157	1380838
1990	0.196	0.193	0.123	1012280



### 2017 vs 1990

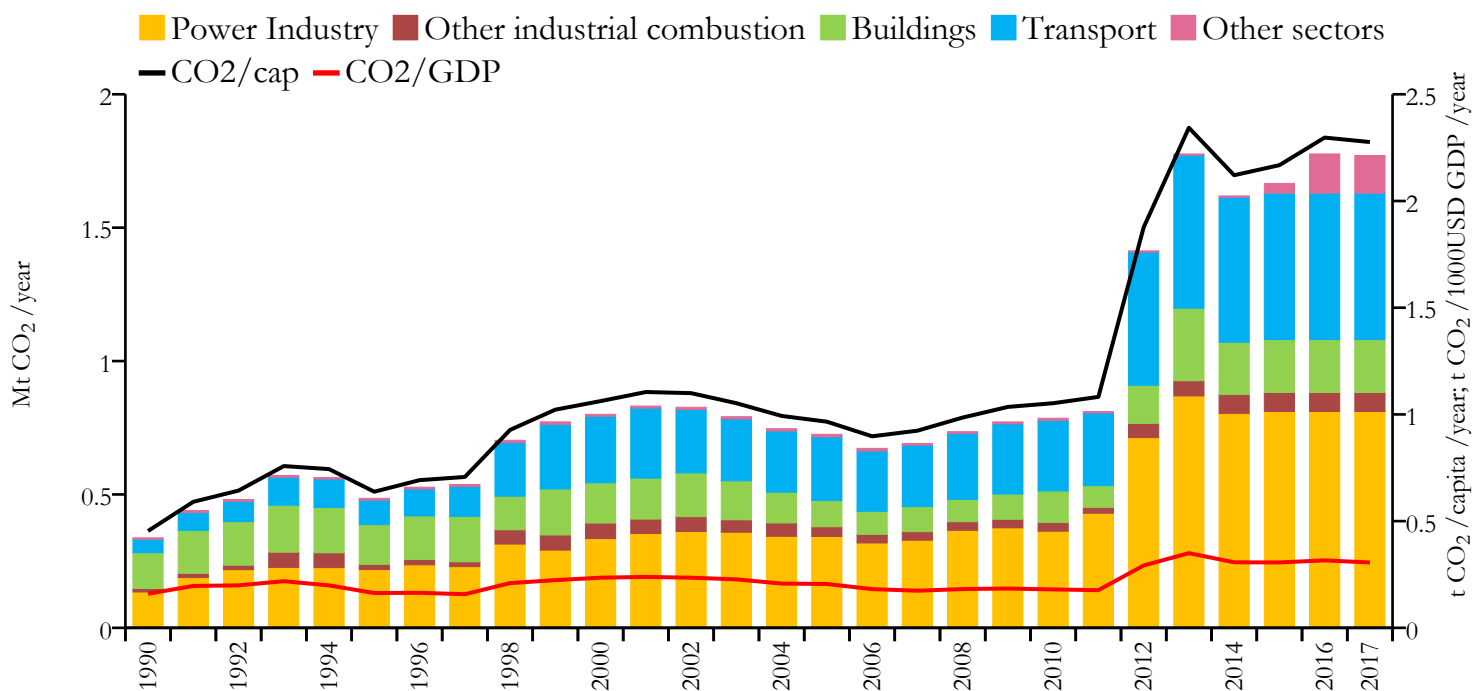


### 2017 vs 2005





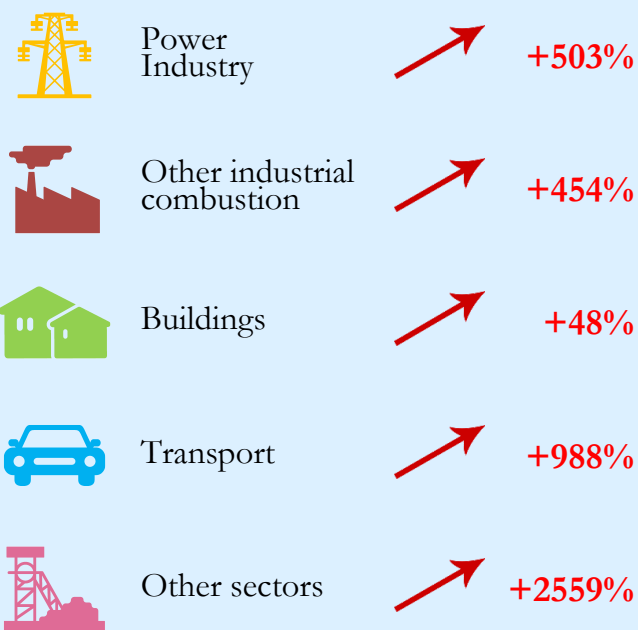
## Fossil CO<sub>2</sub> emissions by sector



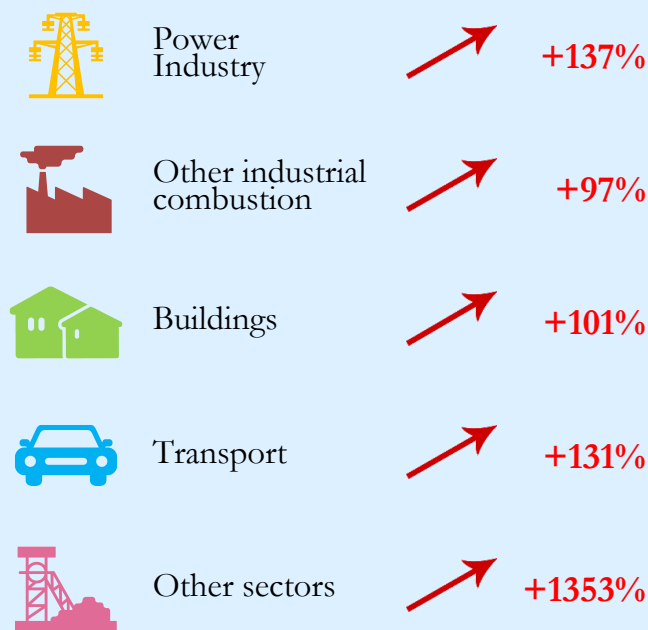
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.771	2.276	0.306	777859
2005	0.725	0.966	0.206	750946
1990	0.337	0.454	0.160	743309



### 2017 vs 1990

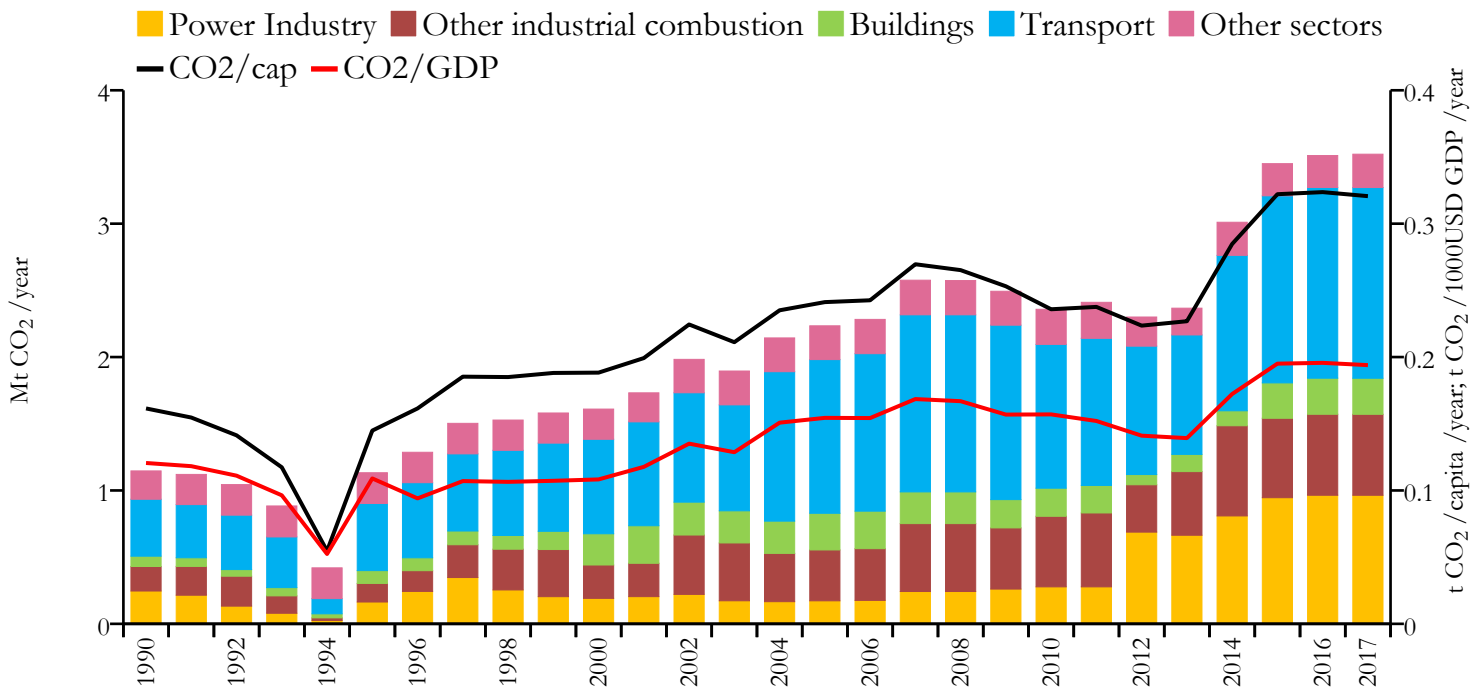


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



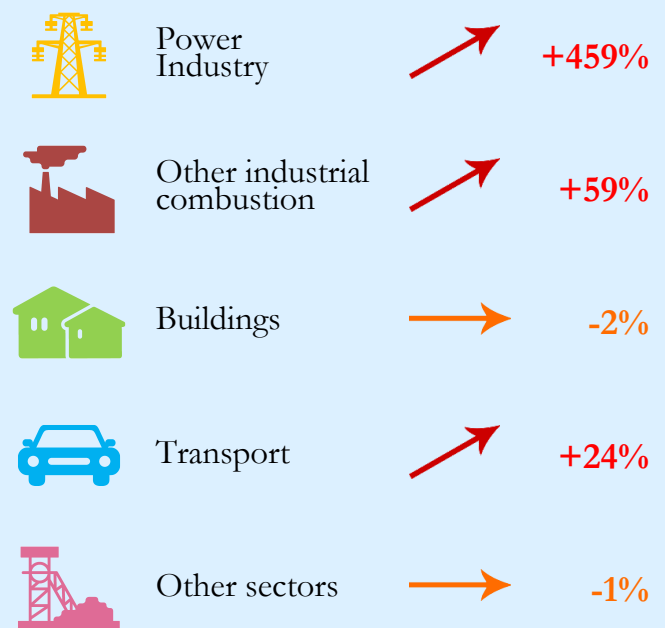
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3.521	0.321	0.194	10981229
2005	2.234	0.241	0.154	9263404
1990	1.147	0.161	0.121	7099732



### 2017 vs 1990



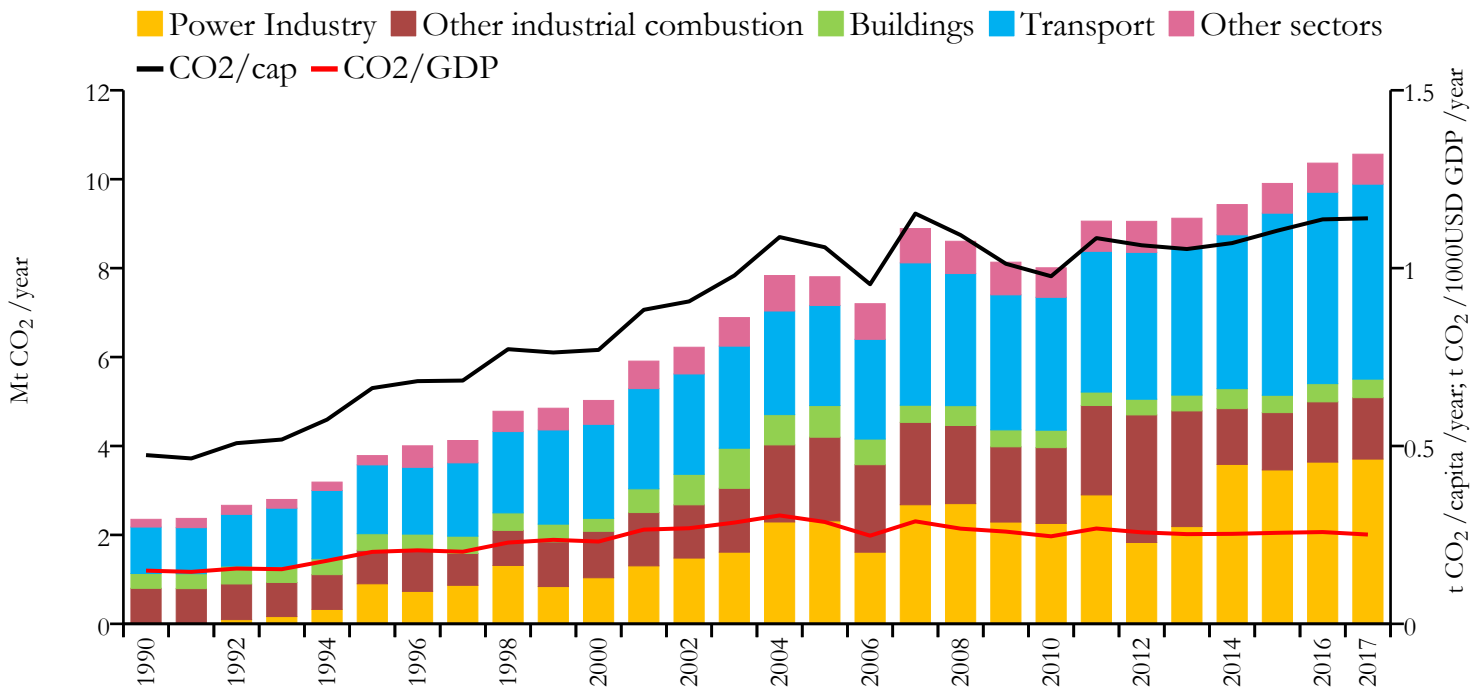
### 2017 vs 2005



# Honduras



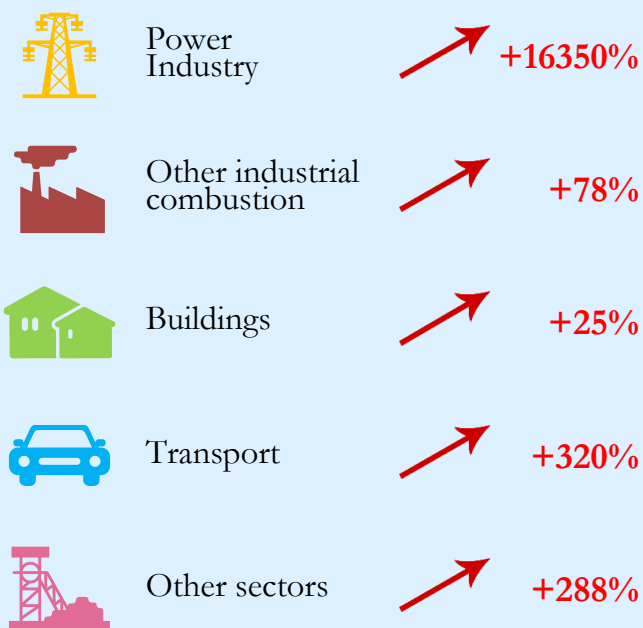
## Fossil CO<sub>2</sub> emissions by sector



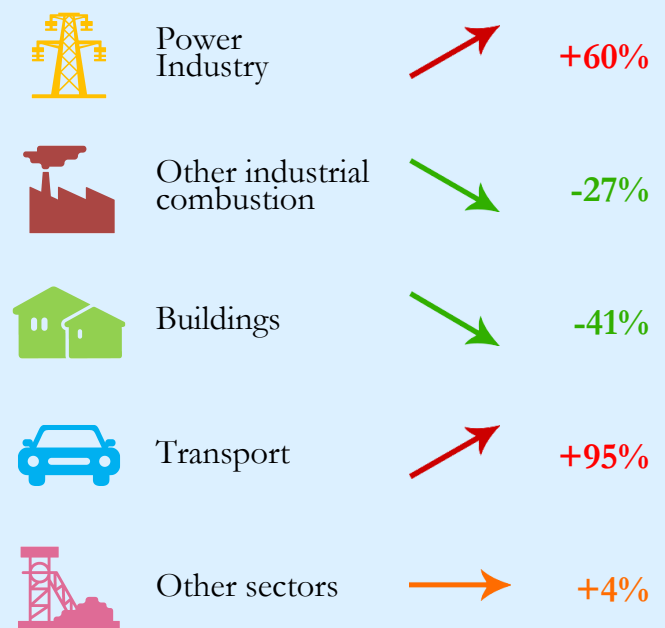
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	10.562	1.140	0.251	9265067
2005	7.806	1.059	0.286	7373430
1990	2.351	0.474	0.150	4955328



### 2017 vs 1990

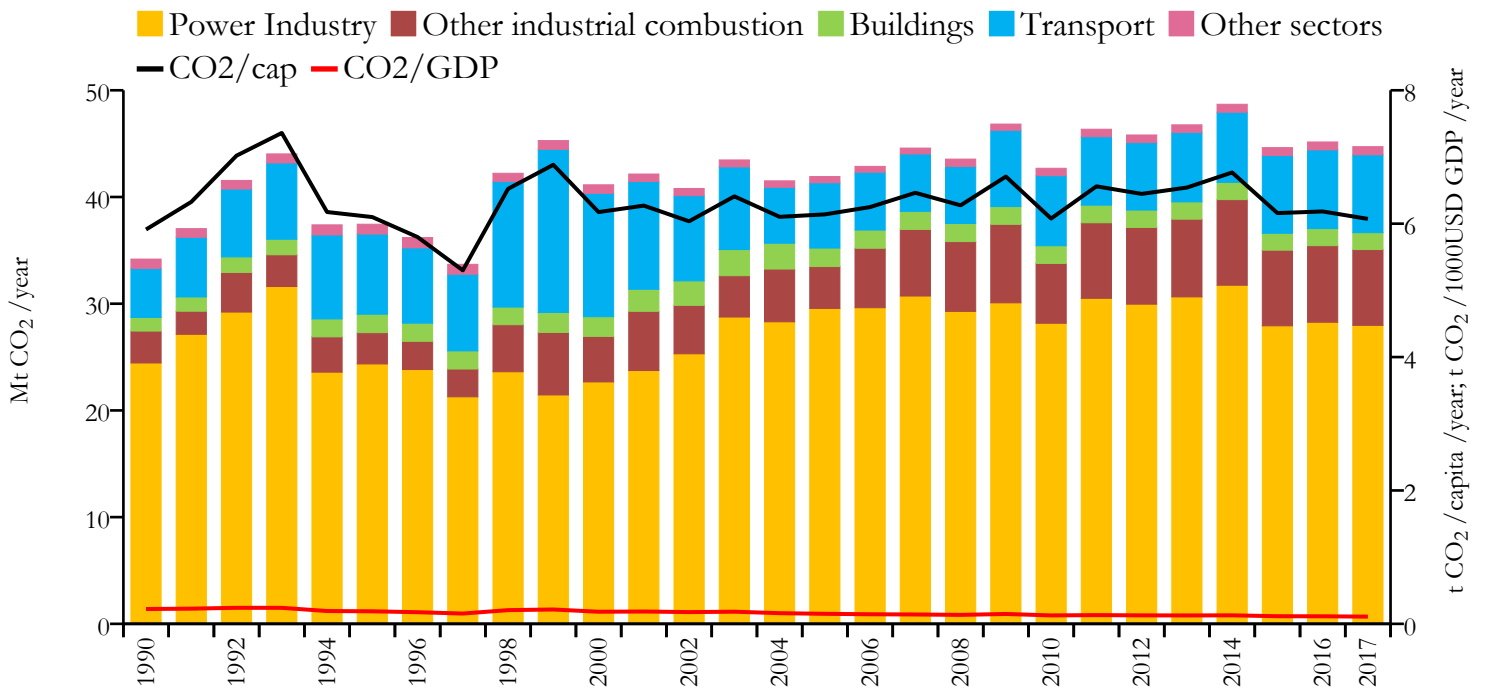


### 2017 vs 2005





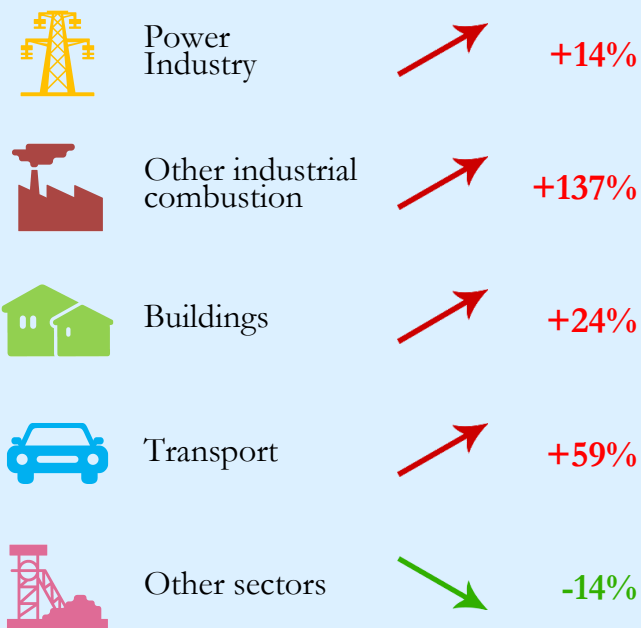
## Fossil CO<sub>2</sub> emissions by sector



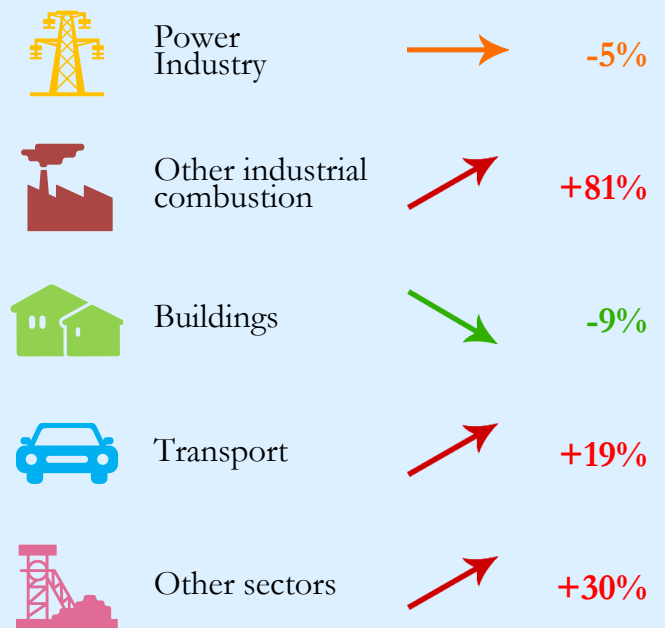
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	44.715	6.071	0.108	7364883
2005	41.916	6.139	0.150	6827761
1990	34.182	5.912	0.222	5781459



### 2017 vs 1990



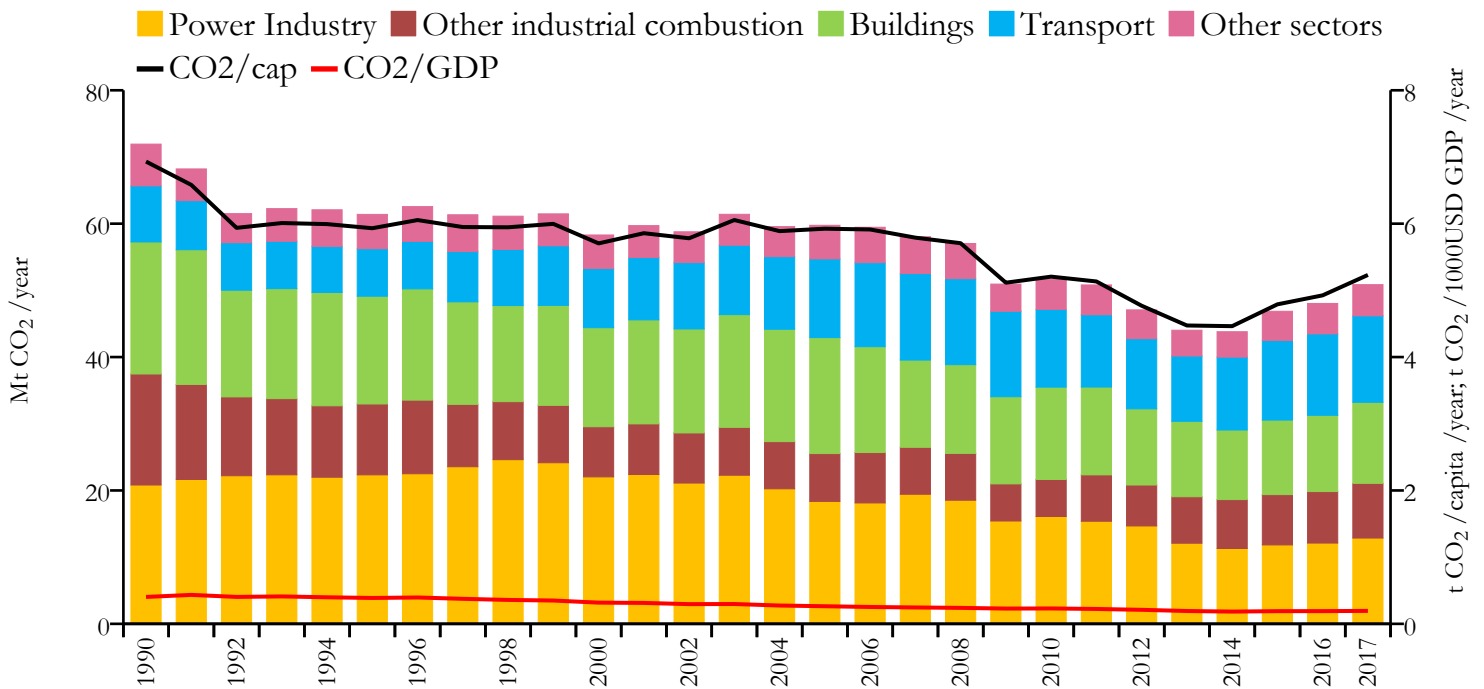
### 2017 vs 2005



# Hungary



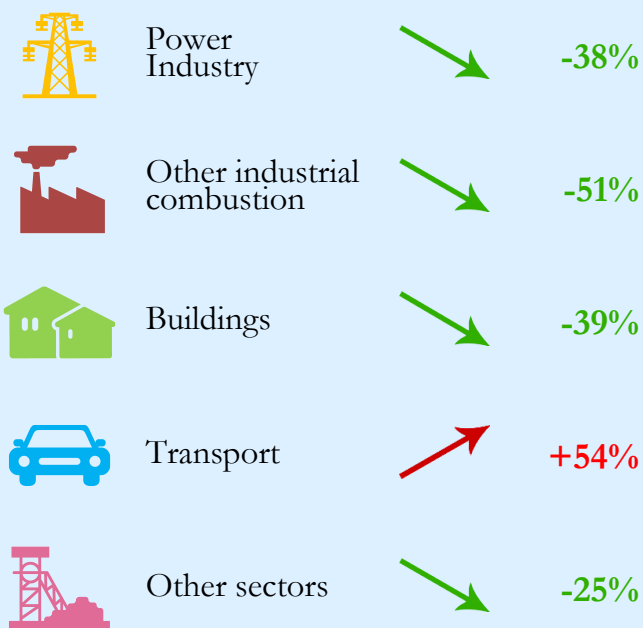
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	50.856	5.231	0.194	9721559
2005	59.758	5.925	0.264	10086465
1990	71.929	6.931	0.403	10377651



### 2017 vs 1990



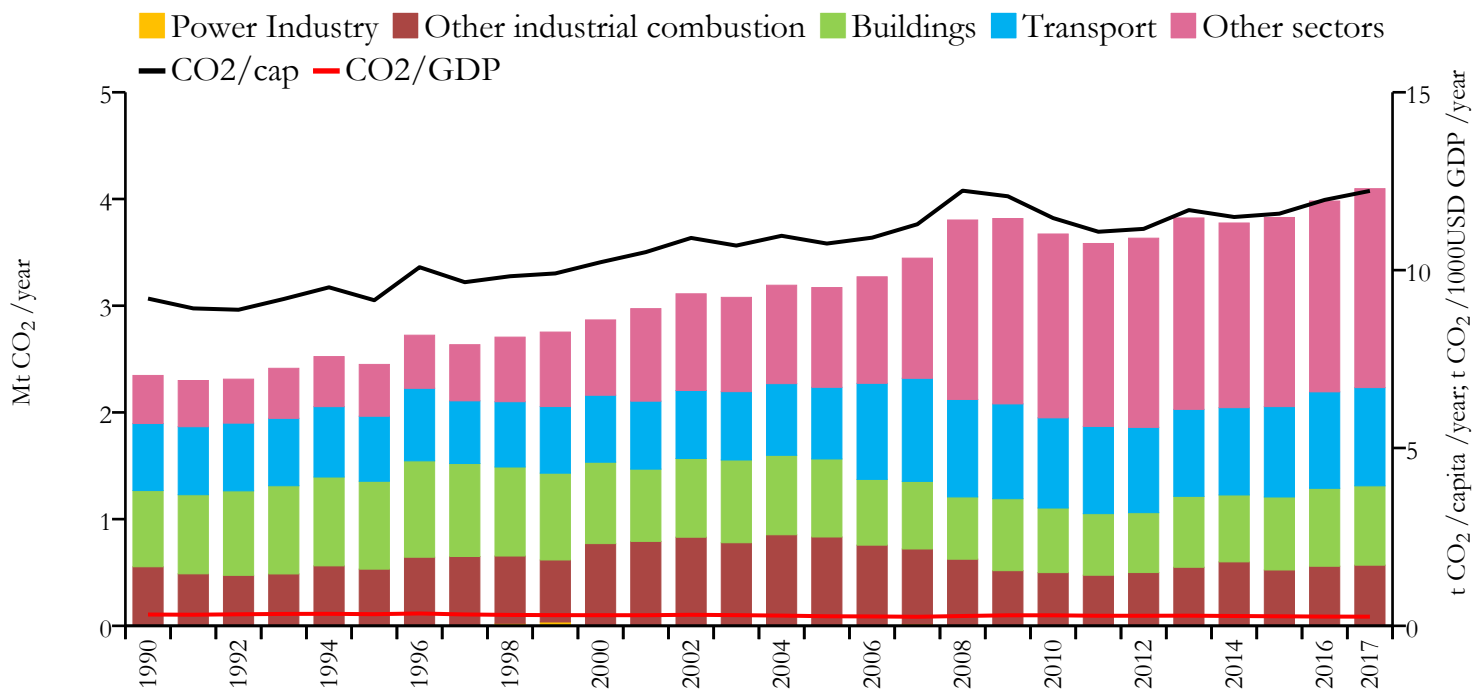
### 2017 vs 2005



# Iceland



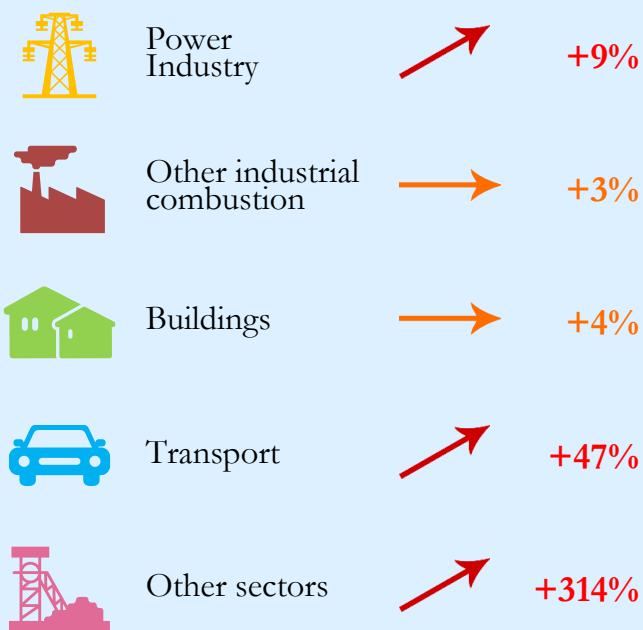
## Fossil CO<sub>2</sub> emissions by sector



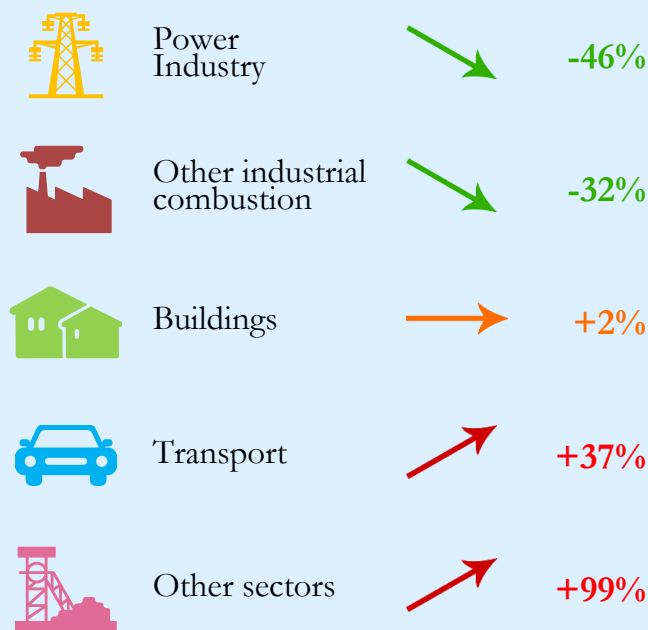
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	4.097	12.228	0.258	335025
2005	3.170	10.747	0.269	294979
1990	2.346	9.200	0.318	255043



### 2017 vs 1990



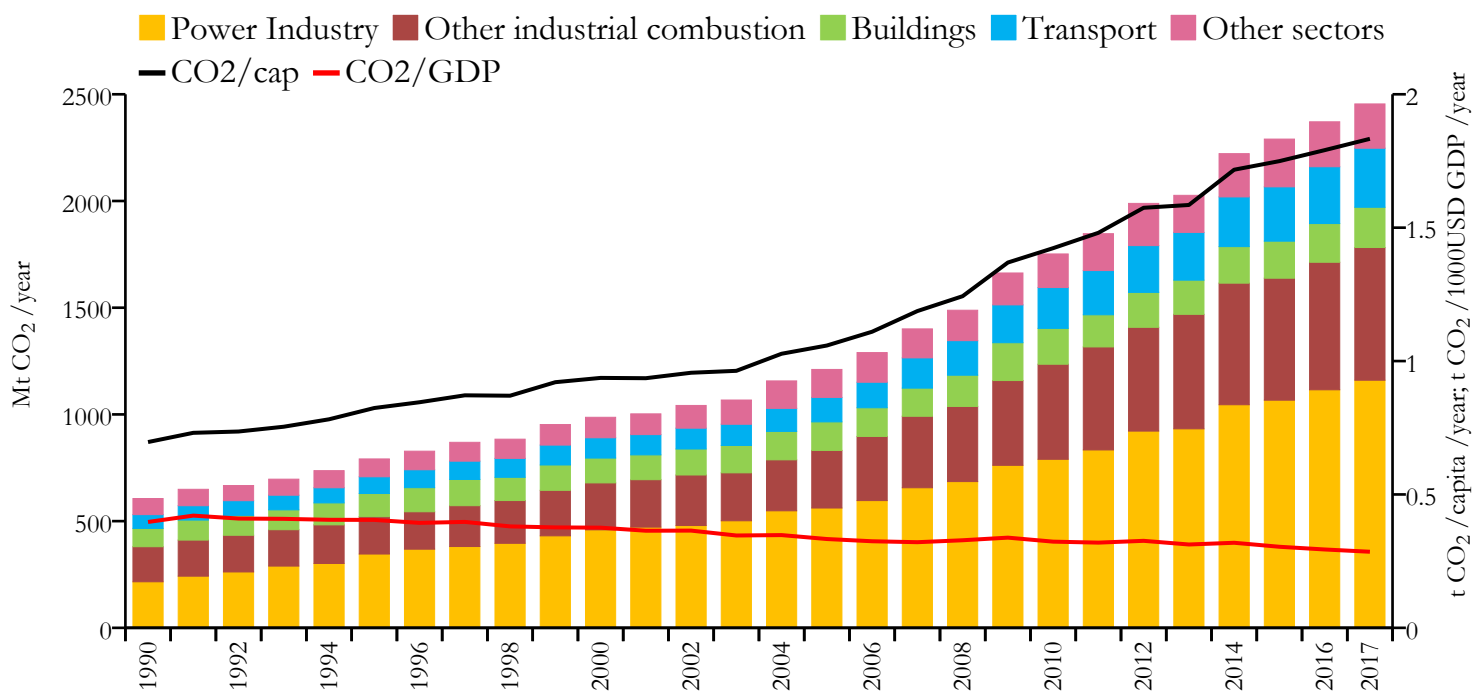
### 2017 vs 2005



# India



## Fossil CO<sub>2</sub> emissions by sector



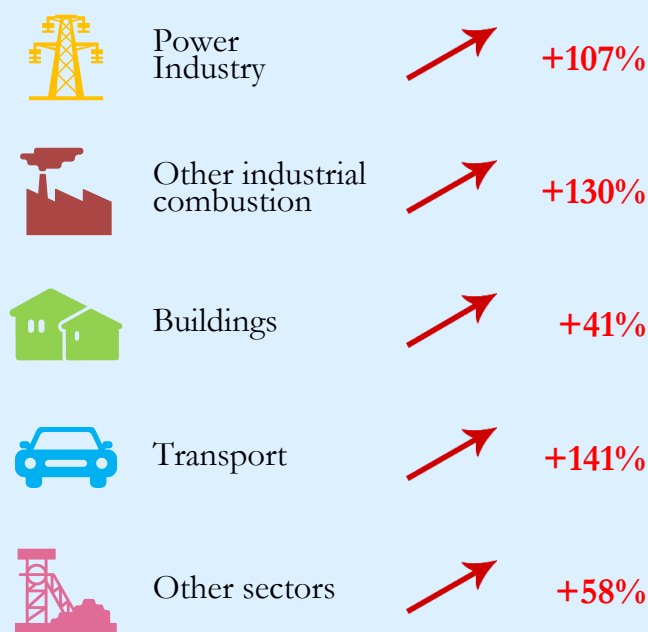
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2454.774	1.833	0.285	1339180127
2005	1210.754	1.058	0.333	1144118674
1990	605.968	0.696	0.397	870133480



### 2017 vs 1990



### 2017 vs 2005

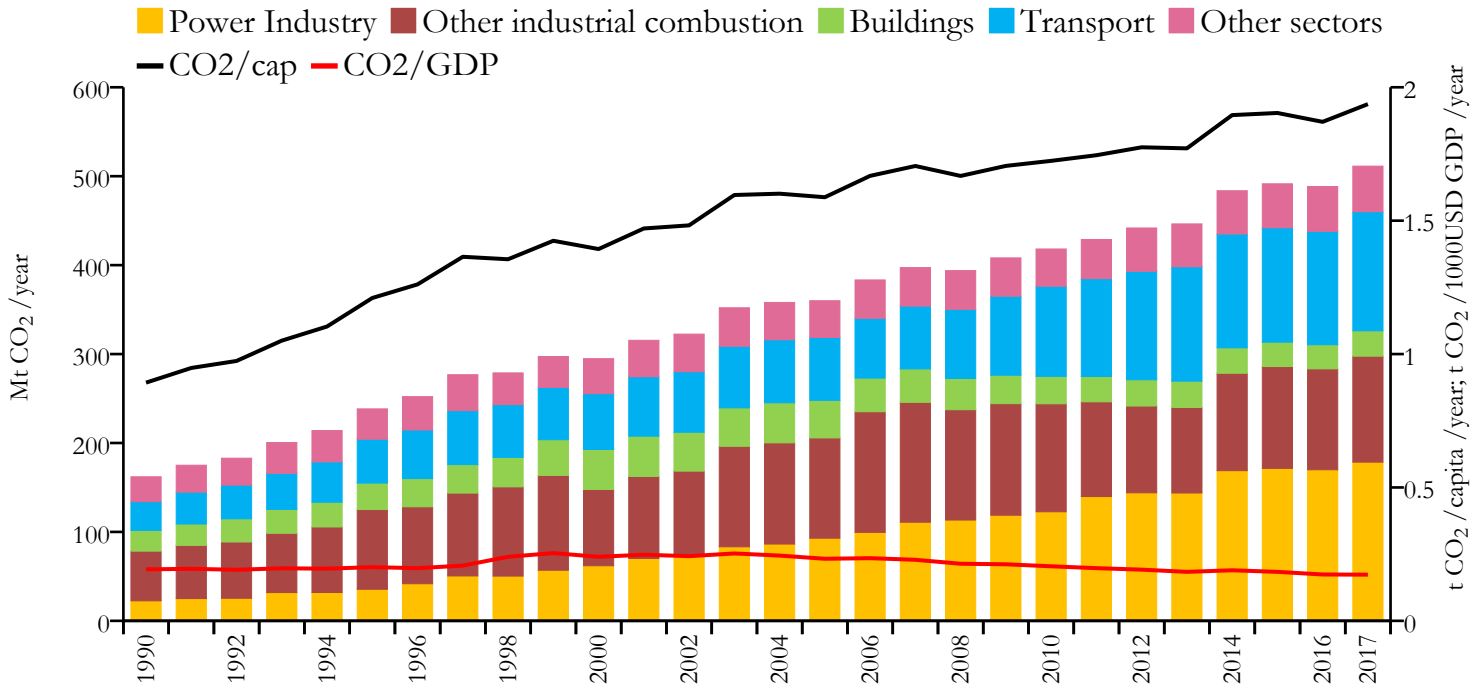




# Indonesia



## Fossil CO<sub>2</sub> emissions by sector



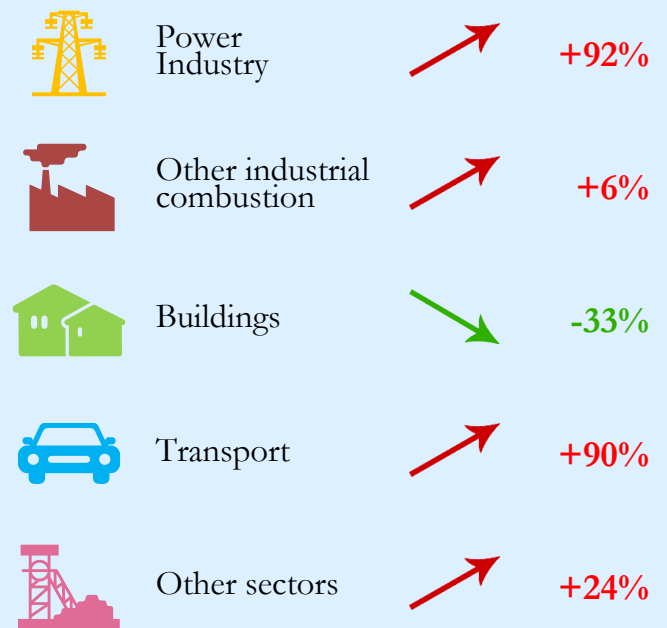
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	511.327	1.937	0.173	263991379
2005	359.989	1.588	0.233	226712730
1990	162.000	0.893	0.193	181436821

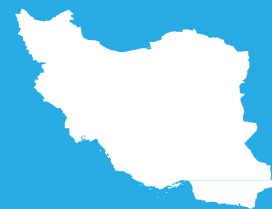


### 2017 vs 1990

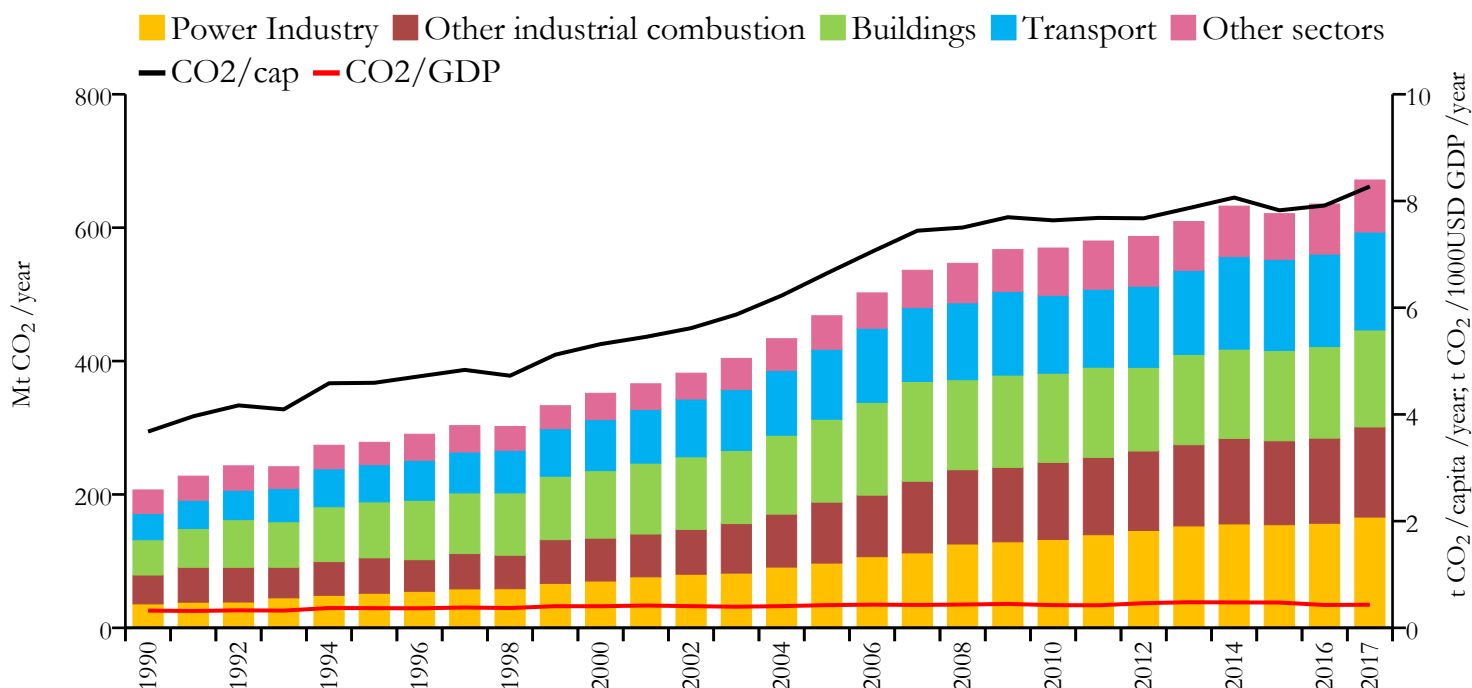


### 2017 vs 2005





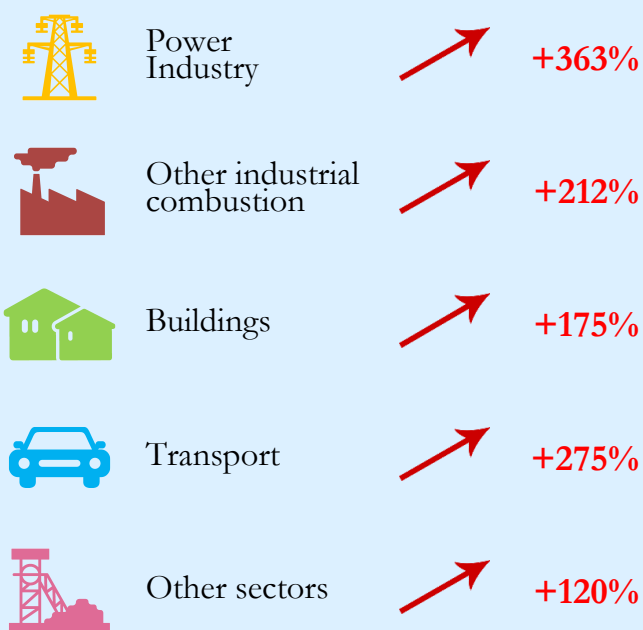
## Fossil CO<sub>2</sub> emissions by sector



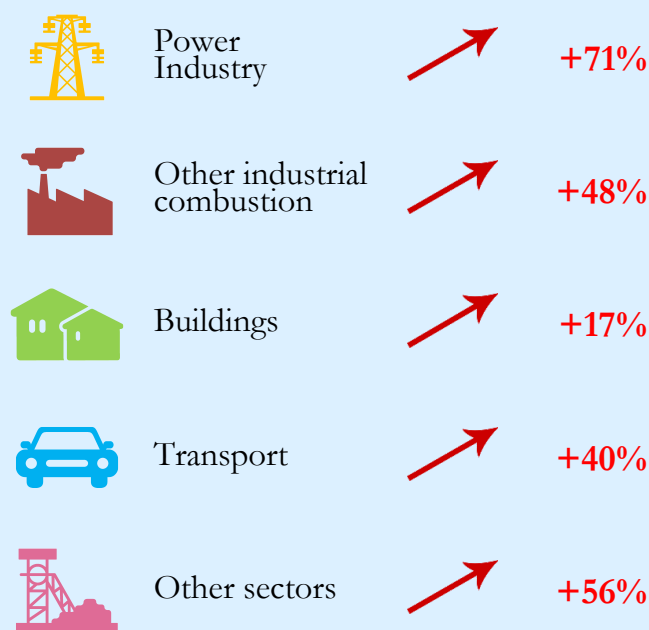
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	671.450	8.273	0.434	81162788
2005	467.905	6.644	0.425	70421811
1990	206.780	3.678	0.323	56226185



### 2017 vs 1990

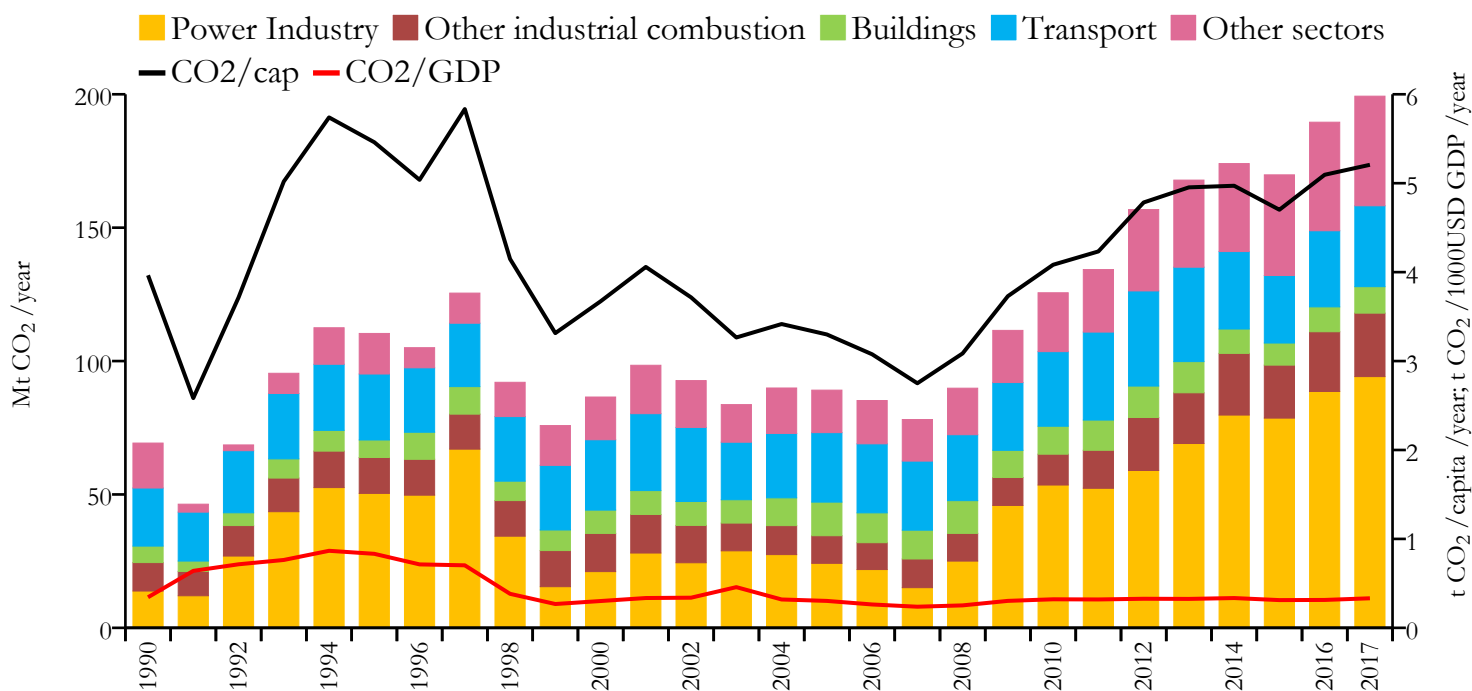


### 2017 vs 2005





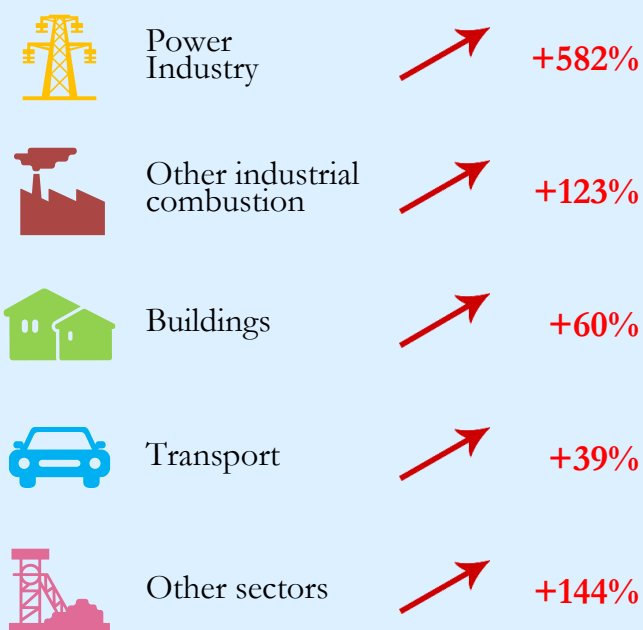
## Fossil CO<sub>2</sub> emissions by sector



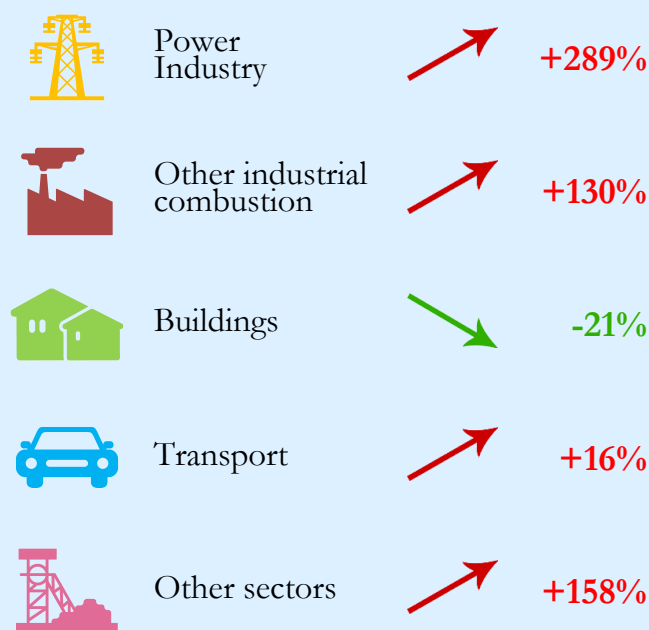
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	199.296	5.207	0.332	38274618
2005	89.103	3.299	0.303	27008426
1990	69.262	3.965	0.344	17469005



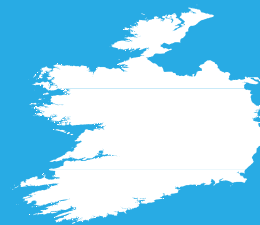
### 2017 vs 1990



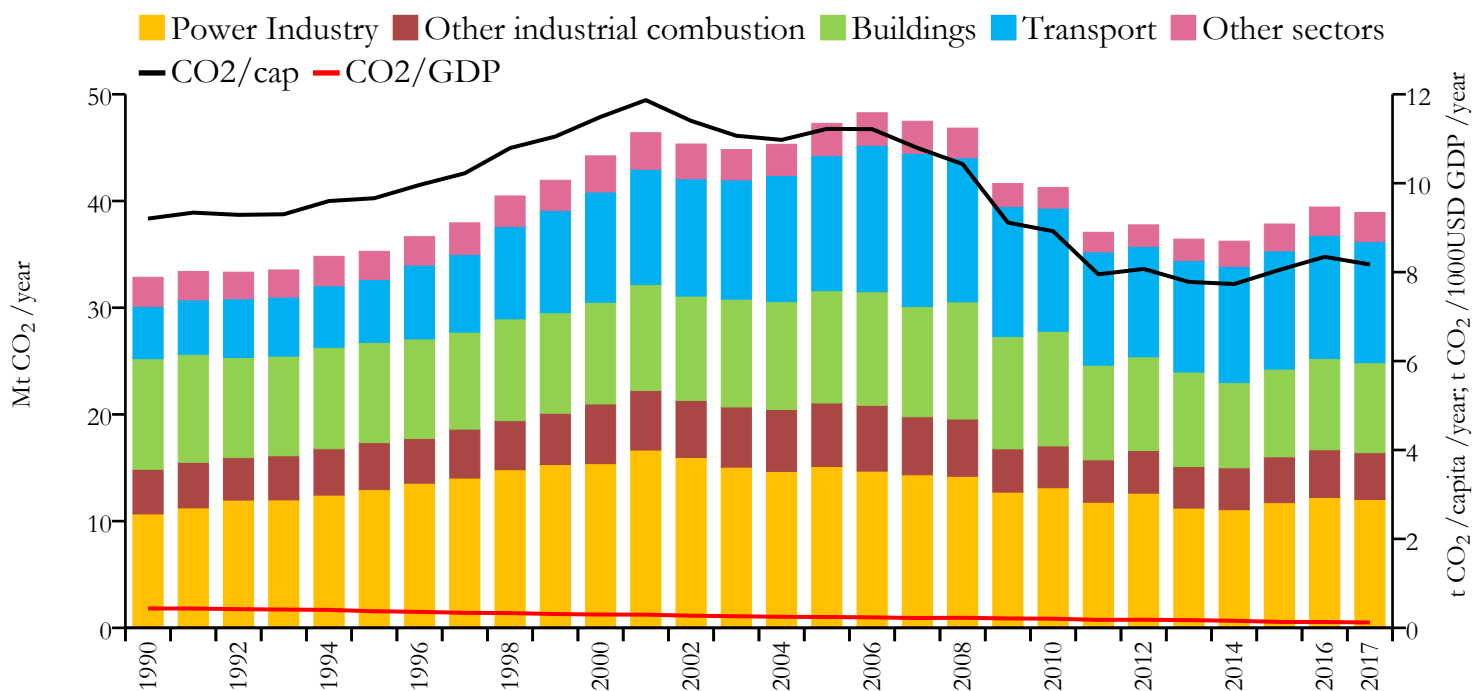
### 2017 vs 2005



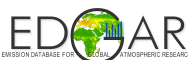
# Ireland



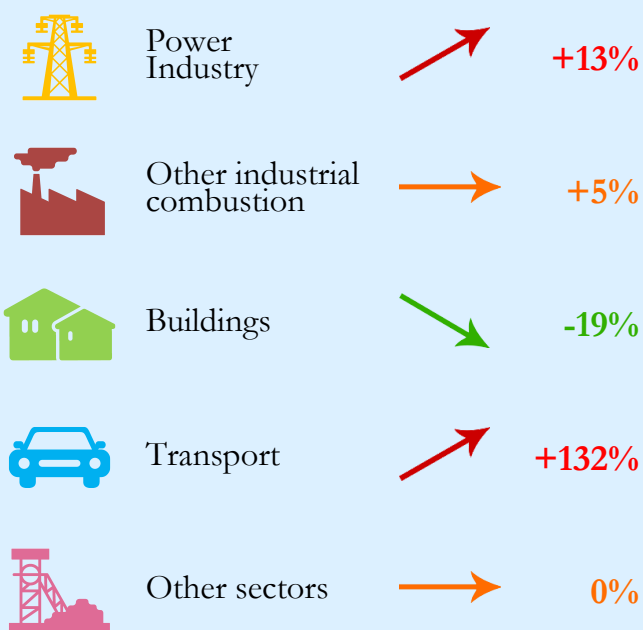
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	38.914	8.172	0.120	4761657
2005	47.277	11.222	0.244	4212977
1990	32.852	9.204	0.436	3569257



### 2017 vs 1990



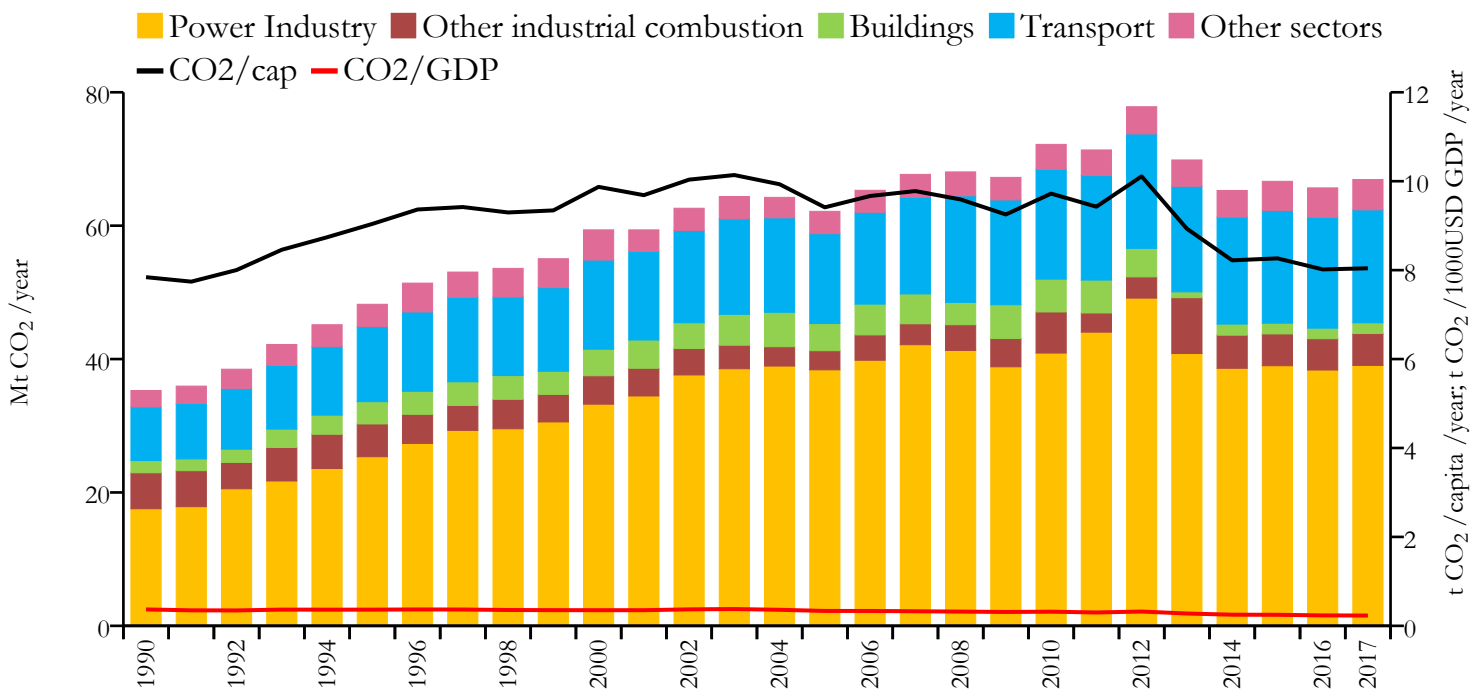
### 2017 vs 2005



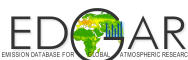
# Israel and Palestine, State of



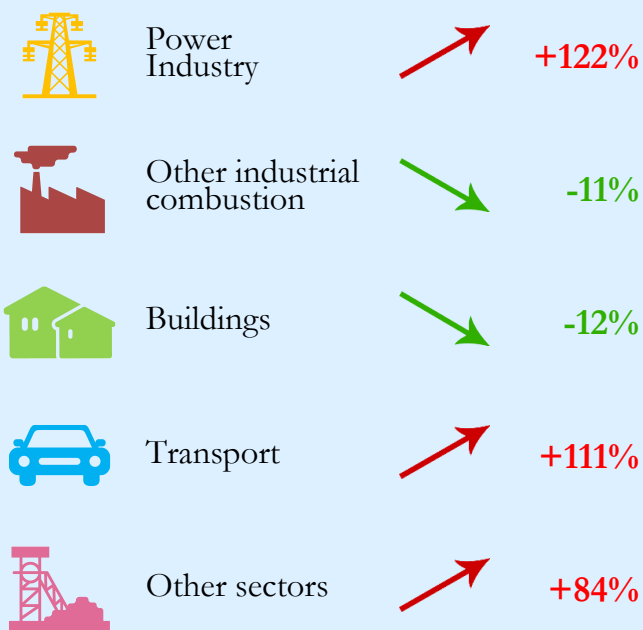
## Fossil CO<sub>2</sub> emissions by sector



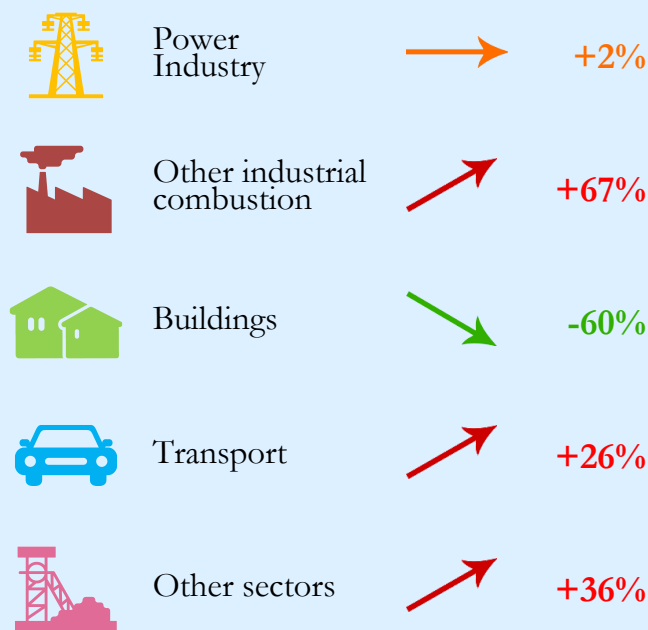
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	66.916	8.041	0.232	8321570
2005	62.149	9.412	0.335	6602970
1990	35.291	7.842	0.369	4500475



### 2017 vs 1990



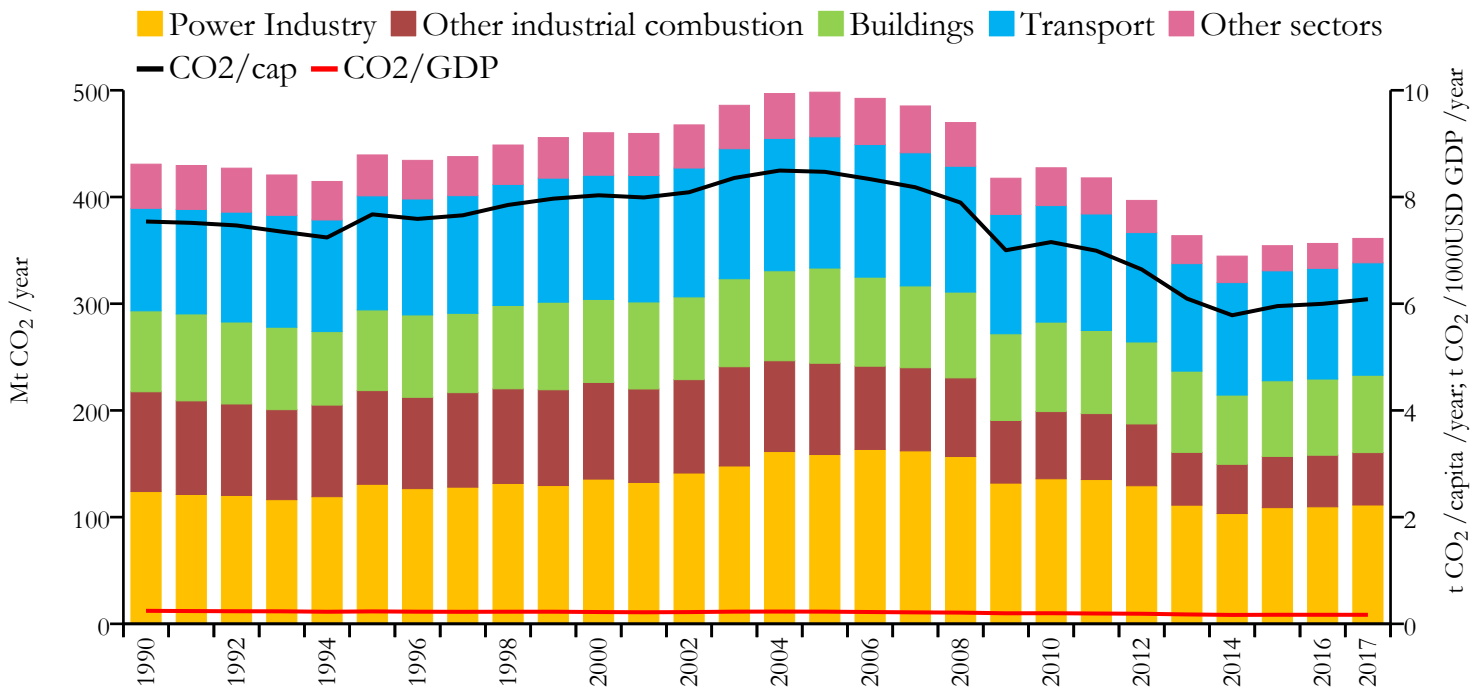
### 2017 vs 2005



# Italy, San Marino and the Holy See



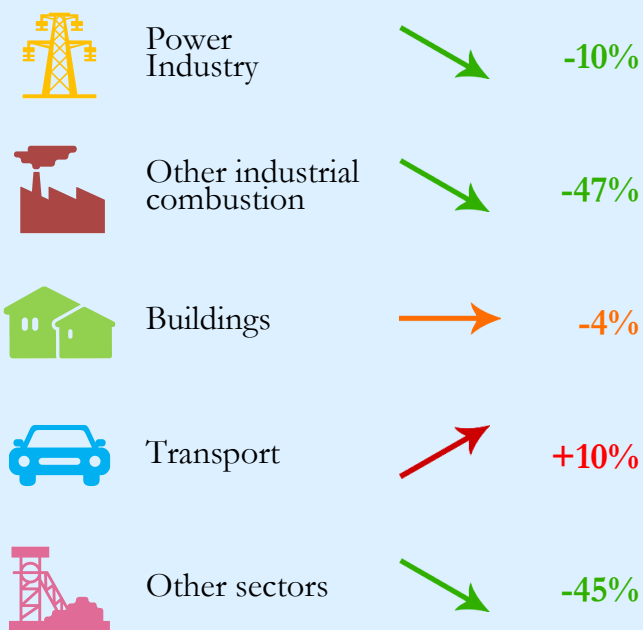
## Fossil CO<sub>2</sub> emissions by sector



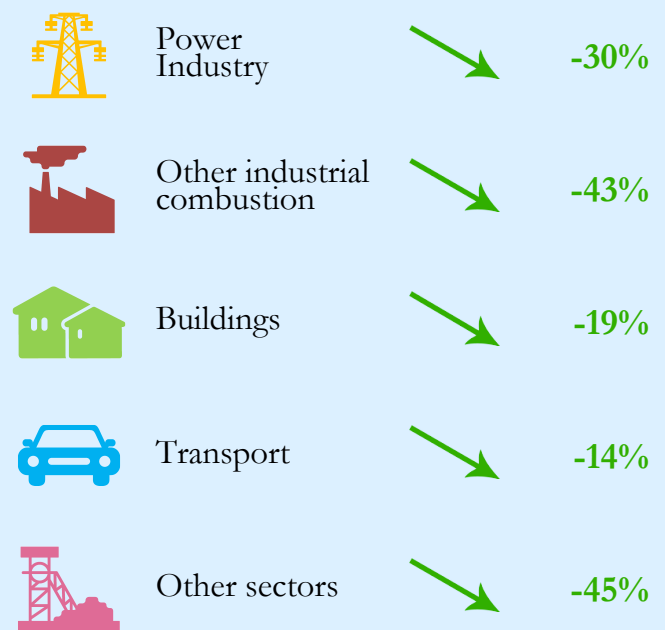
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	361.176	6.085	0.169	59359900
2005	498.205	8.472	0.229	58808483
1990	430.762	7.540	0.244	57127120



### 2017 vs 1990



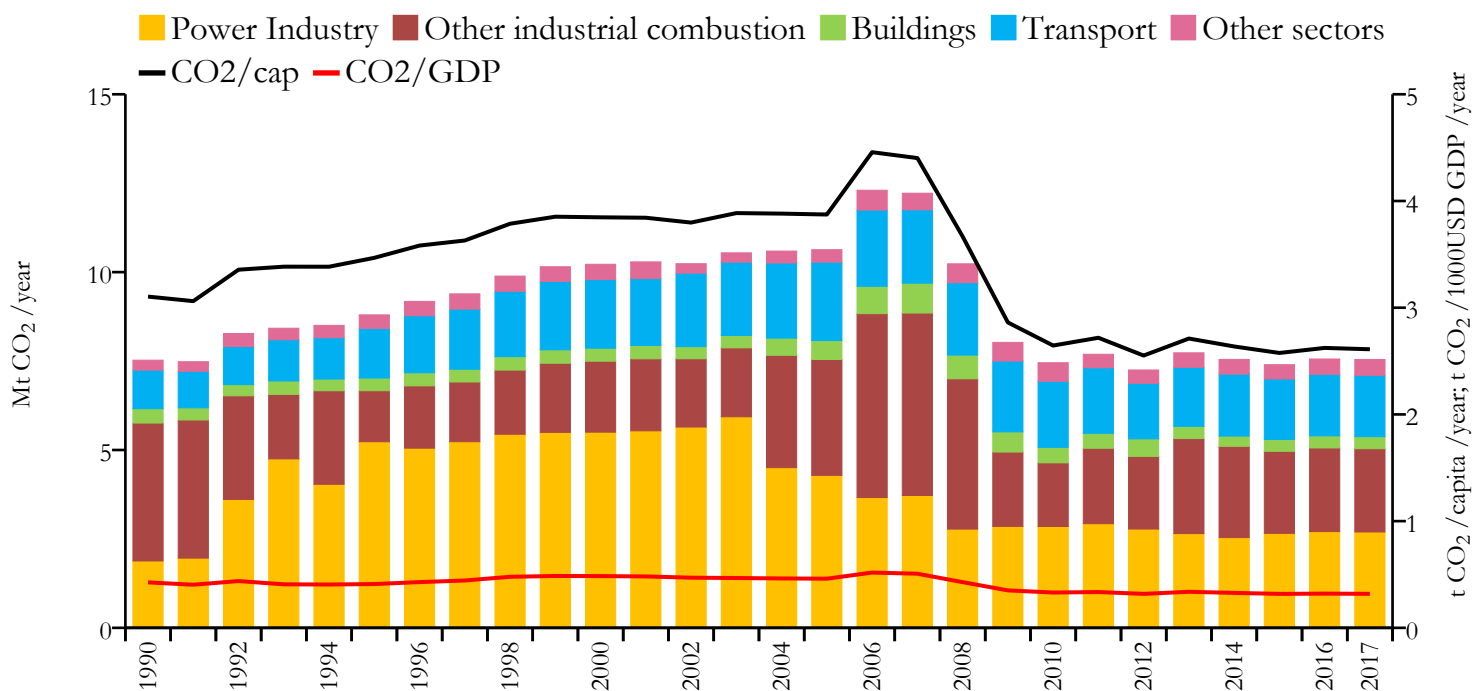
### 2017 vs 2005



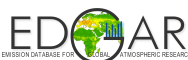
# Jamaica



## Fossil CO<sub>2</sub> emissions by sector



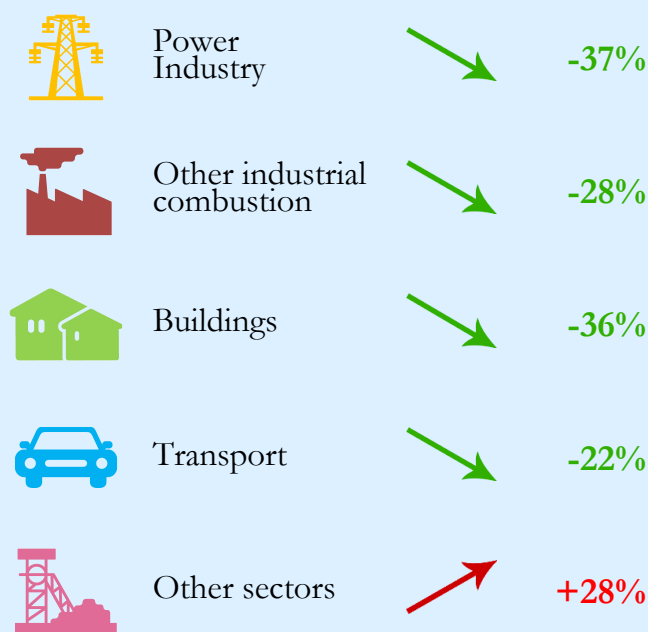
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.546	2.611	0.319	2890299
2005	10.631	3.873	0.461	2744673
1990	7.525	3.104	0.426	2424242



### 2017 vs 1990



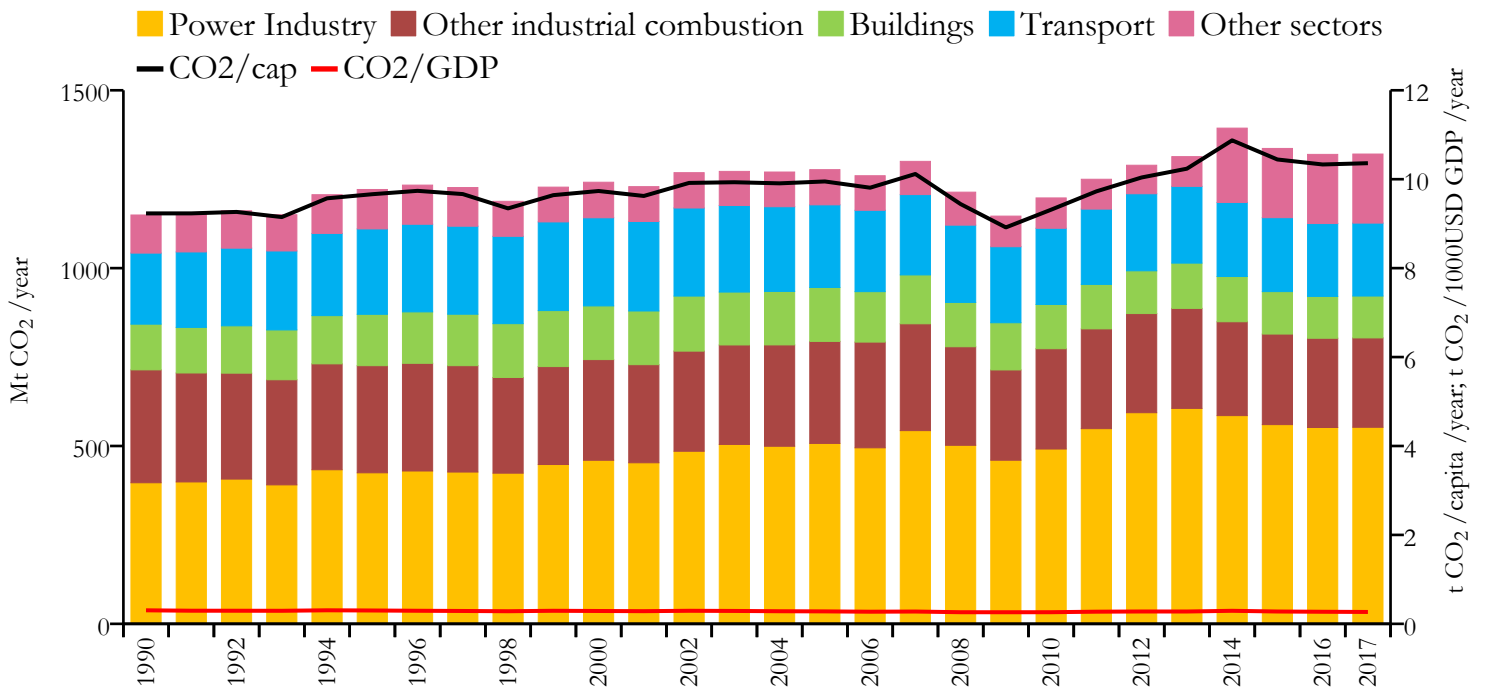
### 2017 vs 2005



# Japan



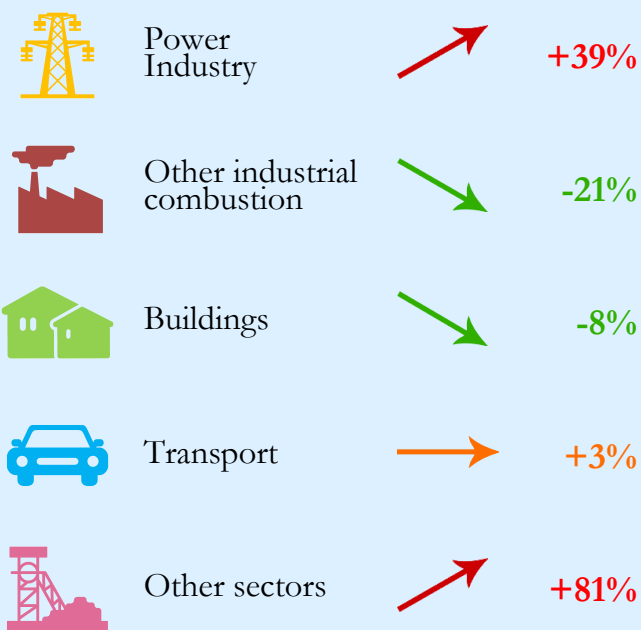
## Fossil CO<sub>2</sub> emissions by sector



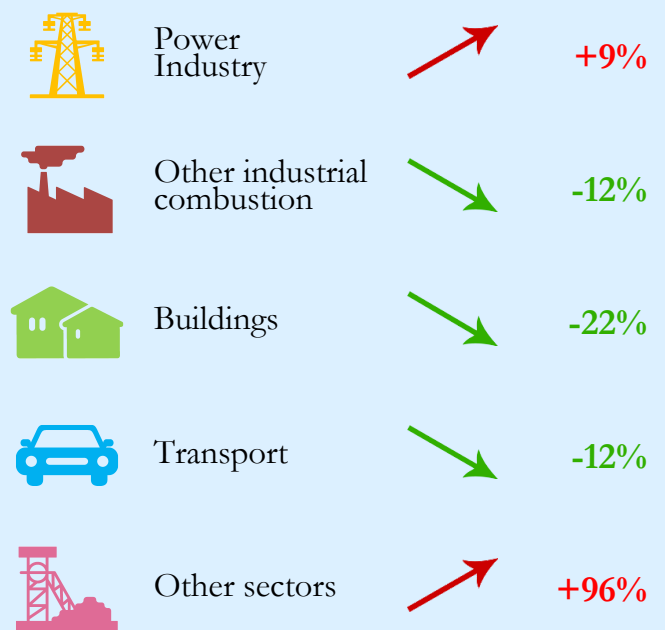
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1320.776	10.360	0.267	127484450
2005	1276.863	9.949	0.280	128335767
1990	1149.400	9.231	0.304	124515561



### 2017 vs 1990



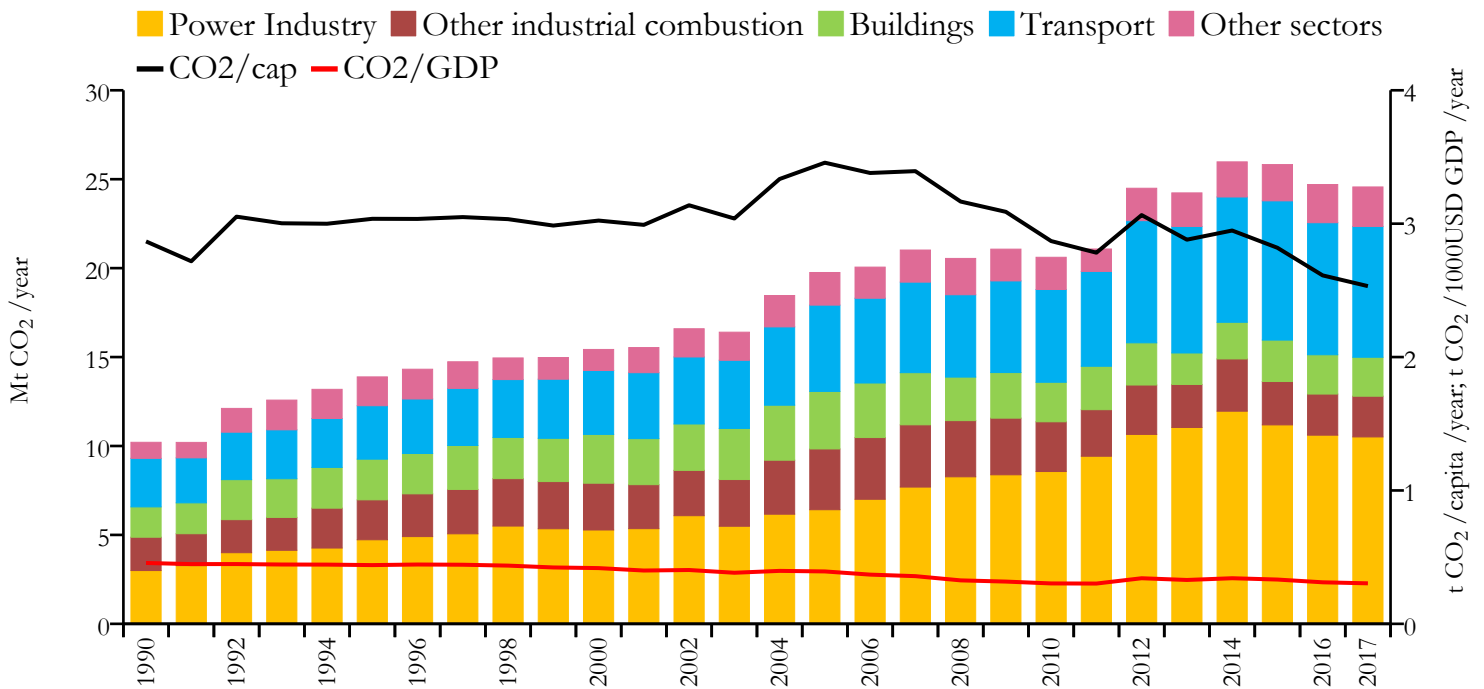
### 2017 vs 2005







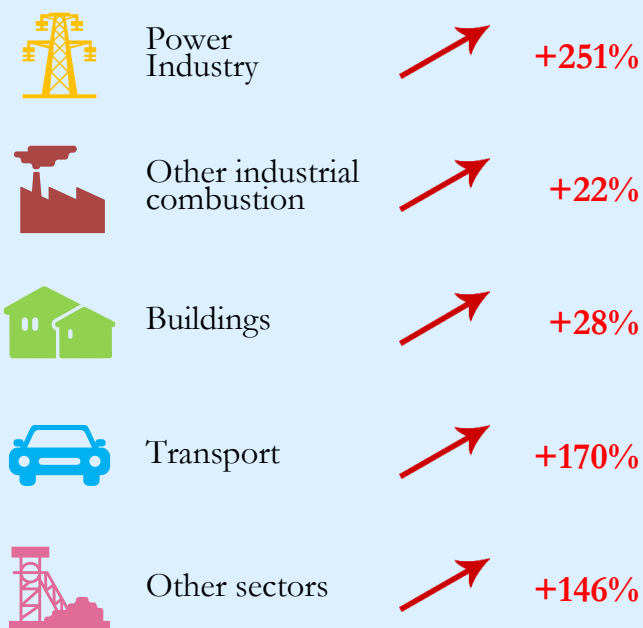
## Fossil CO<sub>2</sub> emissions by sector



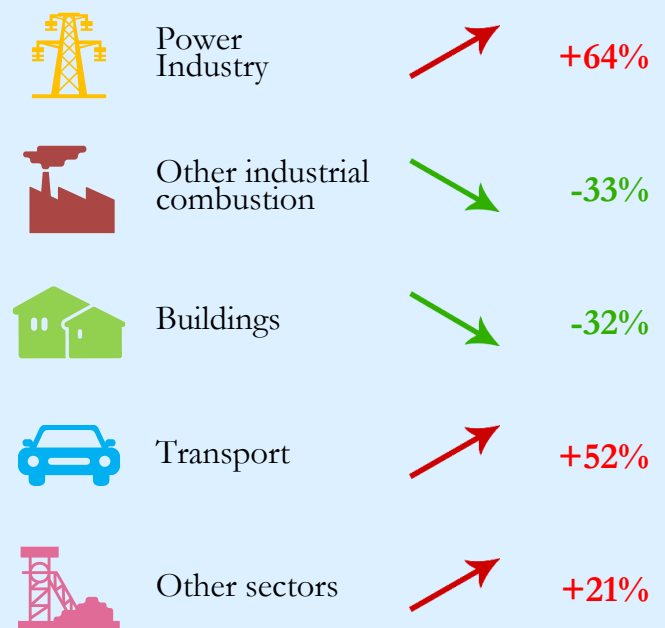
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	24.565	2.532	0.304	9702353
2005	19.755	3.457	0.393	5714111
1990	10.208	2.867	0.456	3560582



### 2017 vs 1990

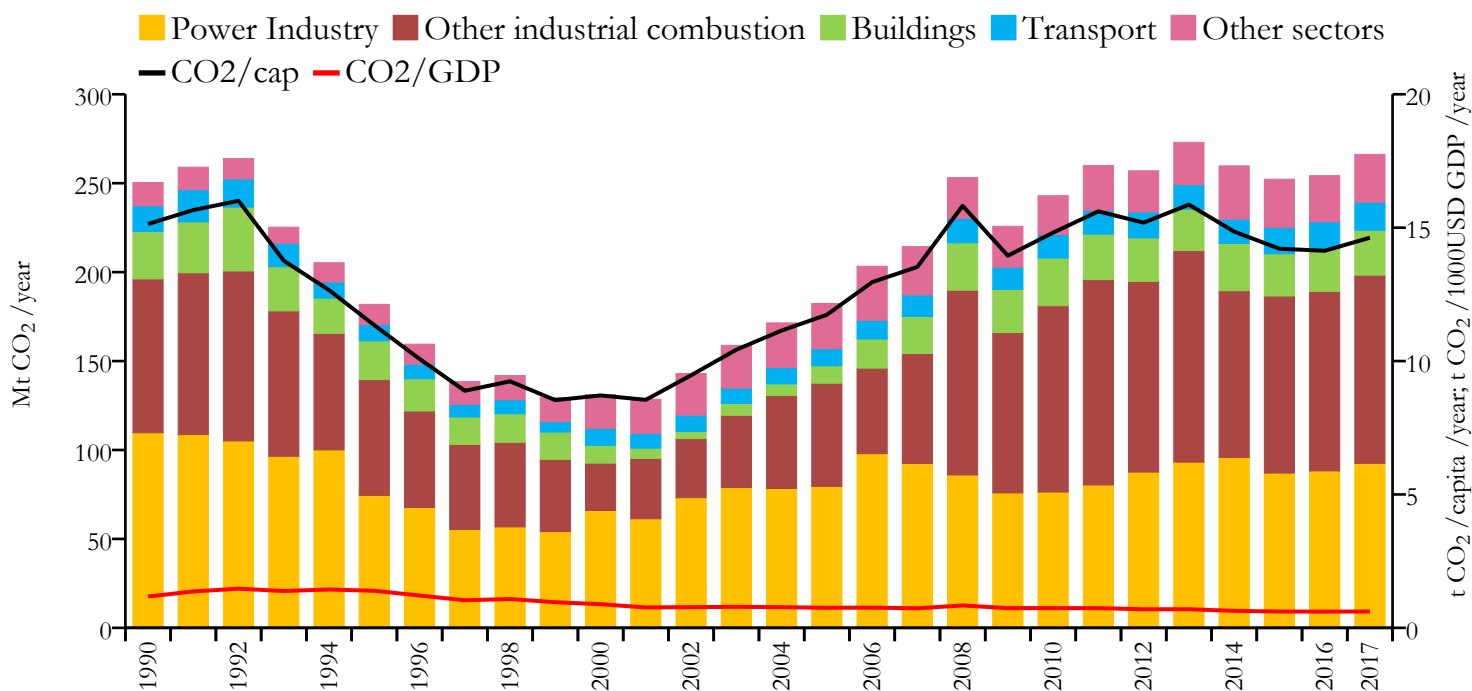


### 2017 vs 2005





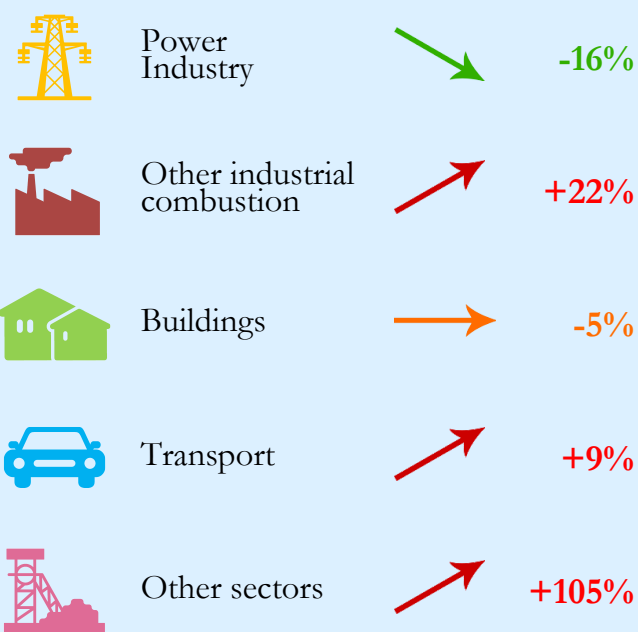
## Fossil CO<sub>2</sub> emissions by sector



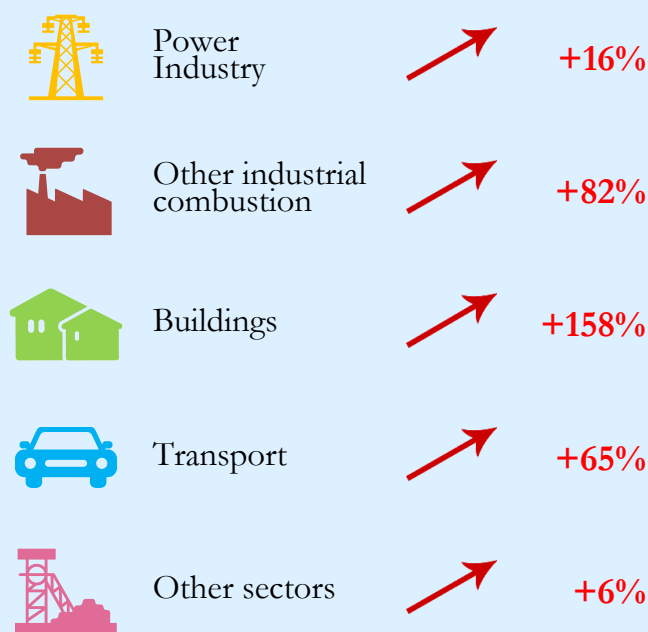
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	266.207	14.623	0.614	18204499
2005	182.369	11.734	0.752	15541457
1990	250.382	15.138	1.174	16540258



### 2017 vs 1990

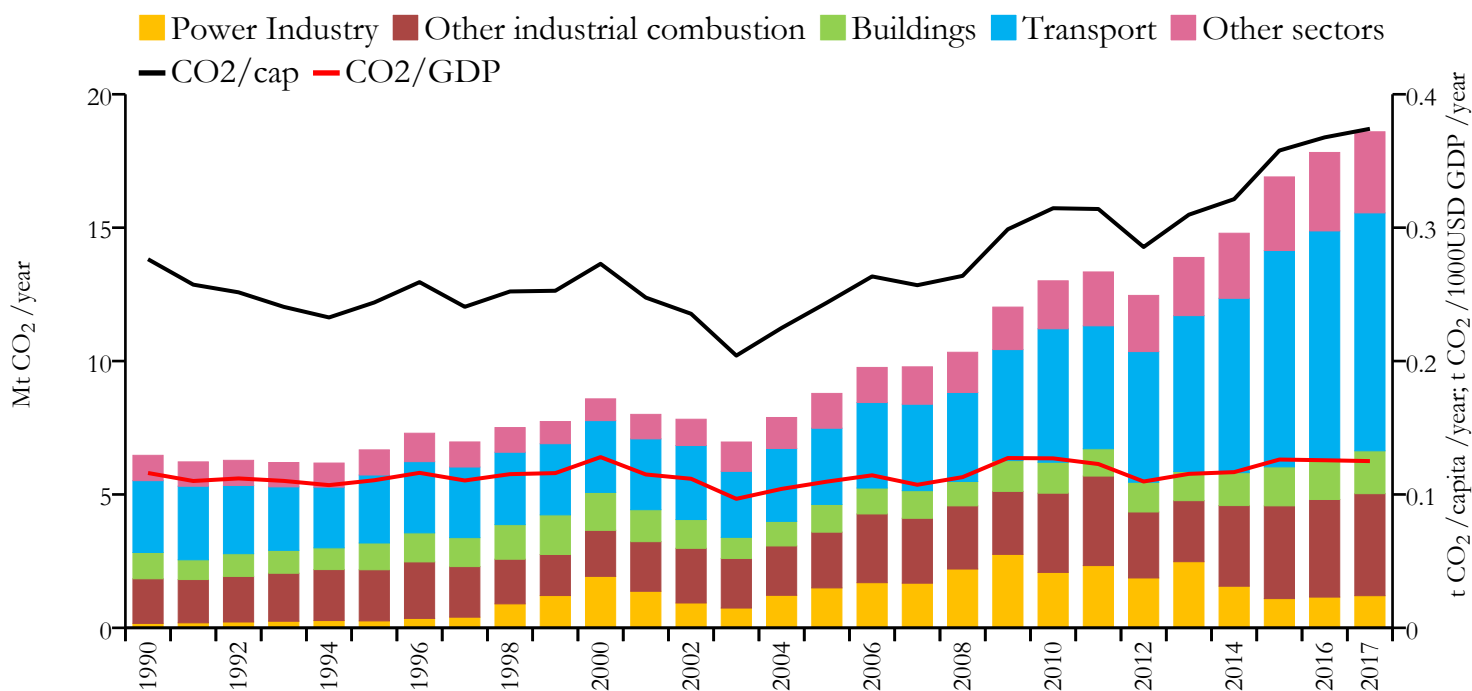


### 2017 vs 2005





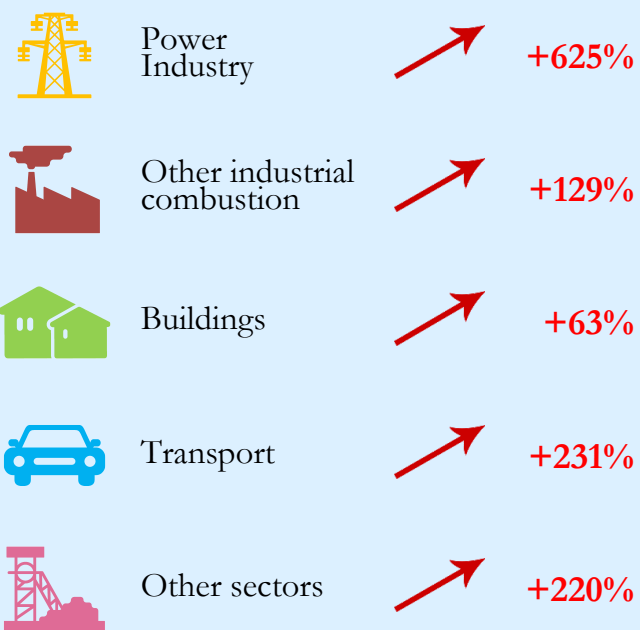
## Fossil CO<sub>2</sub> emissions by sector



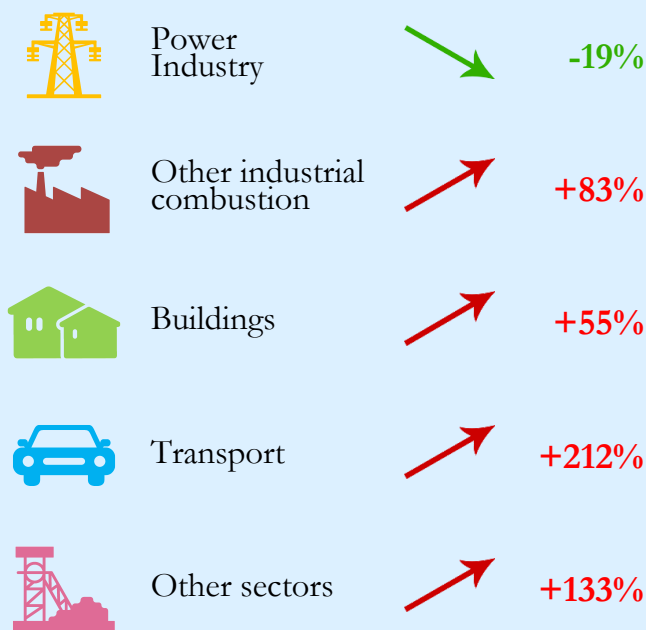
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	18.594	0.374	0.125	49699862
2005	8.787	0.244	0.110	36048288
1990	6.467	0.276	0.116	23402507



### 2017 vs 1990

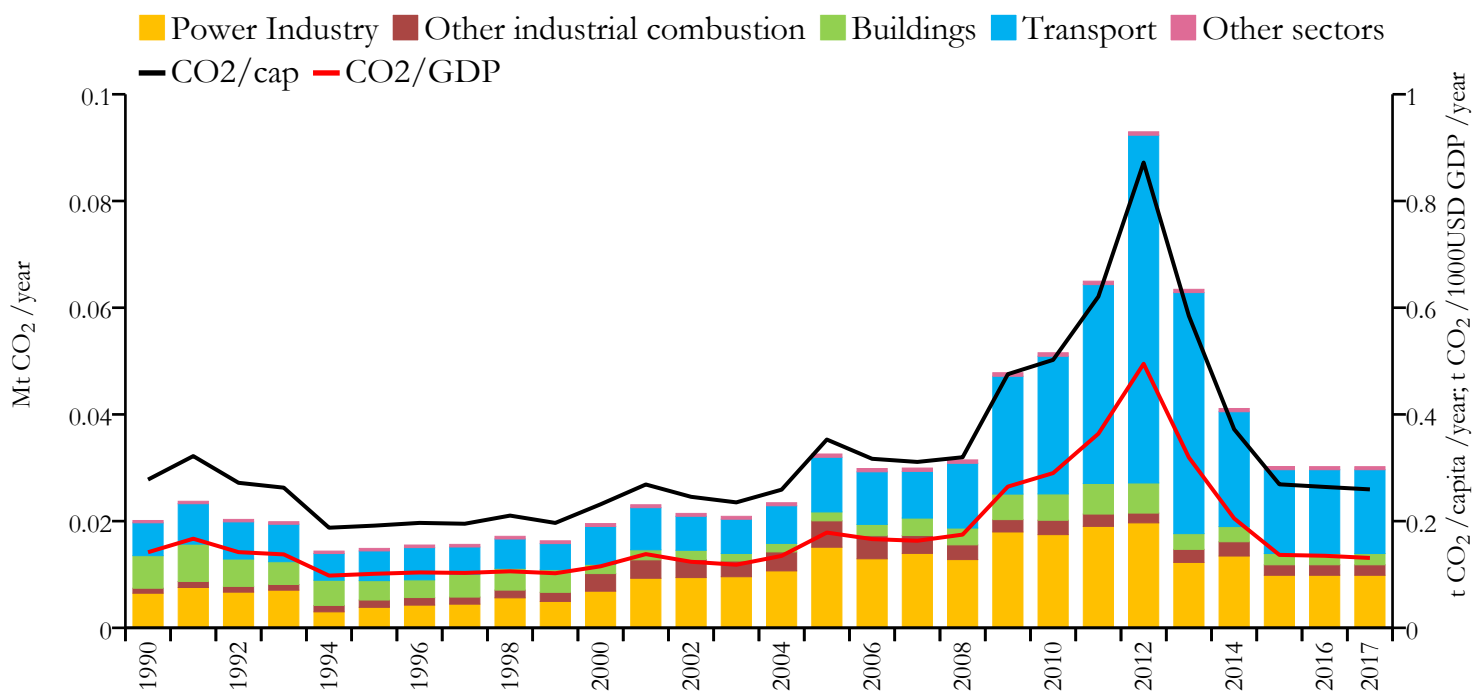


### 2017 vs 2005





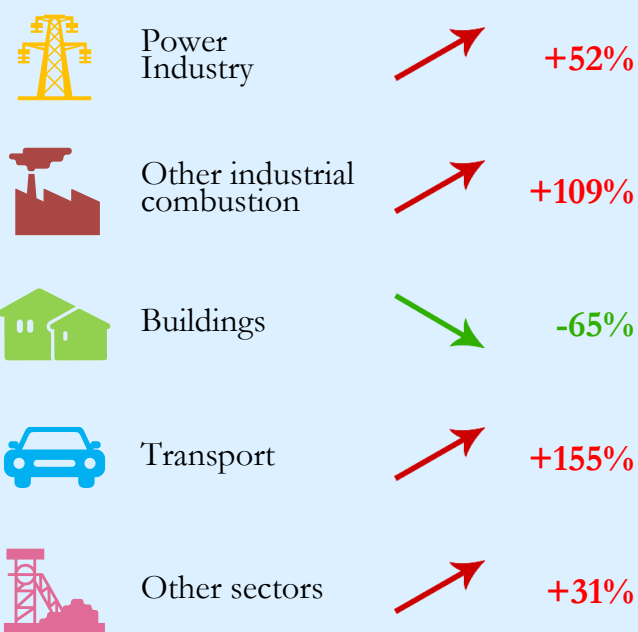
## Fossil CO<sub>2</sub> emissions by sector



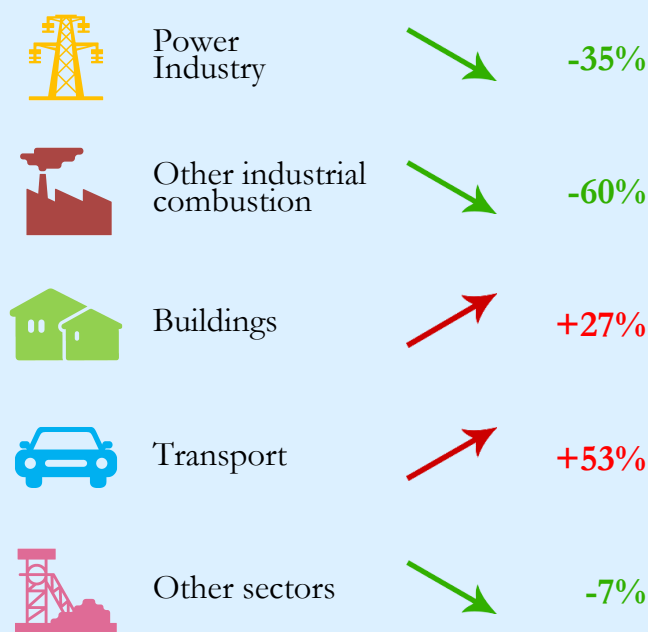
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.030	0.259	0.131	116398
2005	0.033	0.353	0.179	92325
1990	0.020	0.278	0.142	72412



### 2017 vs 1990

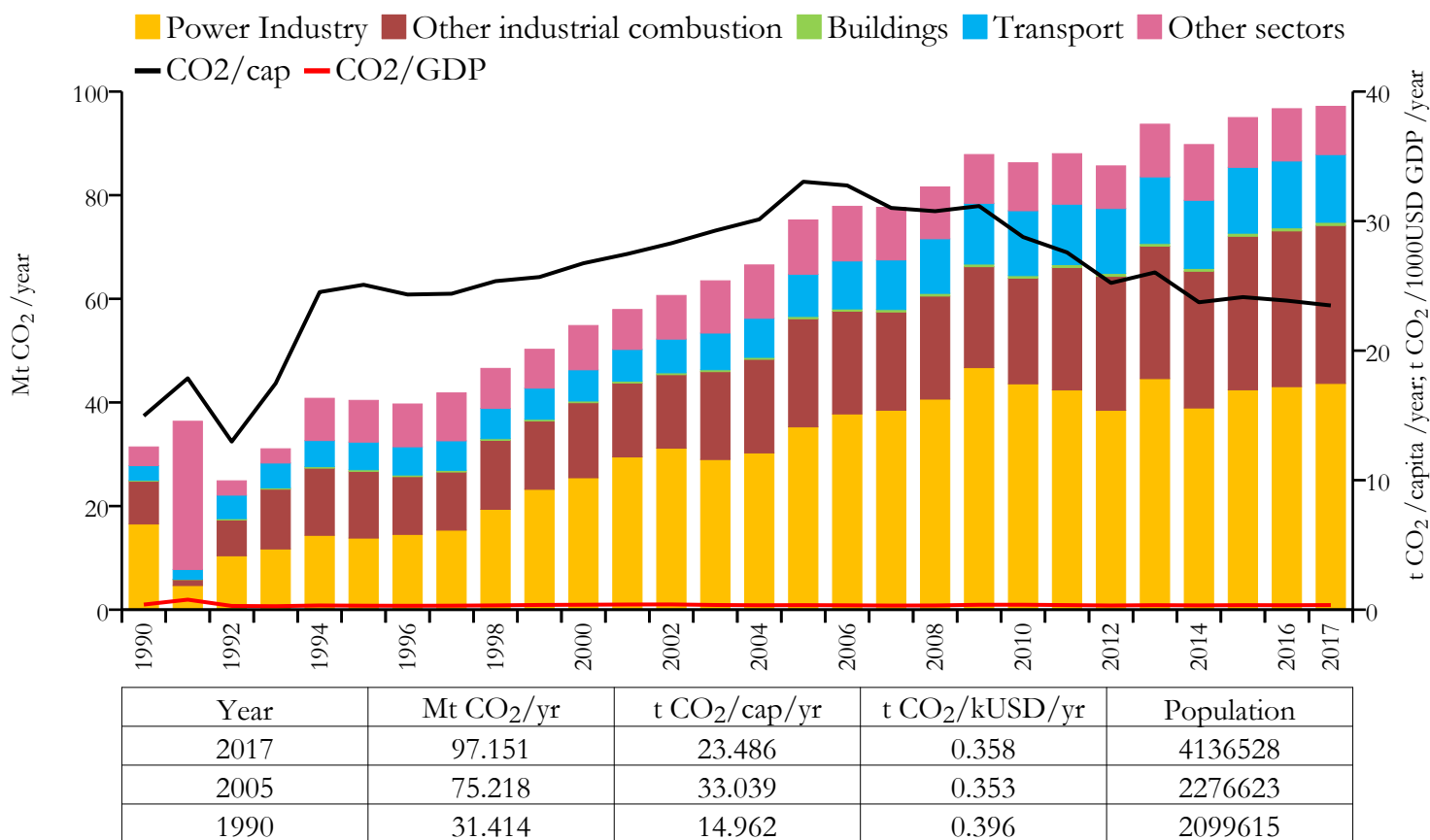


### 2017 vs 2005

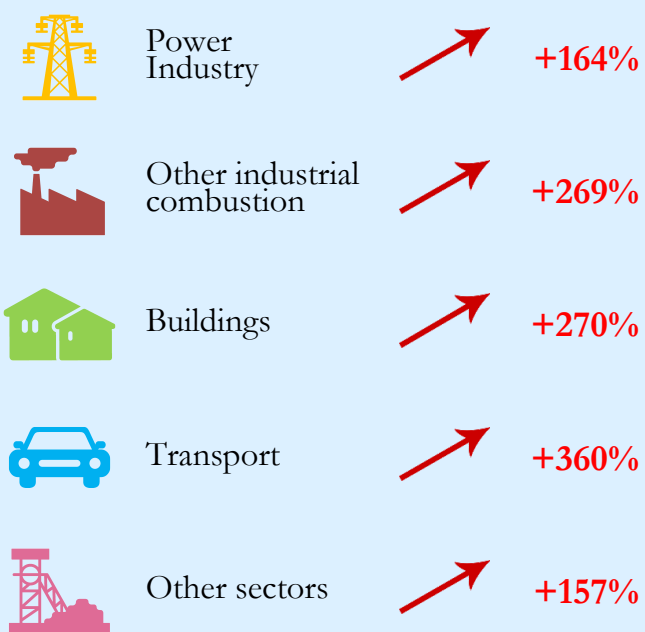




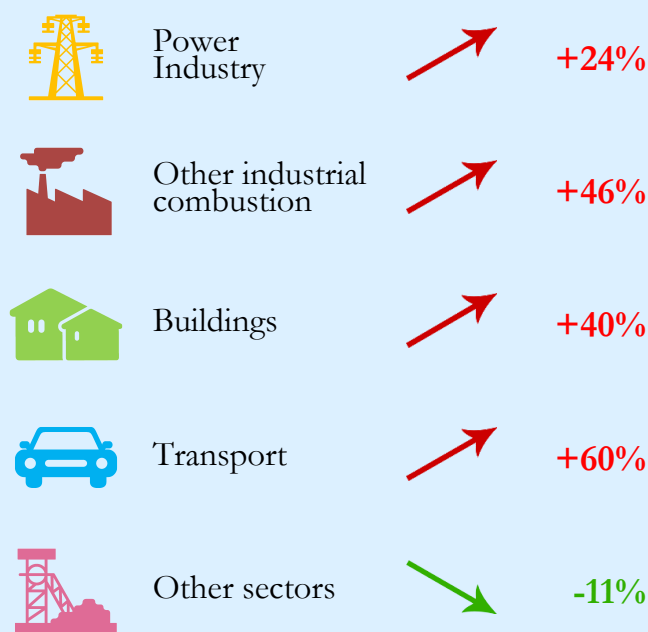
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990

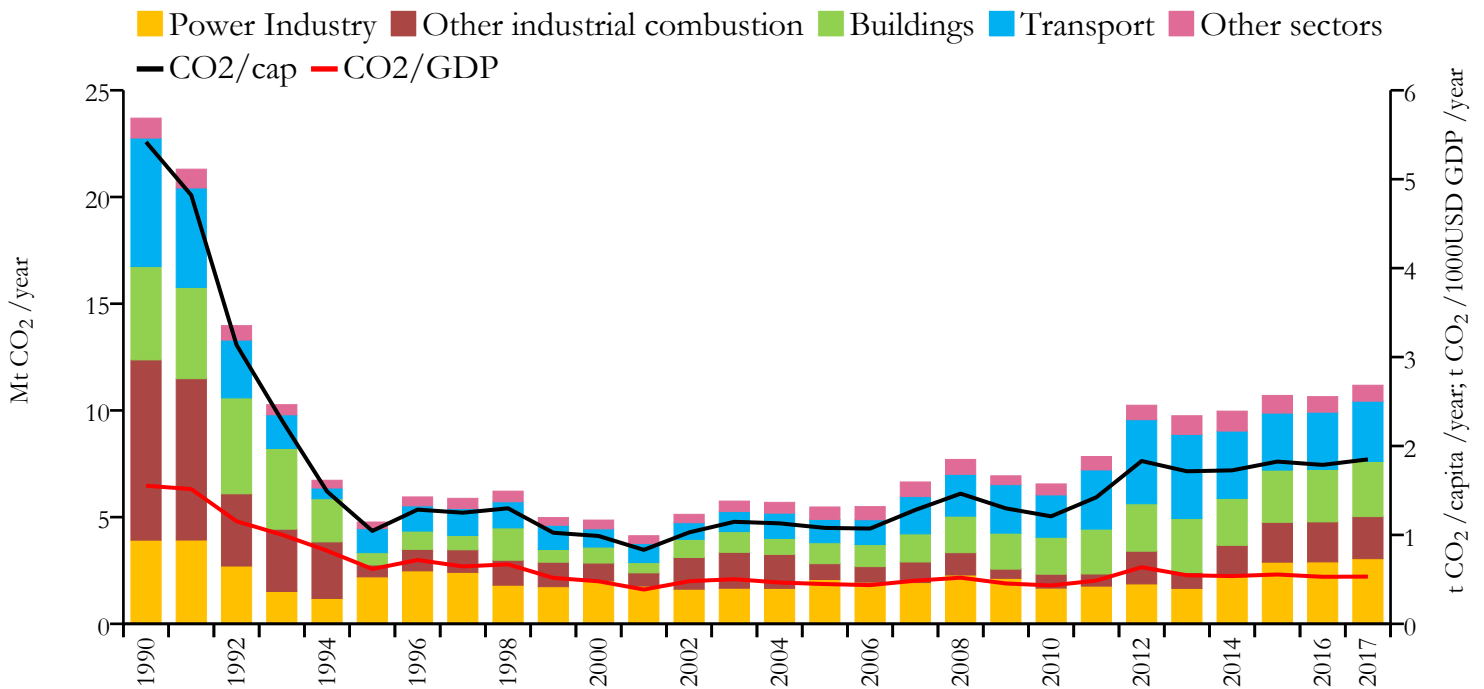


### 2017 vs 2005





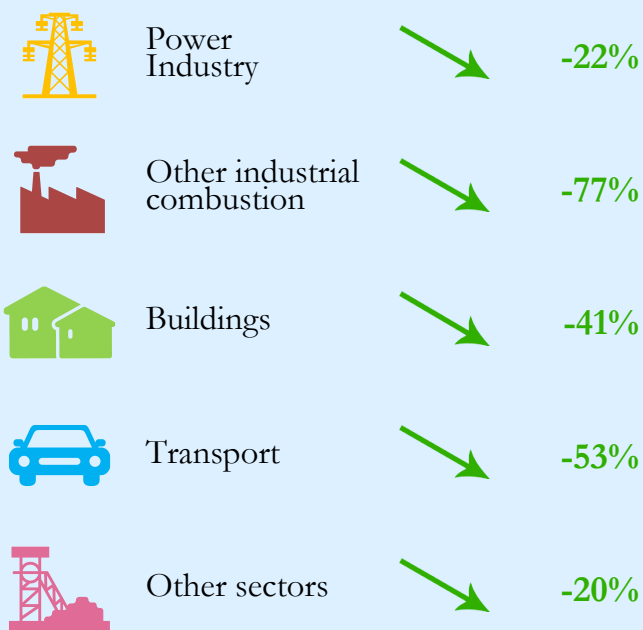
## Fossil CO<sub>2</sub> emissions by sector



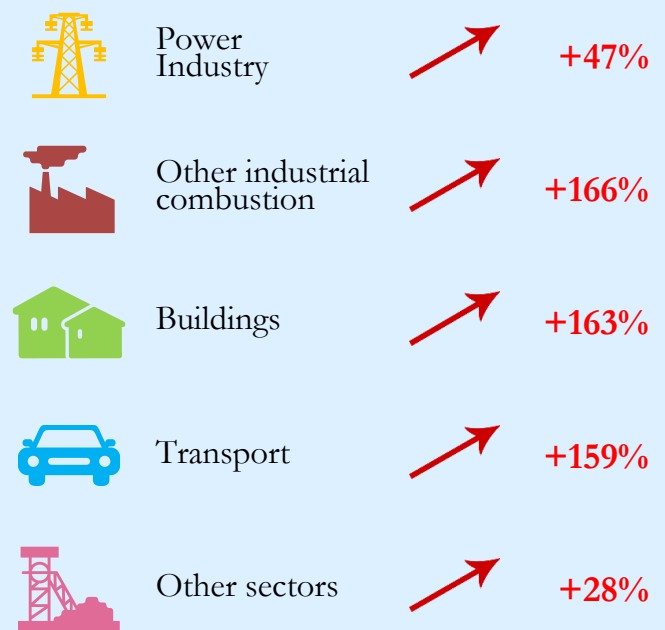
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	11.180	1.849	0.531	6045117
2005	5.475	1.079	0.447	5075380
1990	23.696	5.419	1.553	4372890



### 2017 vs 1990

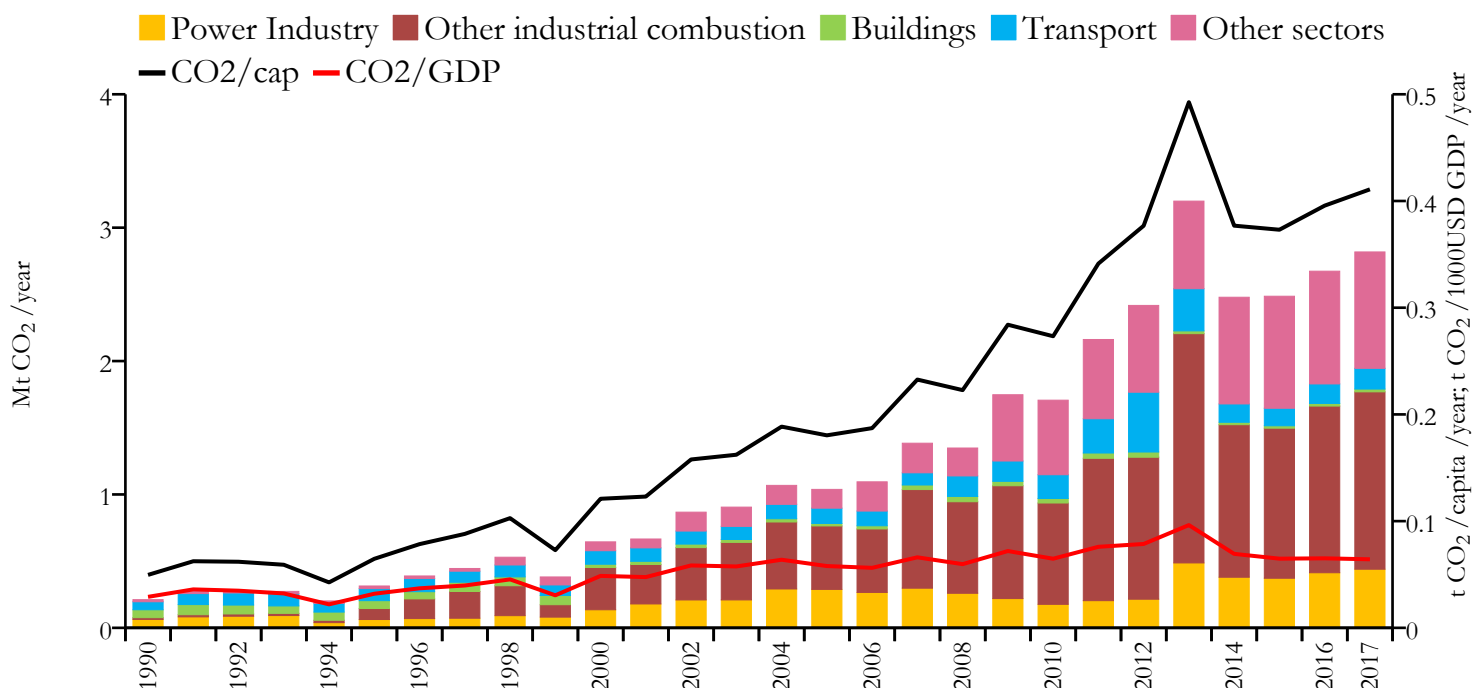


### 2017 vs 2005

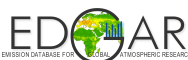




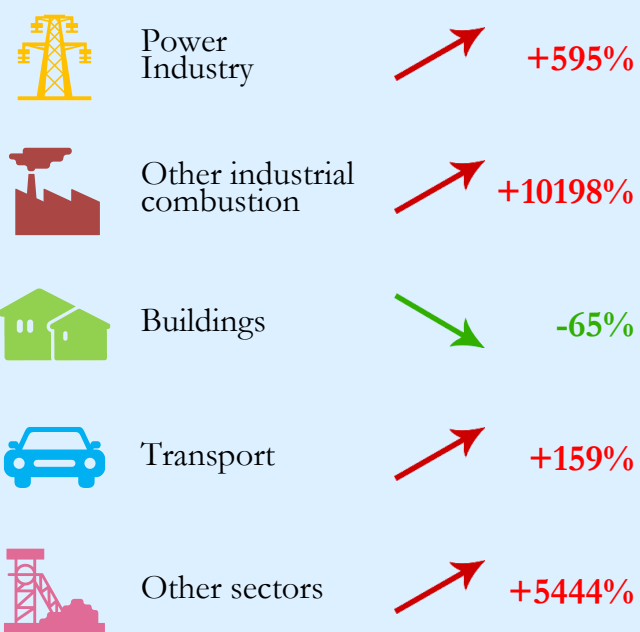
## Fossil CO<sub>2</sub> emissions by sector



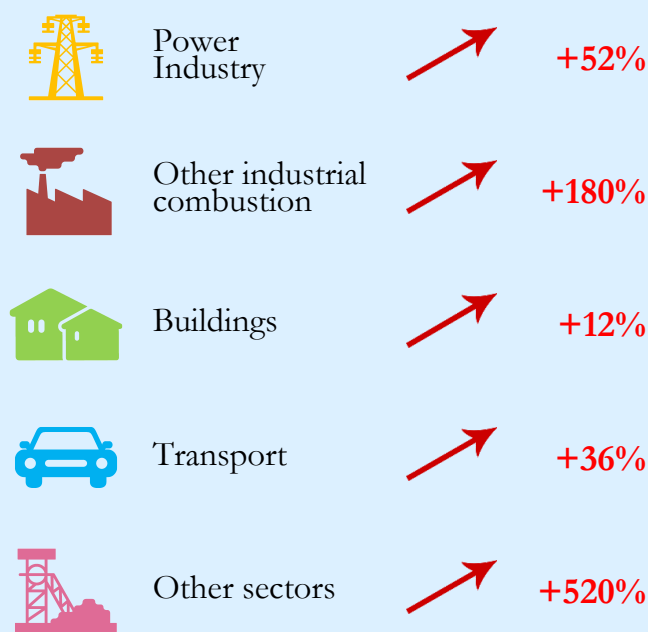
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.818	0.411	0.064	6858160
2005	1.038	0.180	0.058	5754026
1990	0.211	0.050	0.029	4258472



### 2017 vs 1990

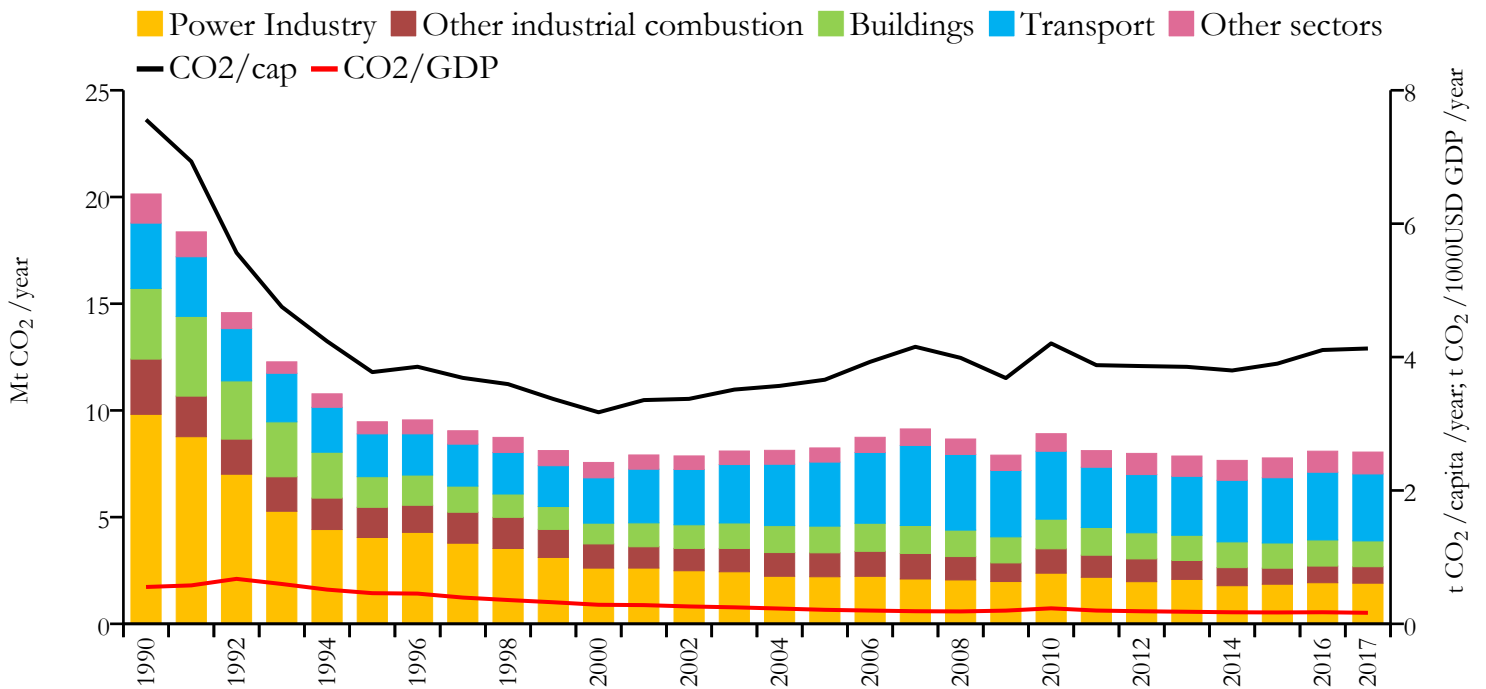


### 2017 vs 2005





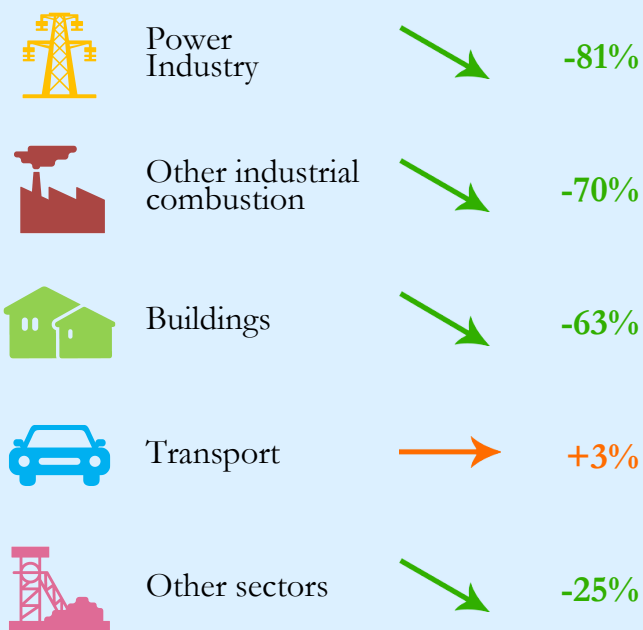
## Fossil CO<sub>2</sub> emissions by sector



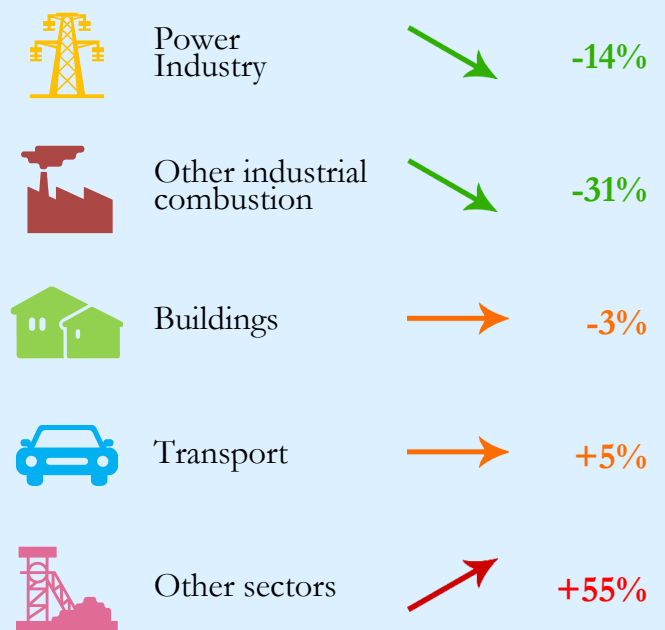
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	8.049	4.129	0.165	1949670
2005	8.242	3.660	0.210	2251983
1990	20.141	7.559	0.553	2664432



### 2017 vs 1990



### 2017 vs 2005

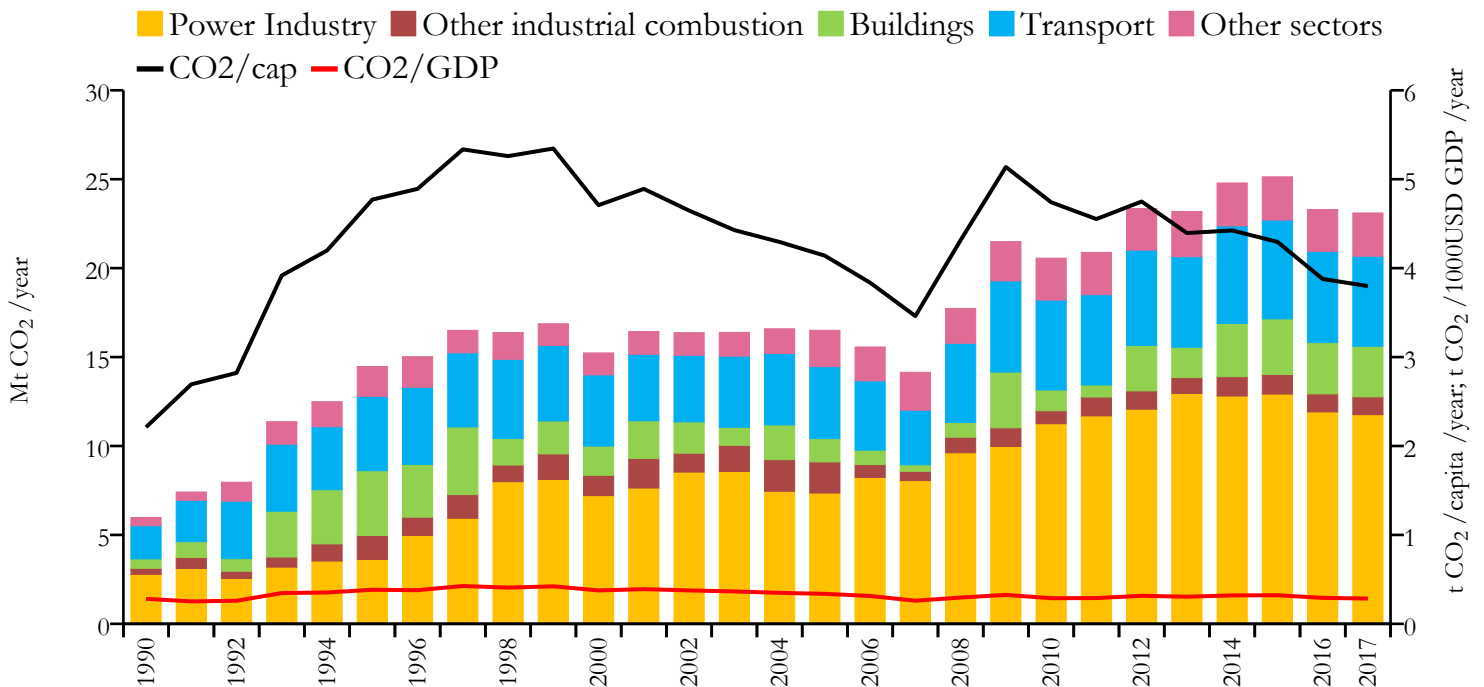




# Lebanon



## Fossil CO<sub>2</sub> emissions by sector



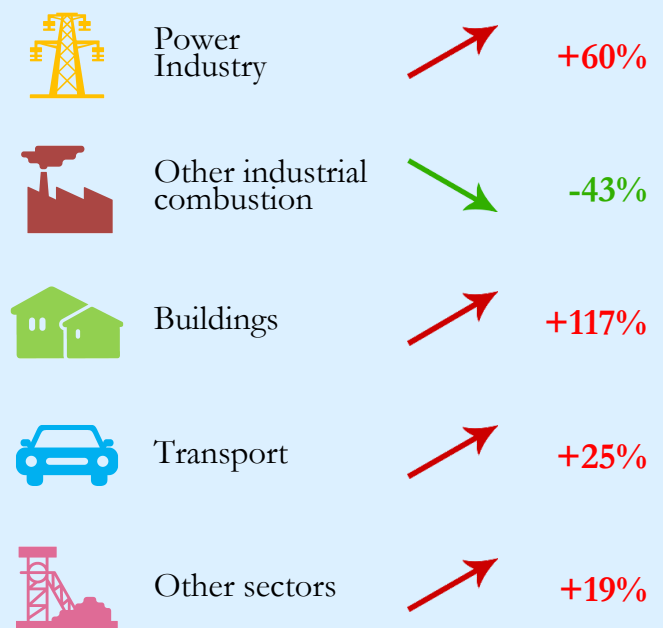
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	23.102	3.798	0.284	6082357
2005	16.505	4.140	0.337	3986852
1990	5.977	2.211	0.281	2703016



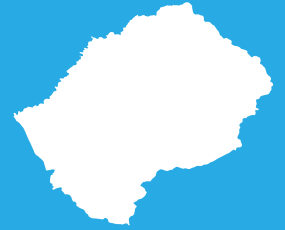
### 2017 vs 1990



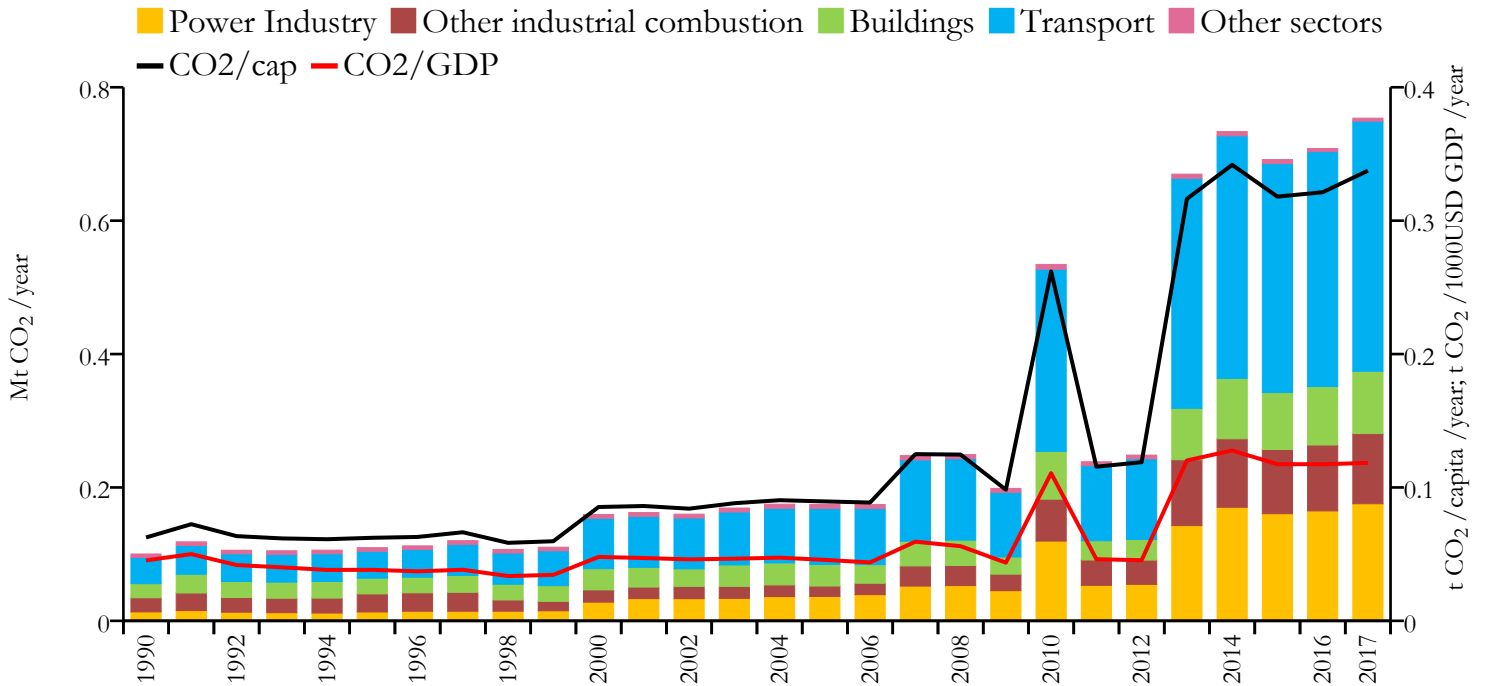
### 2017 vs 2005



# Lesotho



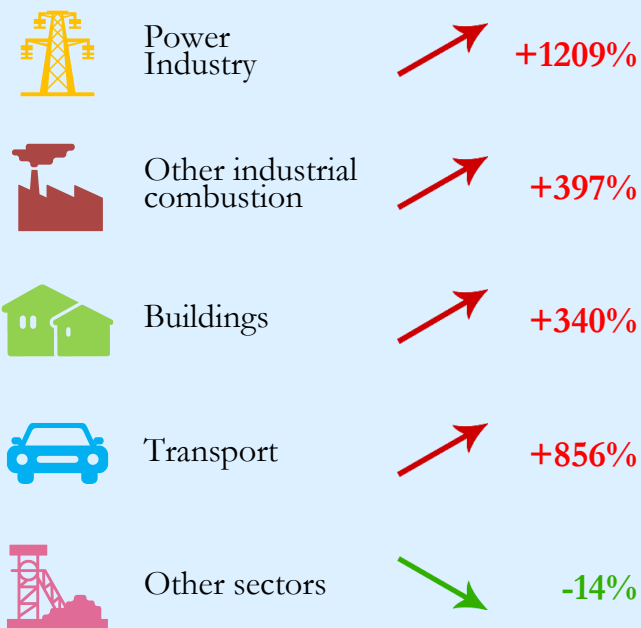
## Fossil CO<sub>2</sub> emissions by sector



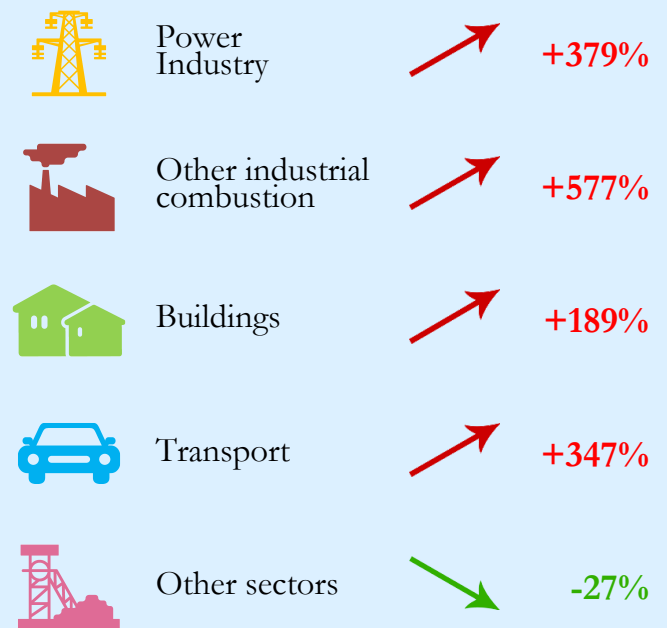
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.754	0.337	0.118	2233339
2005	0.175	0.090	0.046	1949543
1990	0.100	0.062	0.045	1603938



### 2017 vs 1990

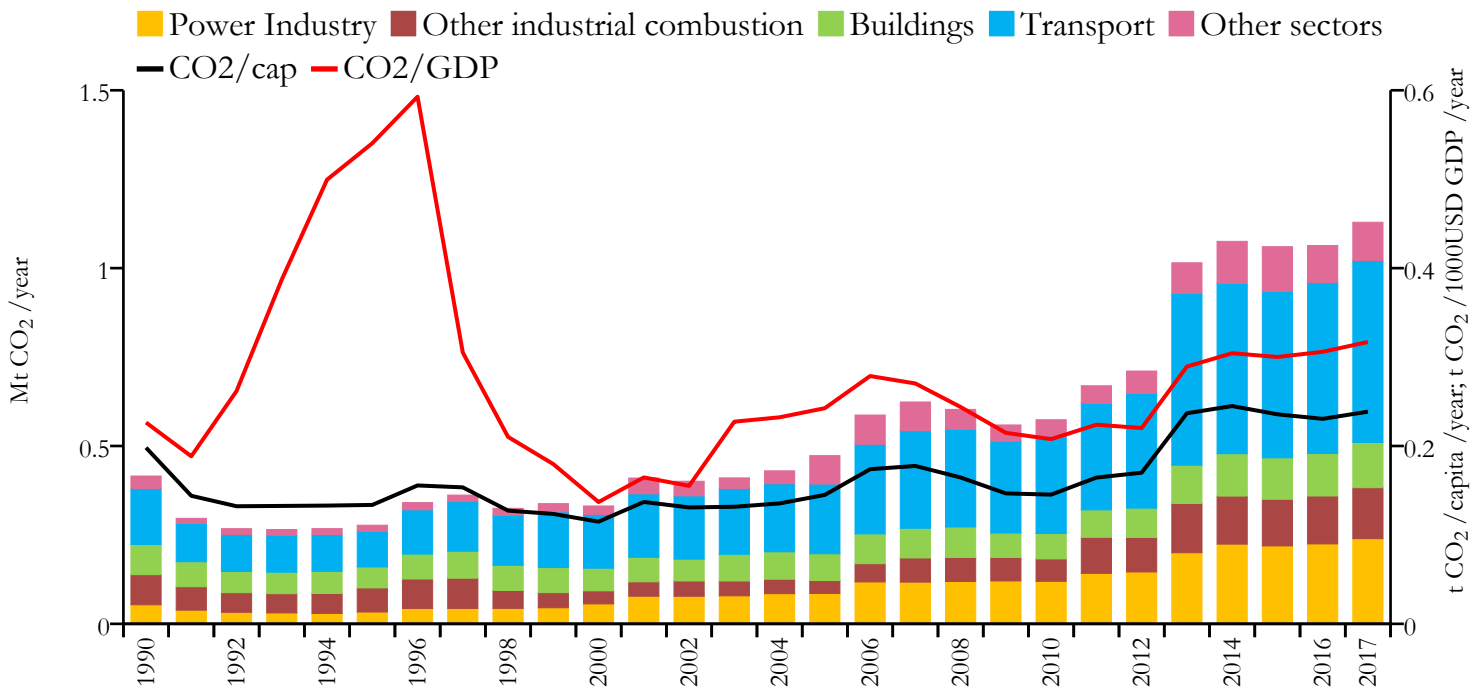


### 2017 vs 2005





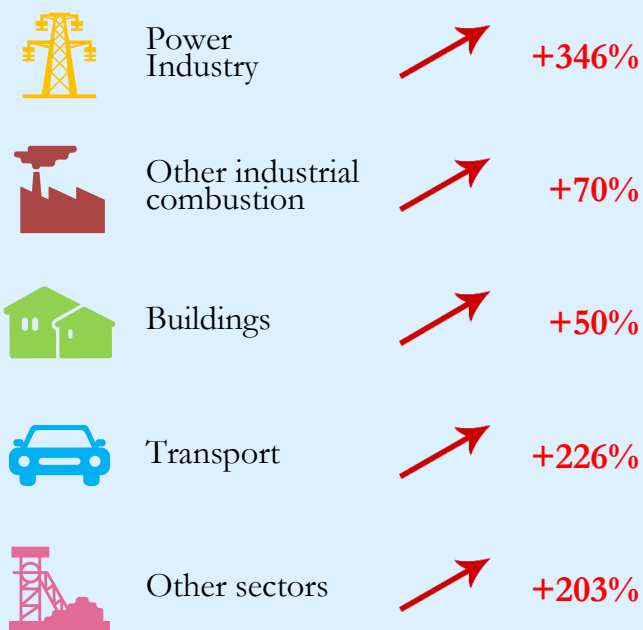
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.129	0.239	0.317	4731906
2005	0.473	0.145	0.243	3261230
1990	0.416	0.198	0.226	2097232



### 2017 vs 1990

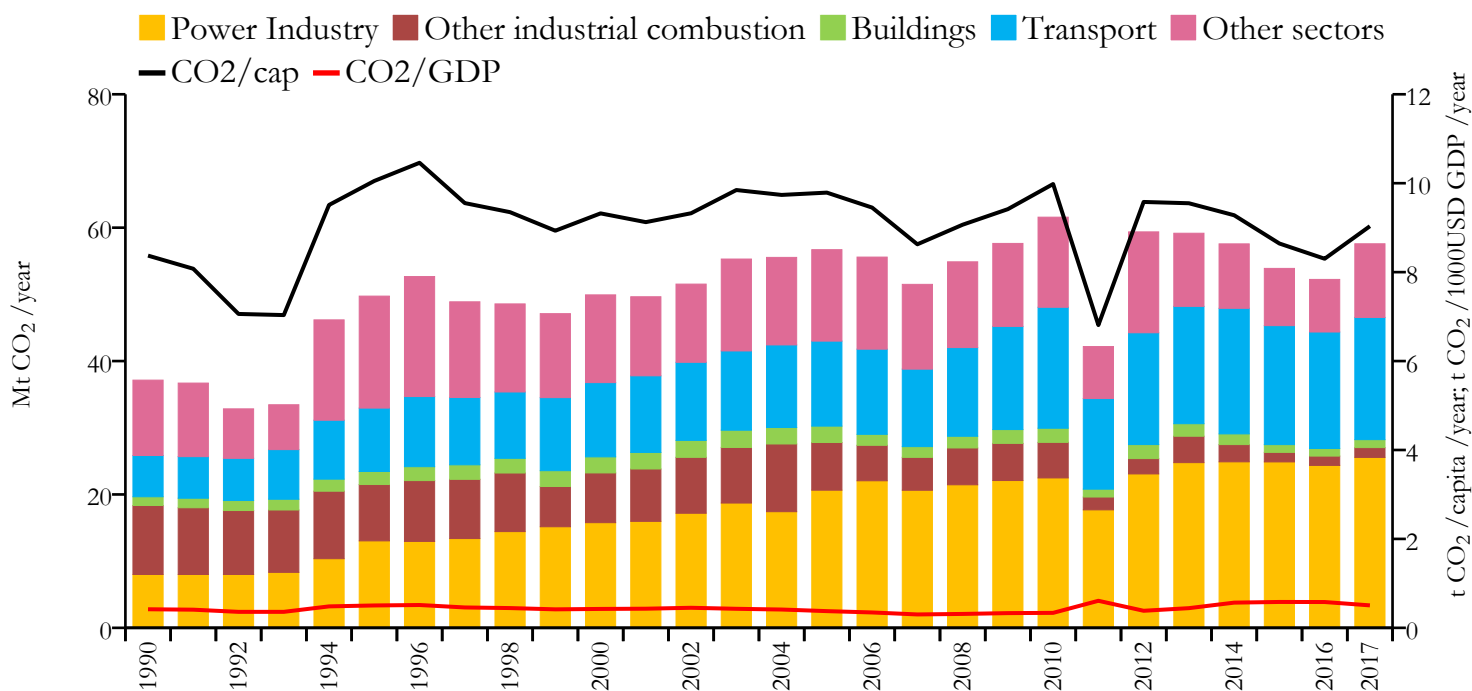


### 2017 vs 2005





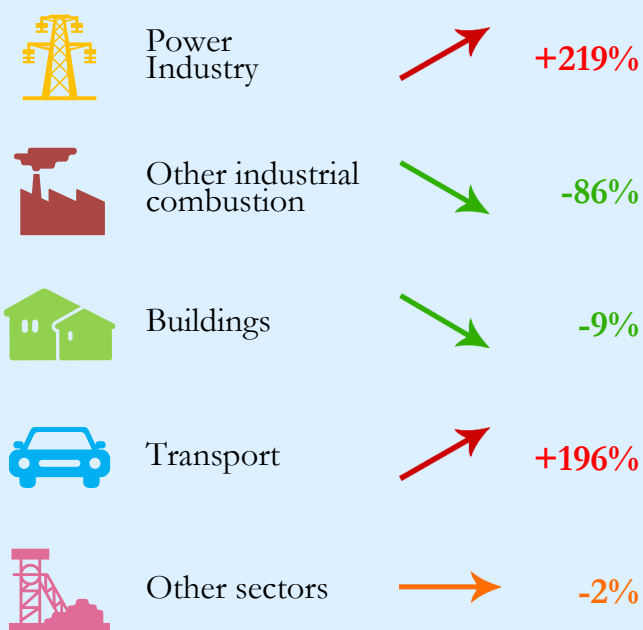
## Fossil CO<sub>2</sub> emissions by sector



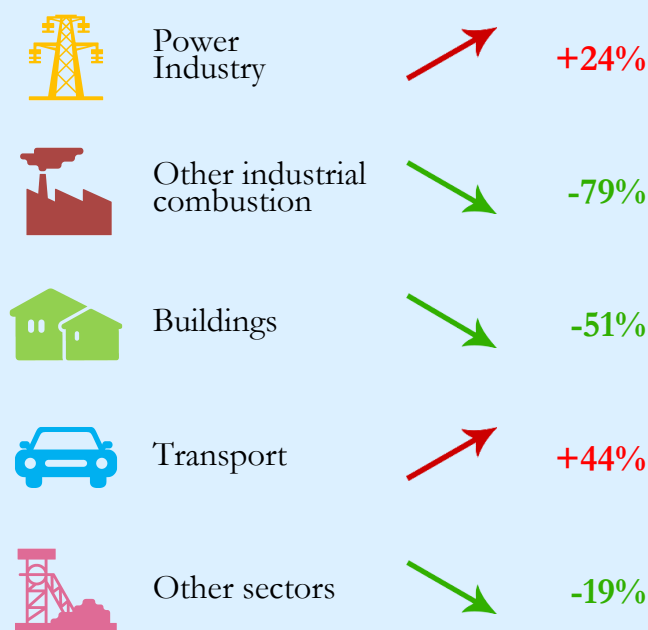
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	57.584	9.033	0.505	6374616
2005	56.700	9.788	0.376	5792688
1990	37.143	8.372	0.418	4436661



### 2017 vs 1990



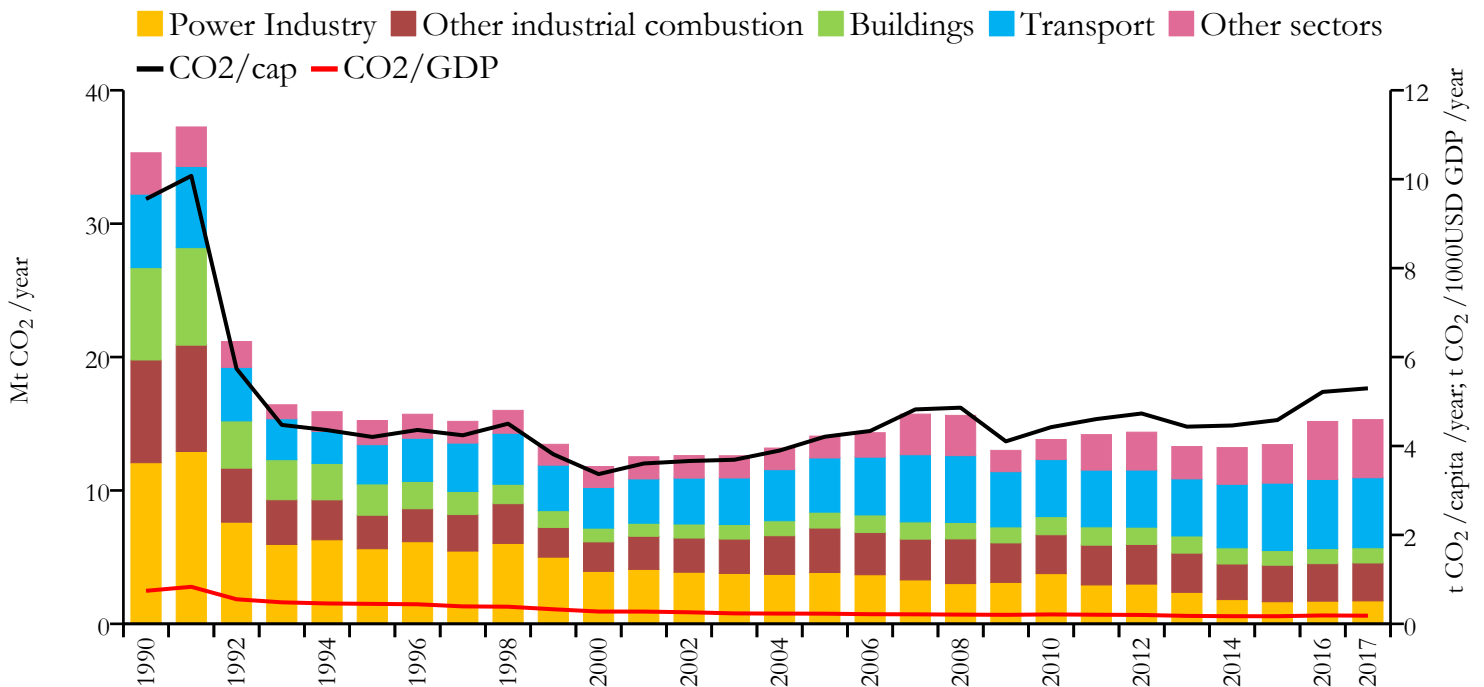
### 2017 vs 2005



# Lithuania



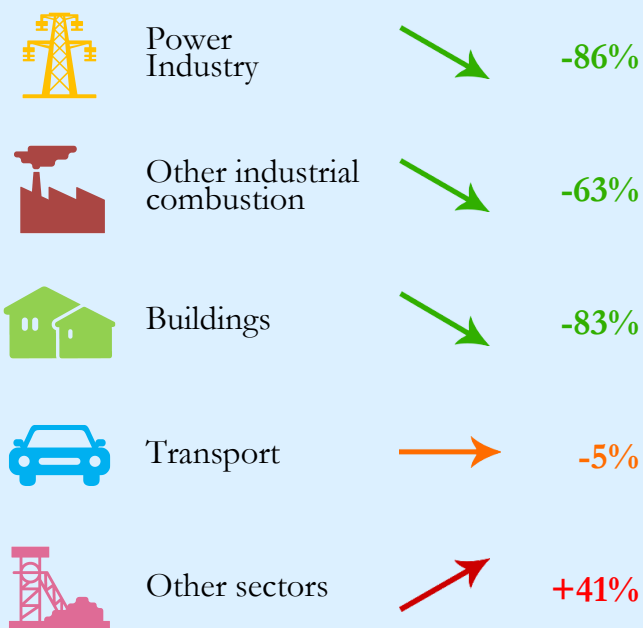
## Fossil CO<sub>2</sub> emissions by sector



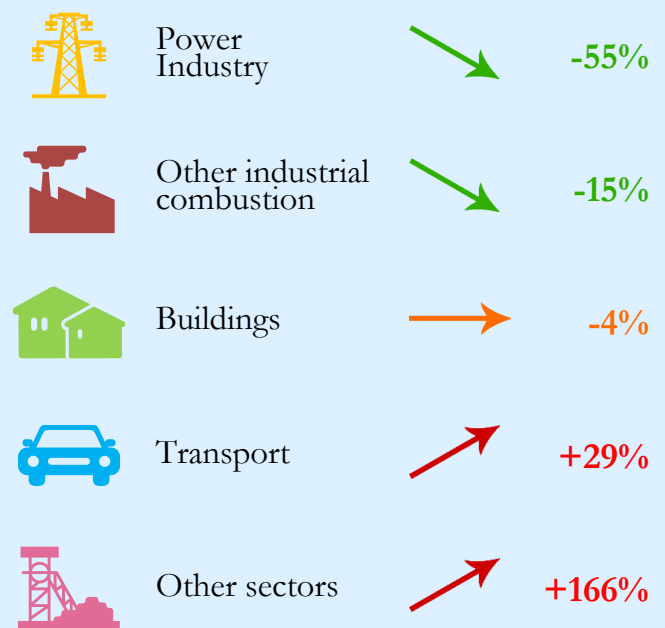
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	15.311	5.297	0.183	2890297
2005	14.075	4.209	0.229	3344252
1990	35.314	9.555	0.743	3696034



### 2017 vs 1990

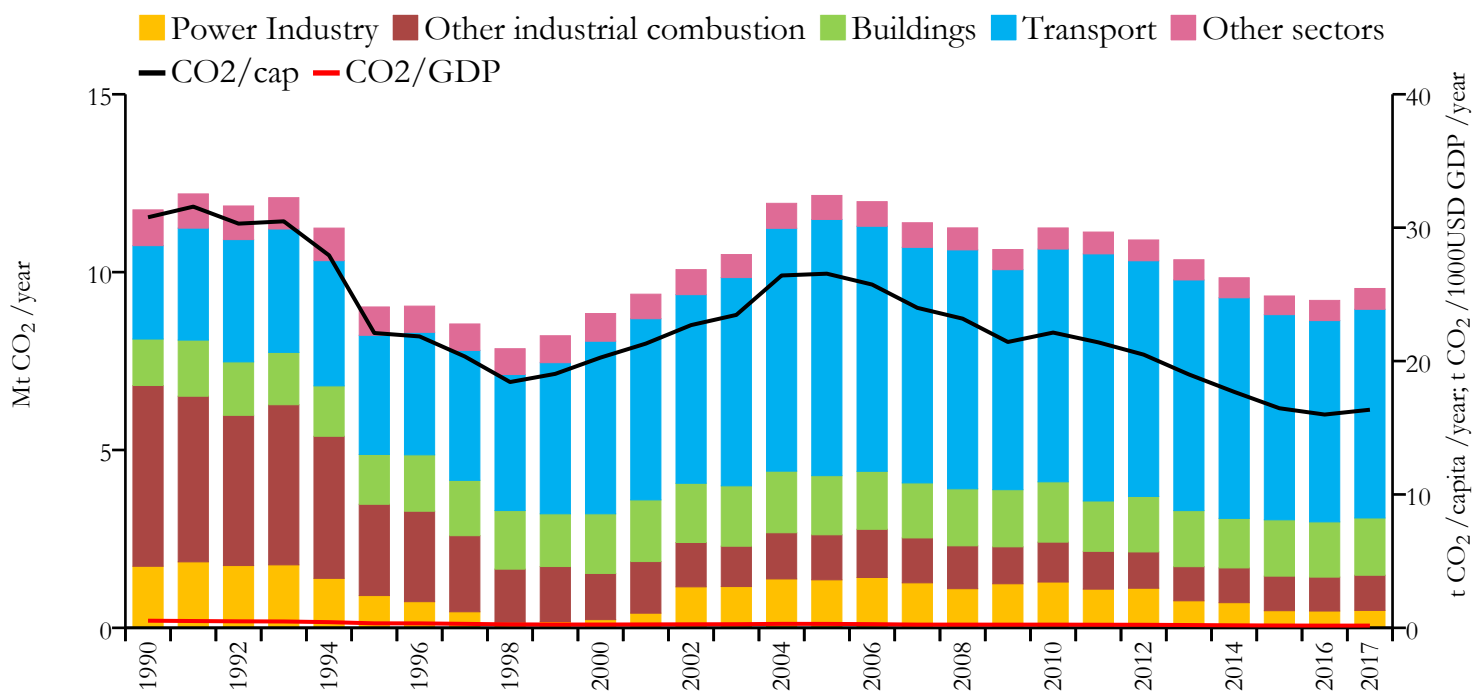


### 2017 vs 2005

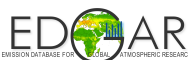




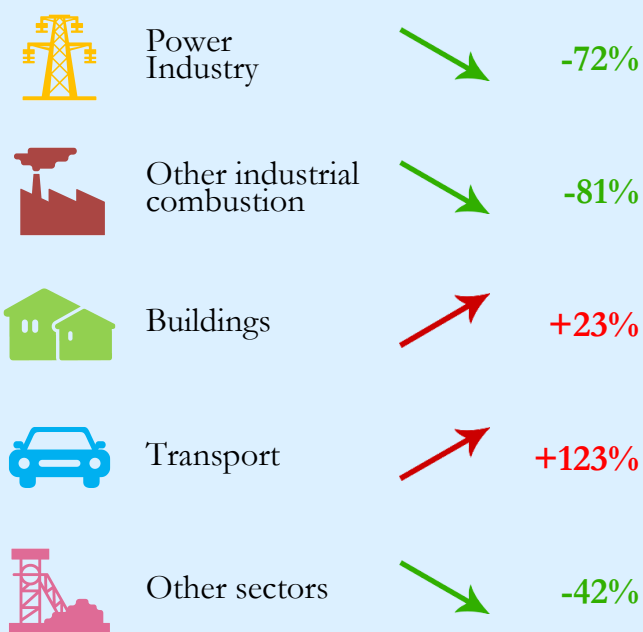
## Fossil CO<sub>2</sub> emissions by sector



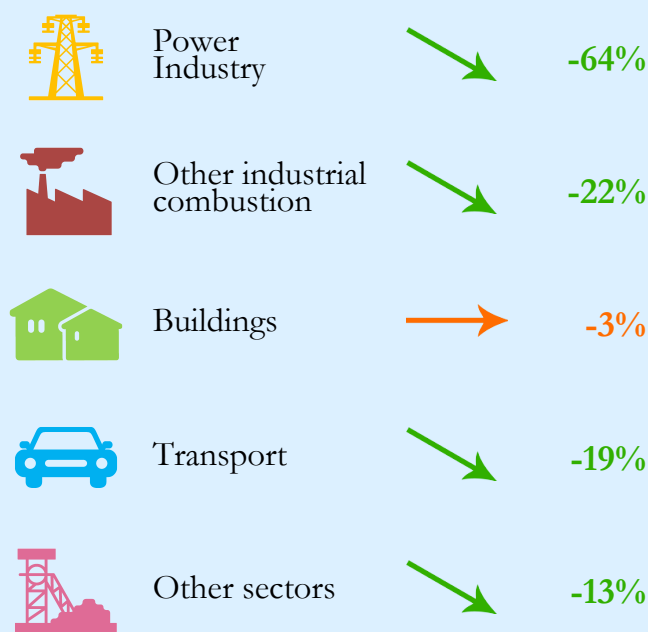
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	9.540	16.352	0.169	583455
2005	12.156	26.550	0.295	457842
1990	11.750	30.777	0.534	381791



### 2017 vs 1990

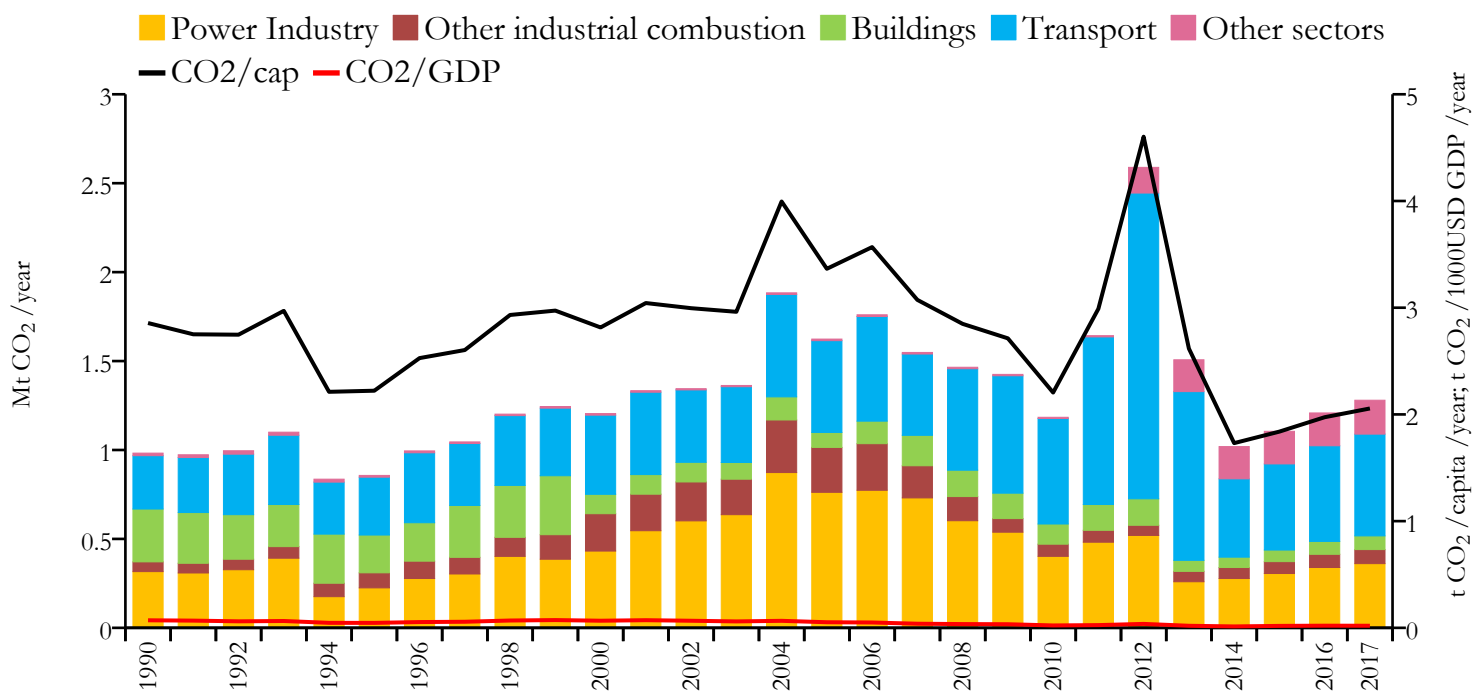


### 2017 vs 2005





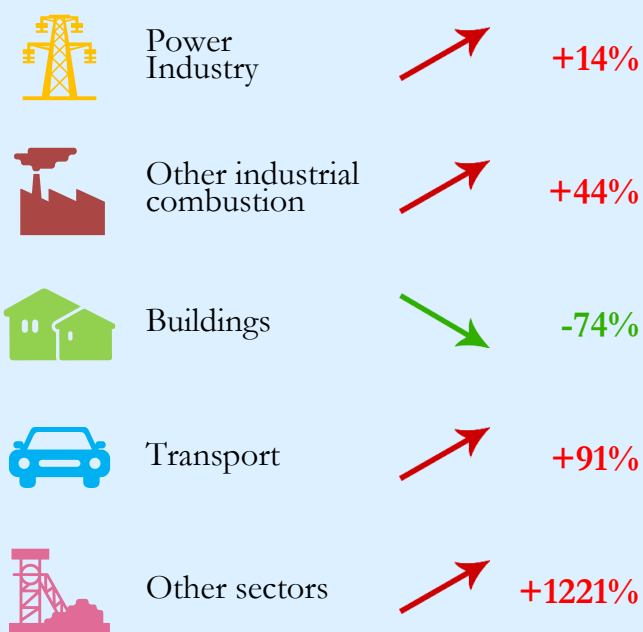
## Fossil CO<sub>2</sub> emissions by sector



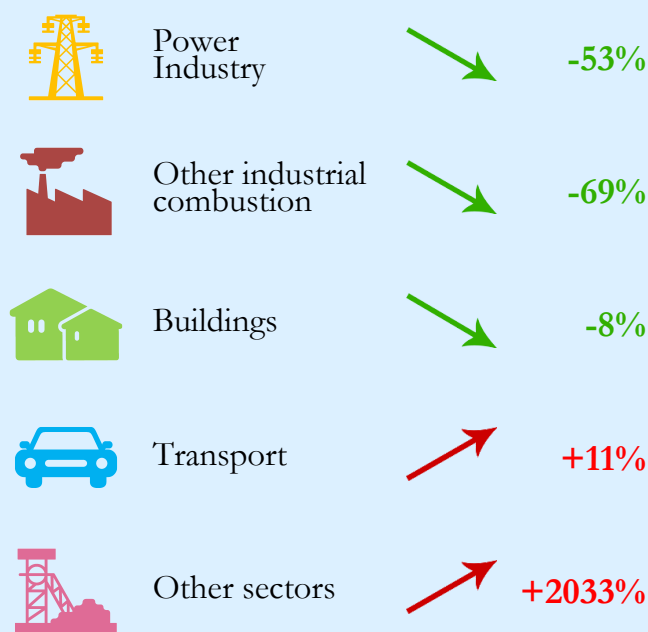
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.280	2.056	0.020	622567
2005	1.624	3.365	0.052	482559
1990	0.982	2.856	0.071	343935



### 2017 vs 1990



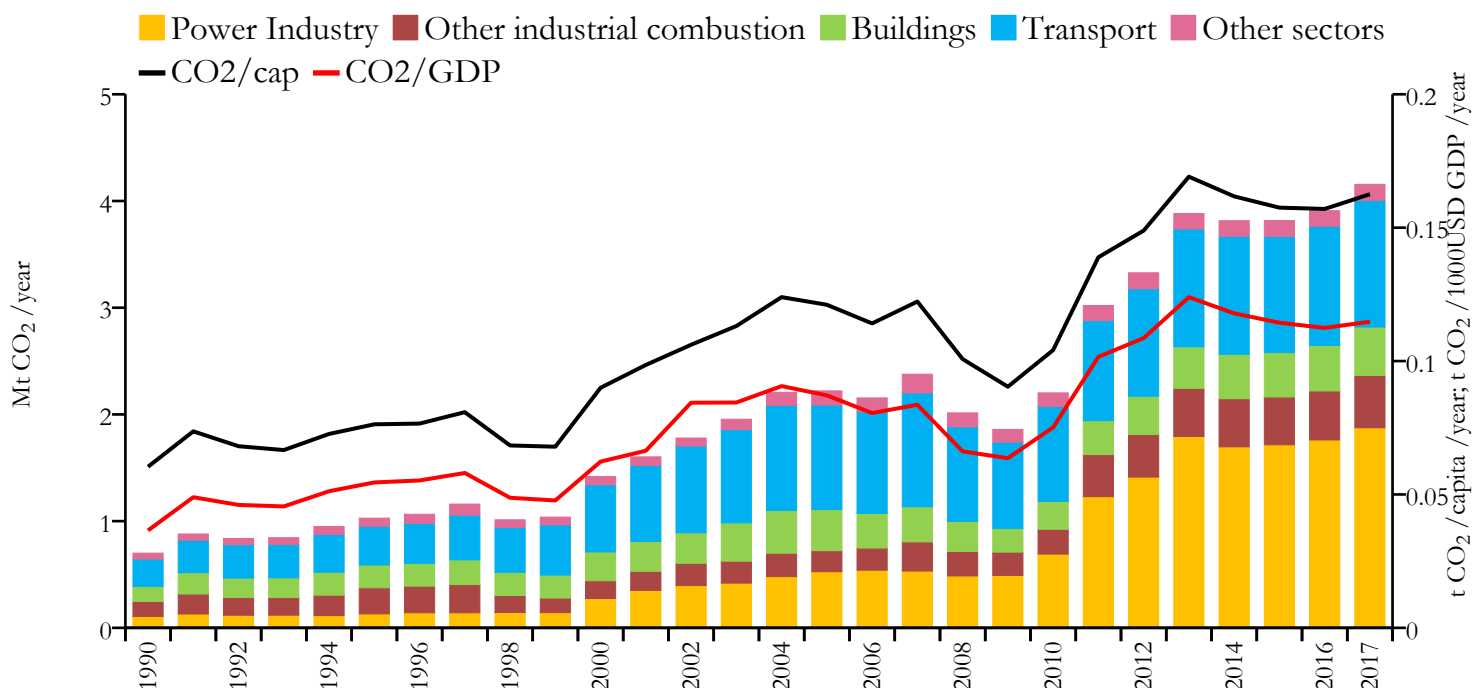
### 2017 vs 2005



# Madagascar



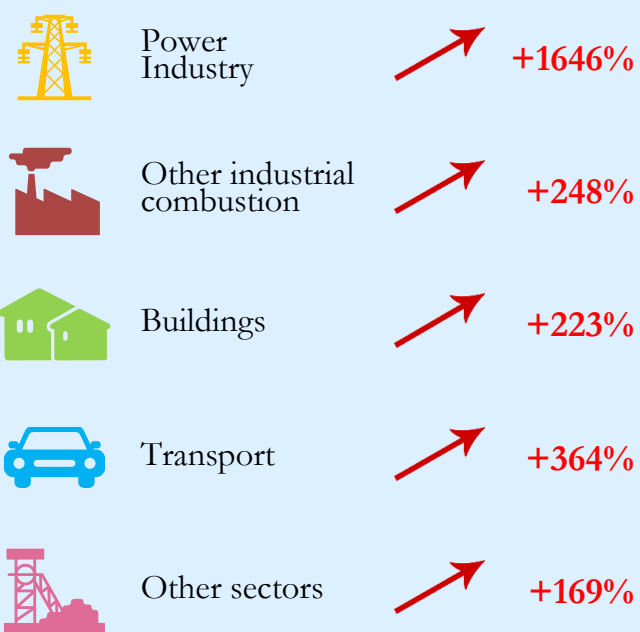
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	4.156	0.163	0.115	25570895
2005	2.220	0.121	0.087	18336724
1990	0.700	0.060	0.037	11598633



### 2017 vs 1990



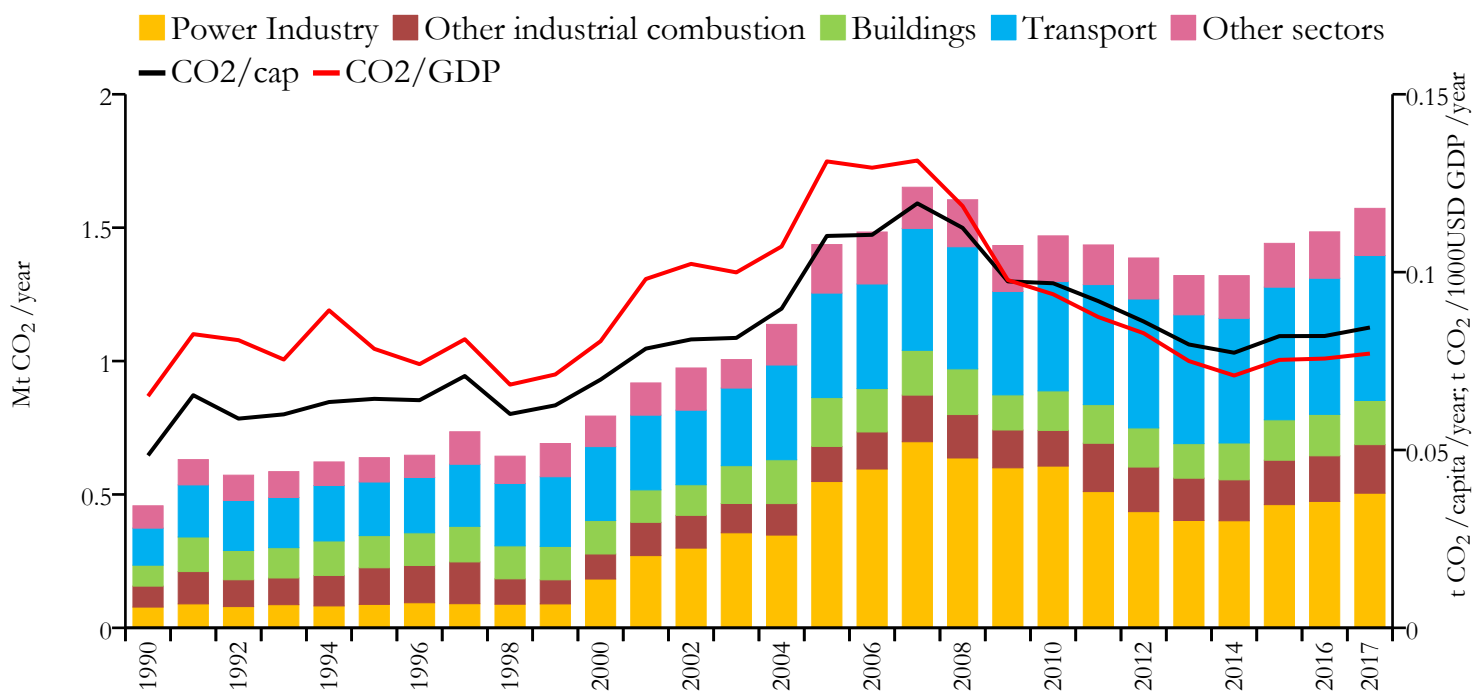
### 2017 vs 2005







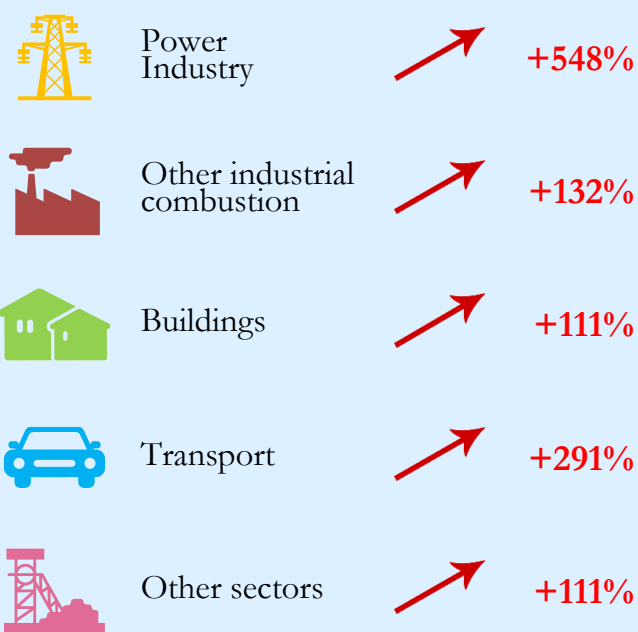
## Fossil CO<sub>2</sub> emissions by sector



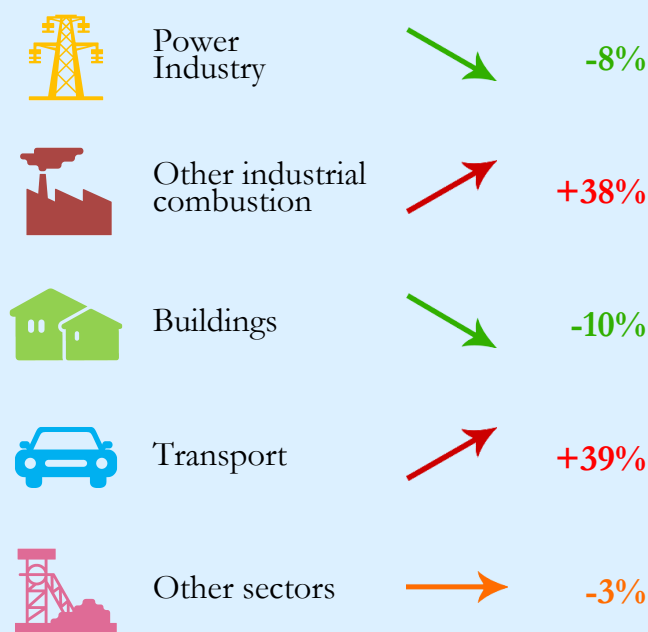
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.572	0.084	0.077	18622104
2005	1.437	0.110	0.131	13039711
1990	0.457	0.048	0.065	9437553



### 2017 vs 1990



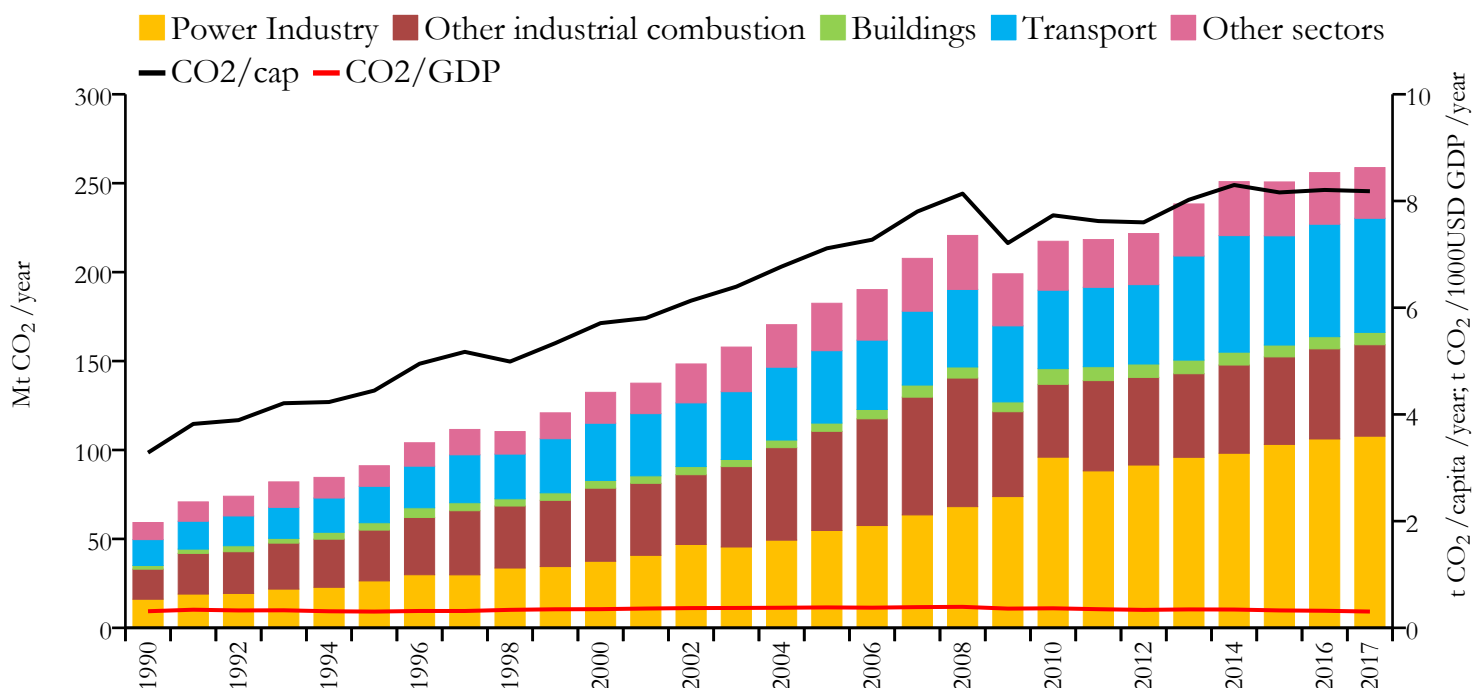
### 2017 vs 2005



# Malaysia



## Fossil CO<sub>2</sub> emissions by sector



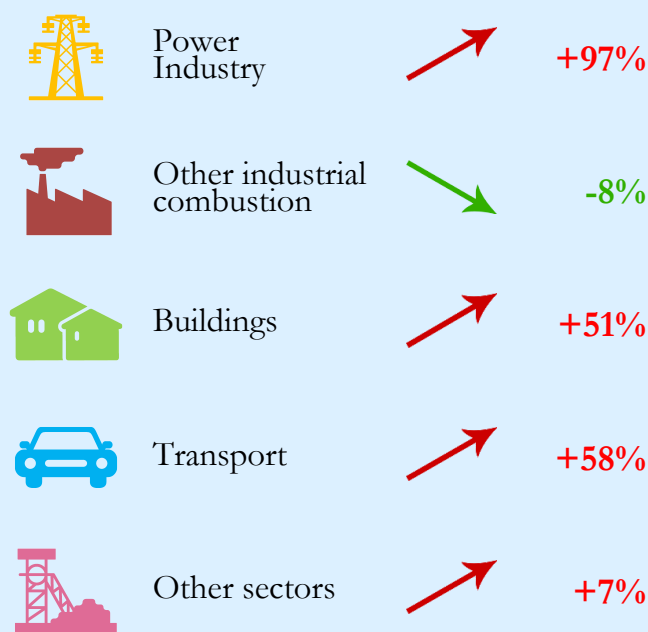
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	258.783	8.183	0.305	31624264
2005	182.503	7.113	0.383	25659393
1990	59.225	3.283	0.311	18038321



### 2017 vs 1990

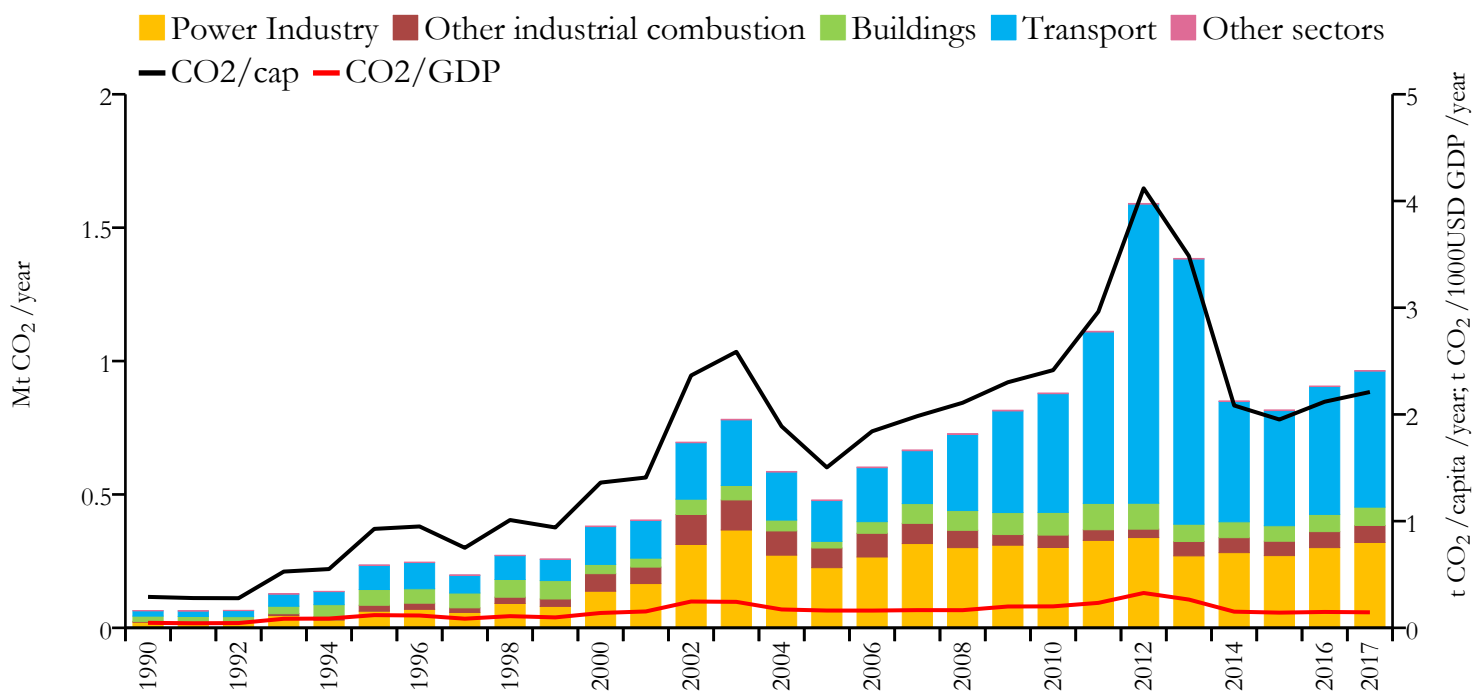


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



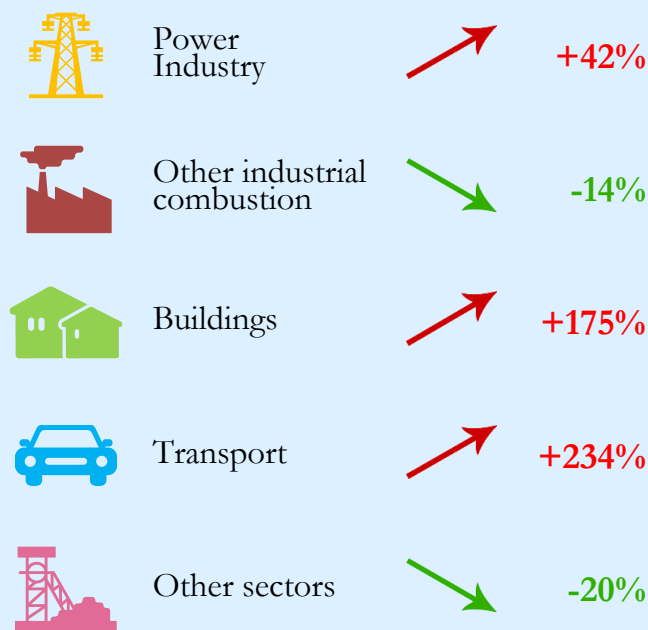
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.964	2.210	0.146	436330
2005	0.479	1.503	0.162	318836
1990	0.065	0.290	0.047	223215



### 2017 vs 1990

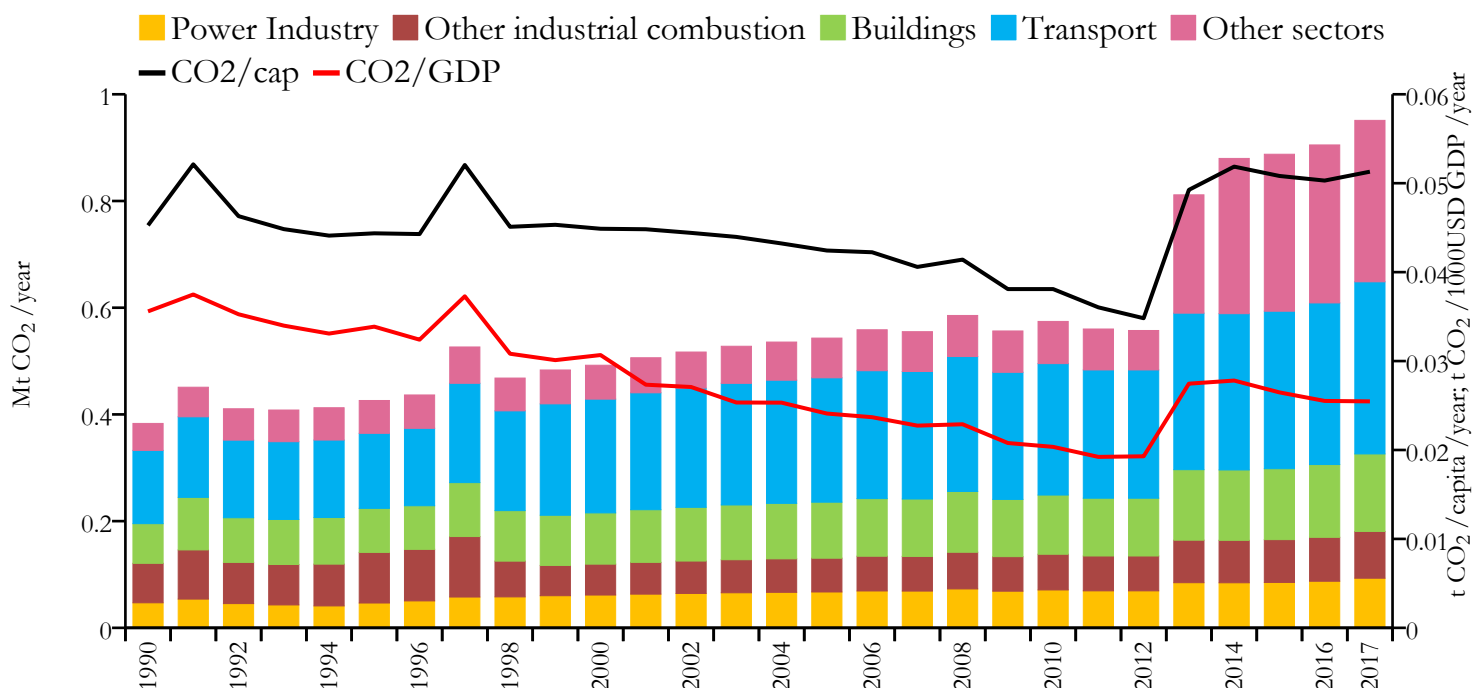


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



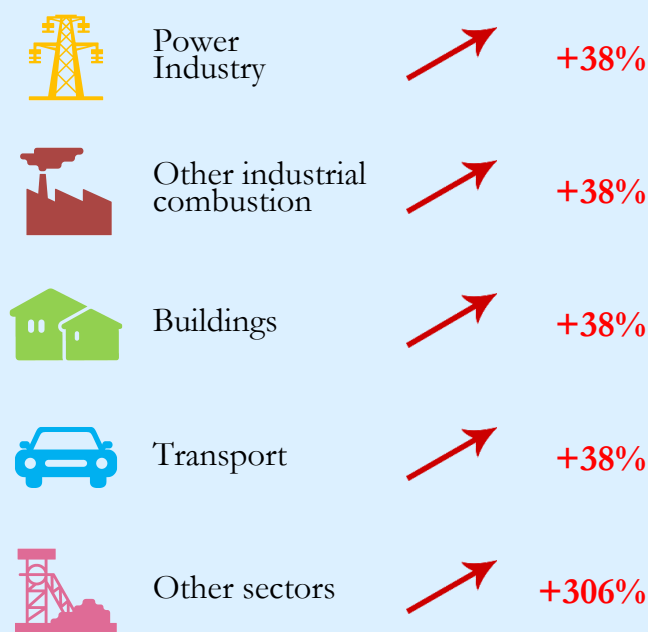
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.951	0.051	0.025	18541980
2005	0.543	0.042	0.024	12798763
1990	0.383	0.045	0.036	8465188



### 2017 vs 1990

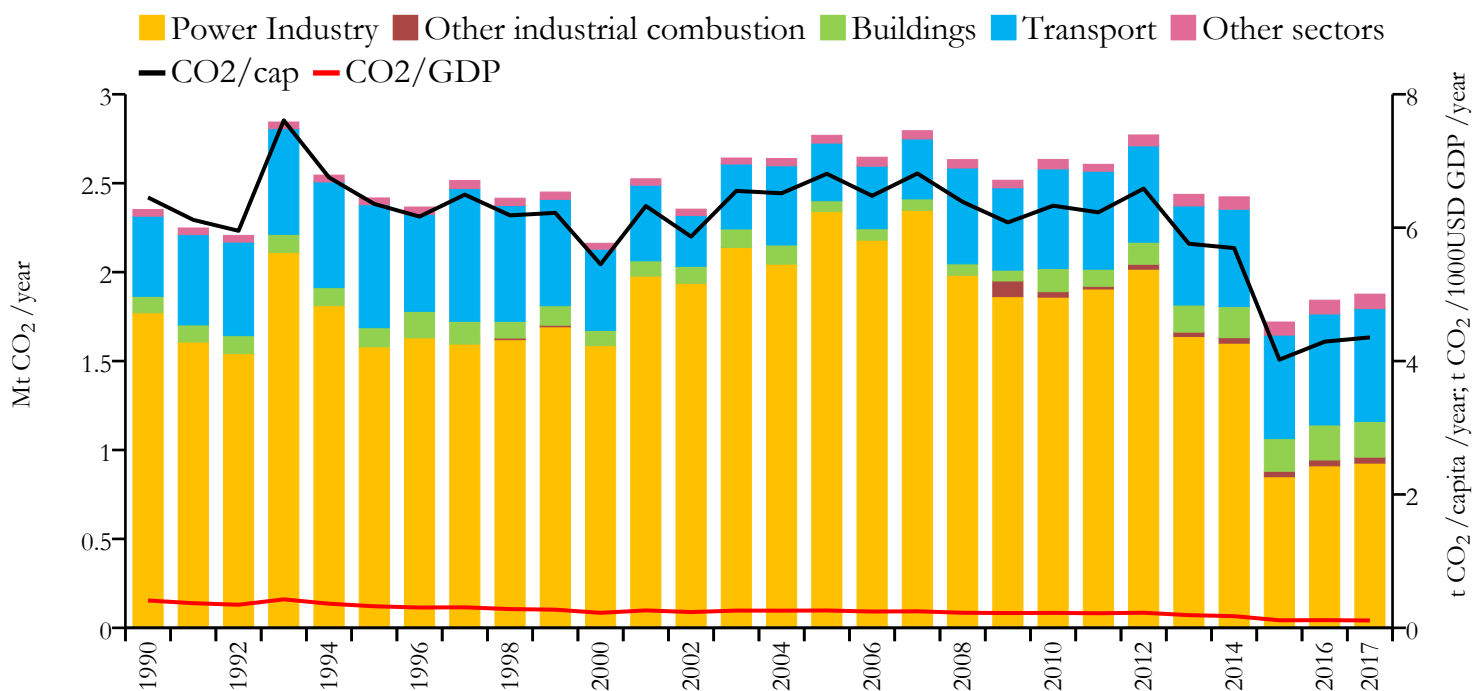


### 2017 vs 2005





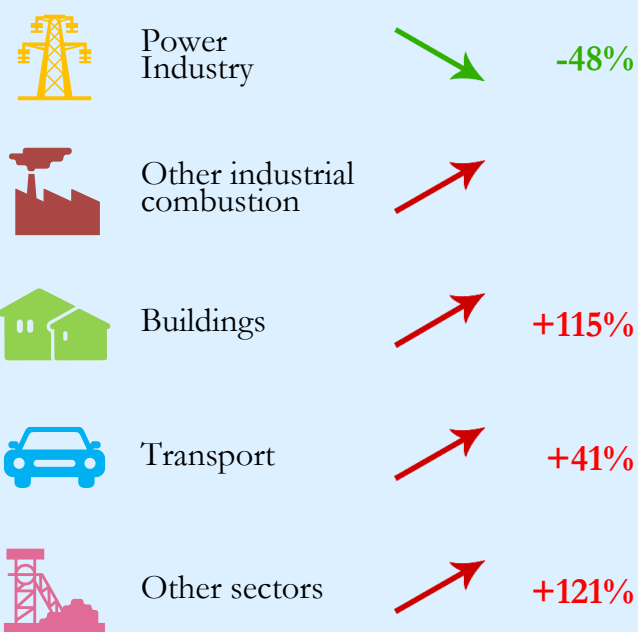
## Fossil CO<sub>2</sub> emissions by sector



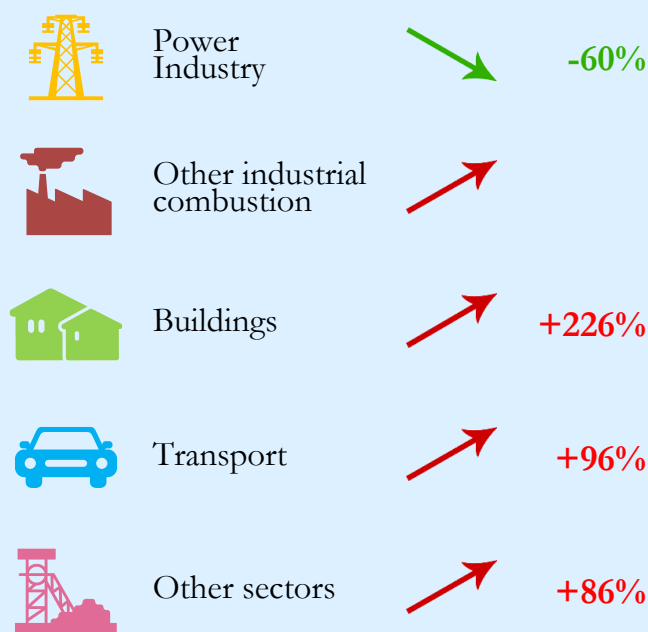
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.876	4.355	0.110	430835
2005	2.769	6.808	0.260	406787
1990	2.352	6.453	0.410	364431



### 2017 vs 1990



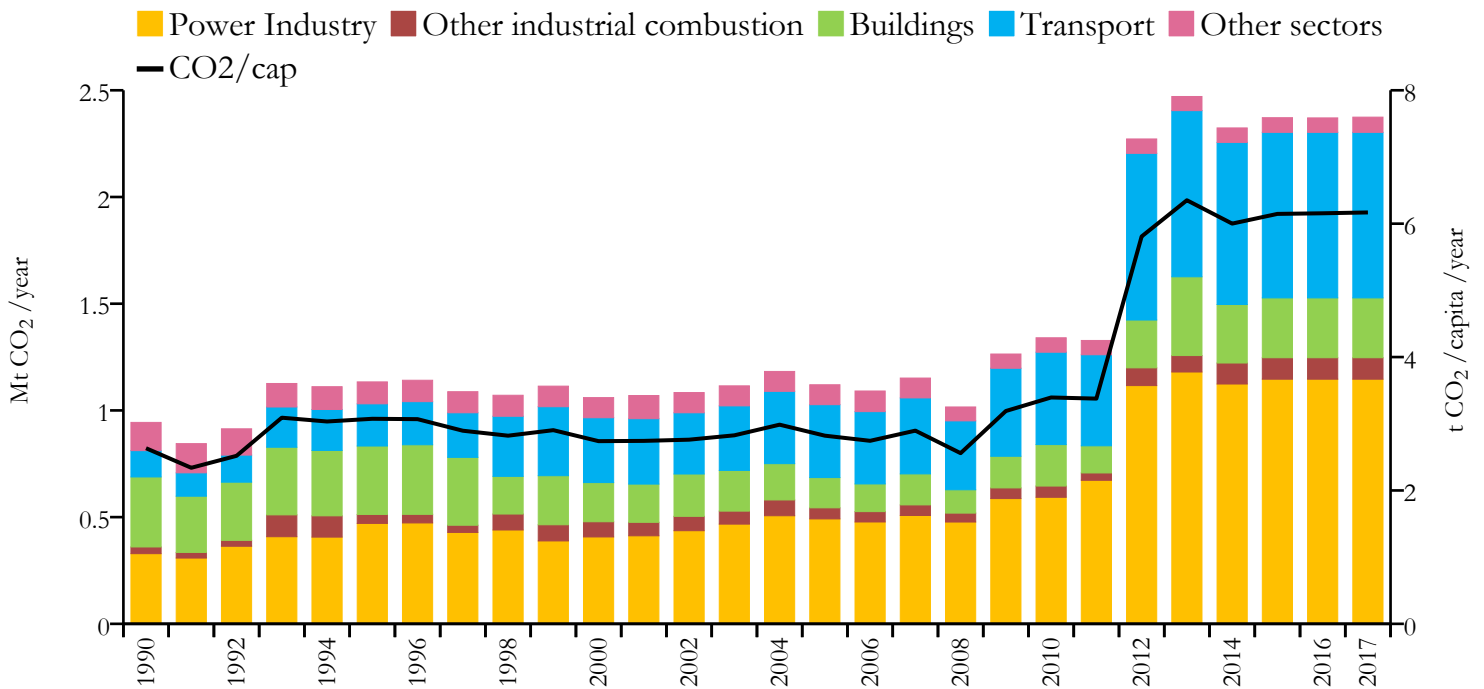
### 2017 vs 2005



# Martinique



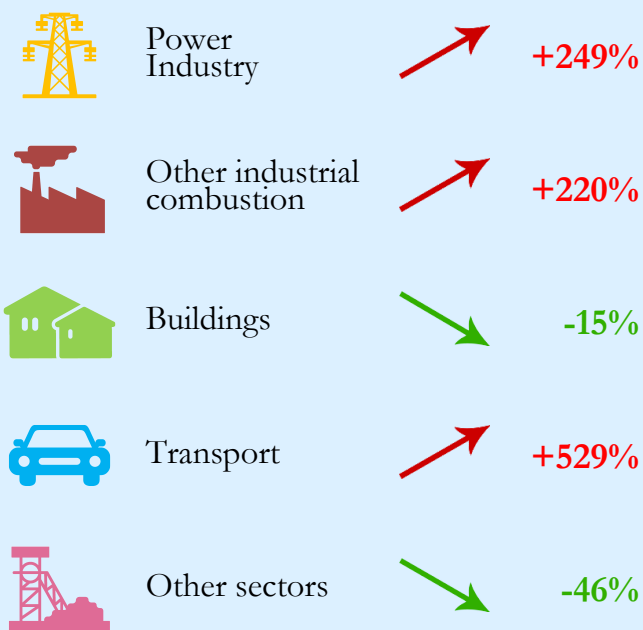
## Fossil CO<sub>2</sub> emissions by sector



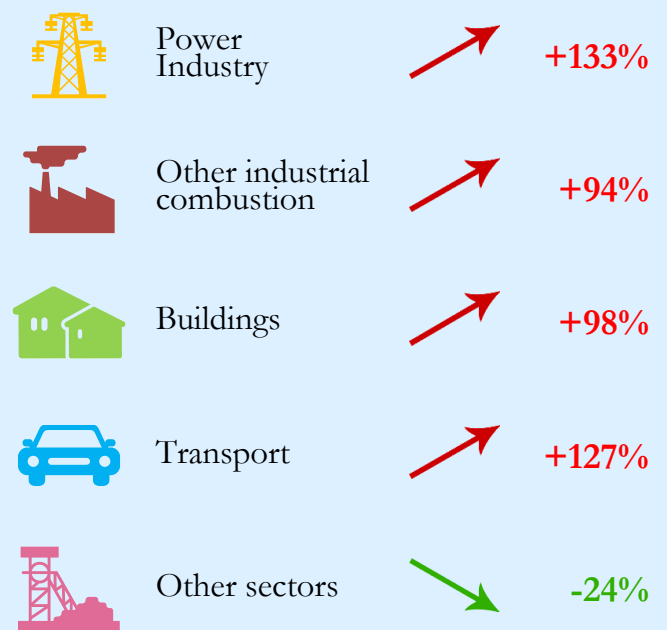
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.374	6.168	n/a	384896
2005	1.120	2.821	n/a	397047
1990	0.944	2.633	n/a	358449



### 2017 vs 1990

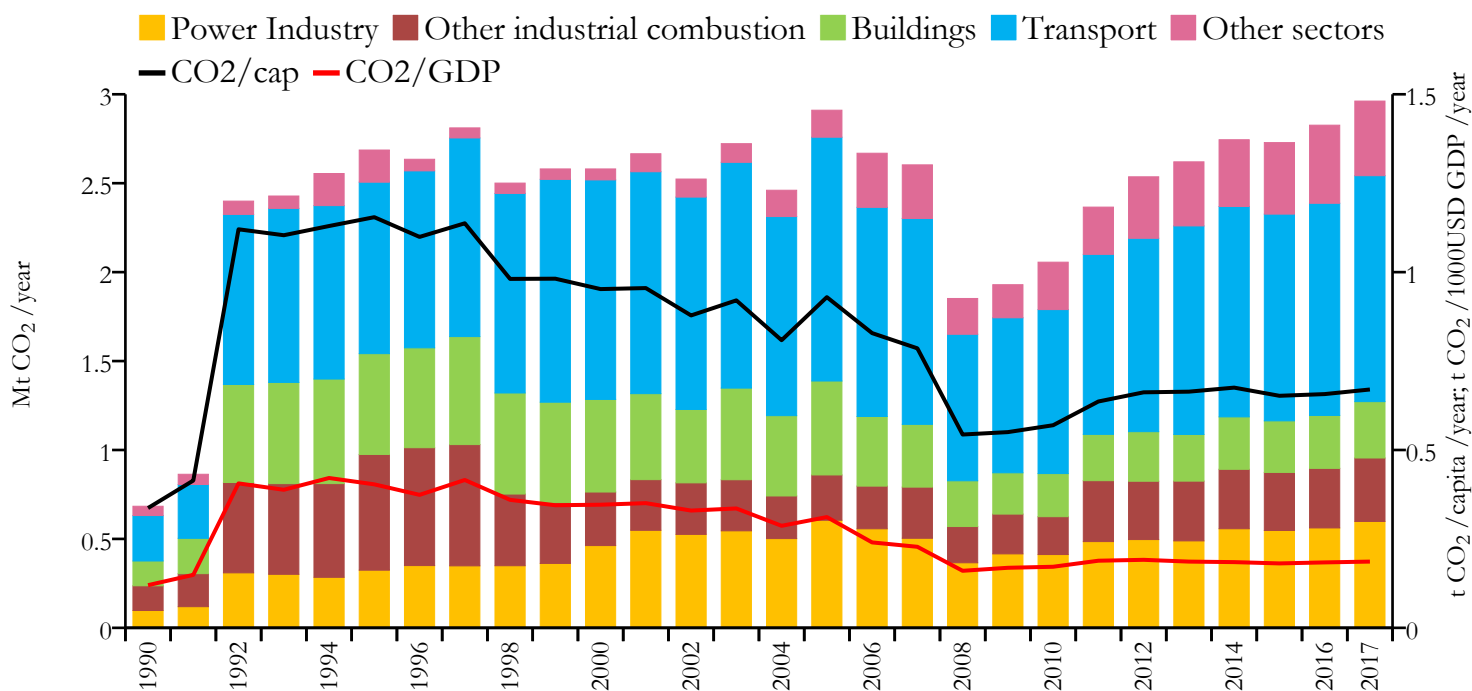


### 2017 vs 2005

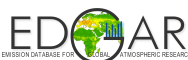




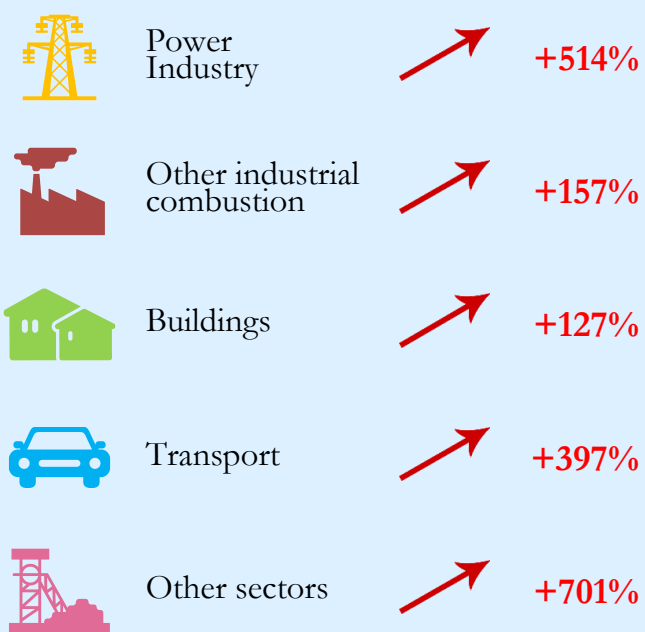
## Fossil CO<sub>2</sub> emissions by sector



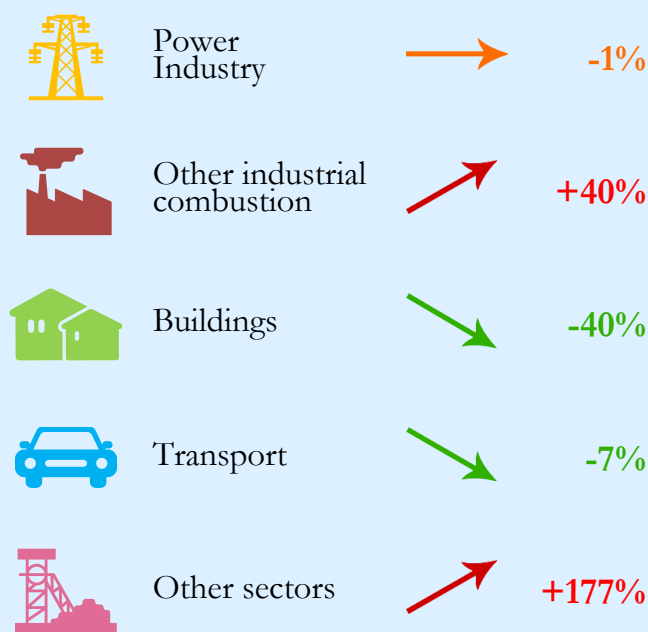
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.962	0.670	0.186	4420184
2005	2.911	0.930	0.311	3130720
1990	0.684	0.337	0.120	2030140



### 2017 vs 1990



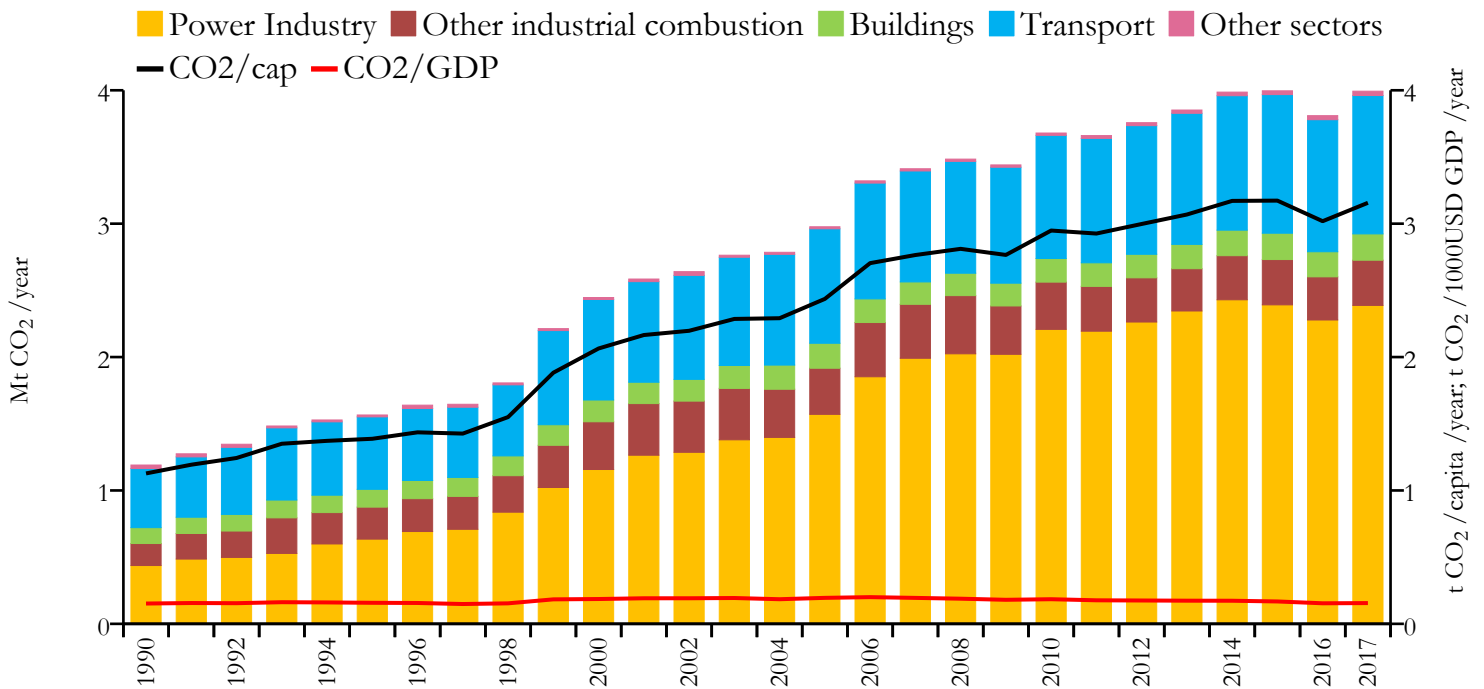
### 2017 vs 2005



# Mauritius



## Fossil CO<sub>2</sub> emissions by sector



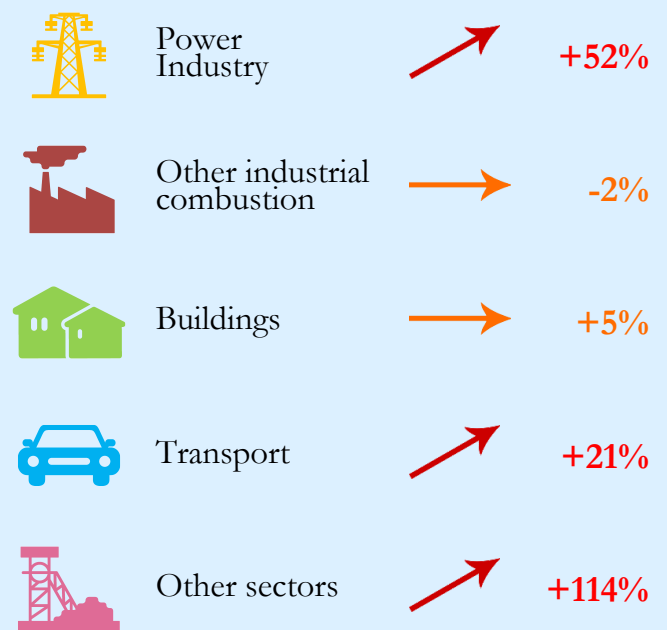
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	3.993	3.156	0.156	1265138
2005	2.977	2.436	0.195	1222003
1990	1.191	1.128	0.152	1055868



### 2017 vs 1990



### 2017 vs 2005

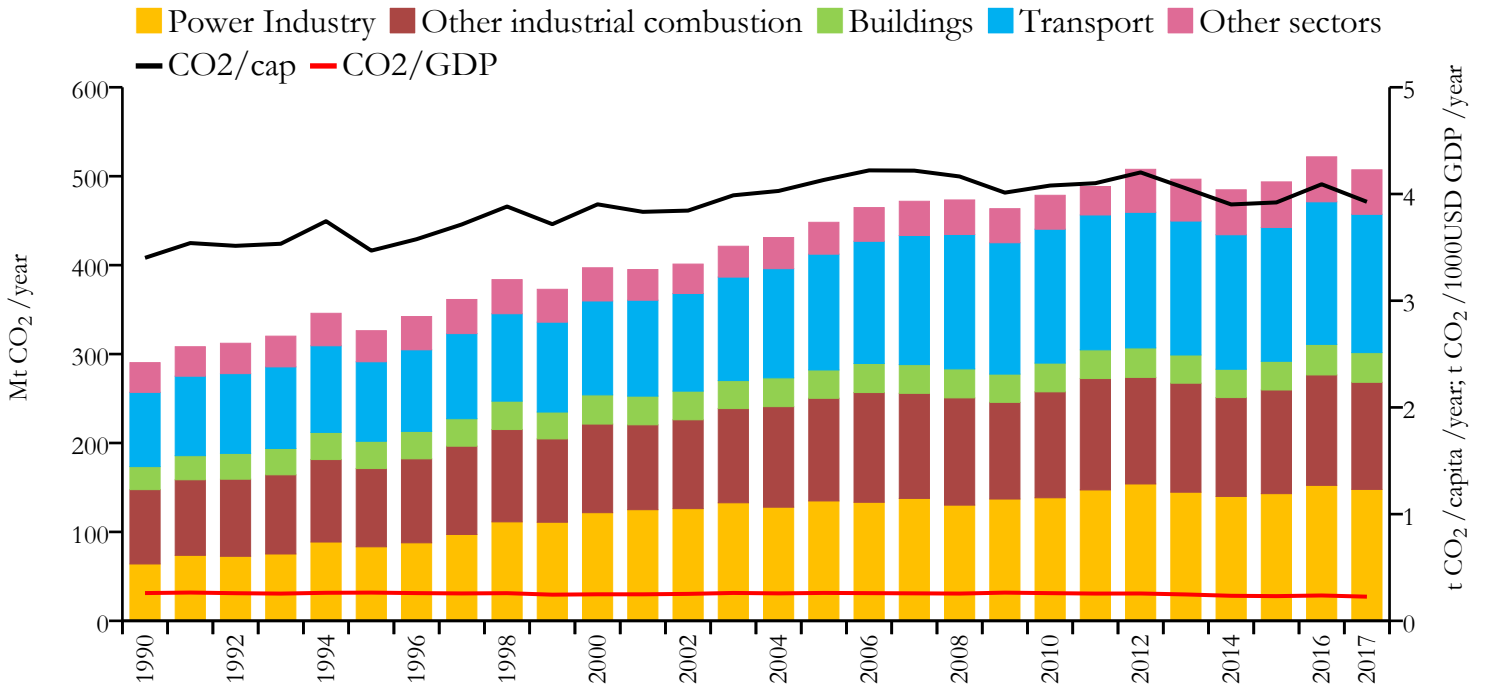




# Mexico



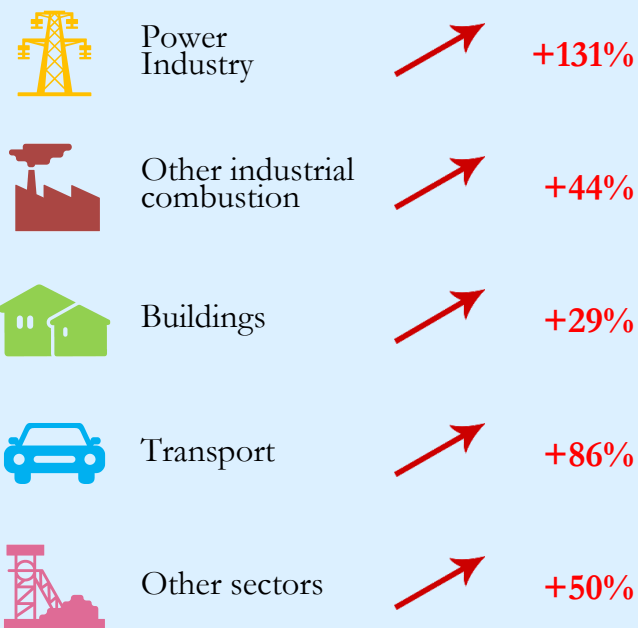
## Fossil CO<sub>2</sub> emissions by sector



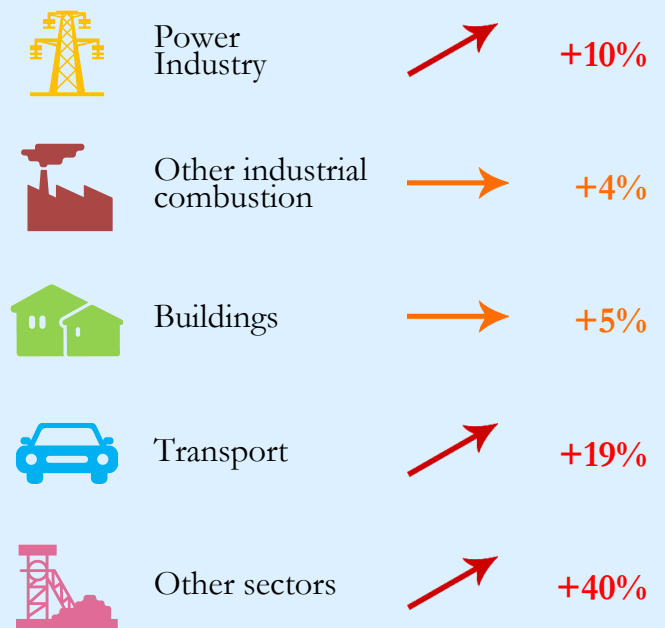
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	507.183	3.927	0.226	129163276
2005	448.171	4.132	0.262	108472228
1990	290.355	3.402	0.260	85357874

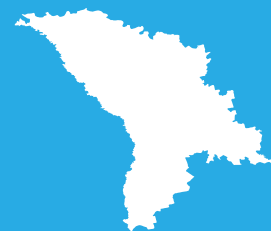


### 2017 vs 1990

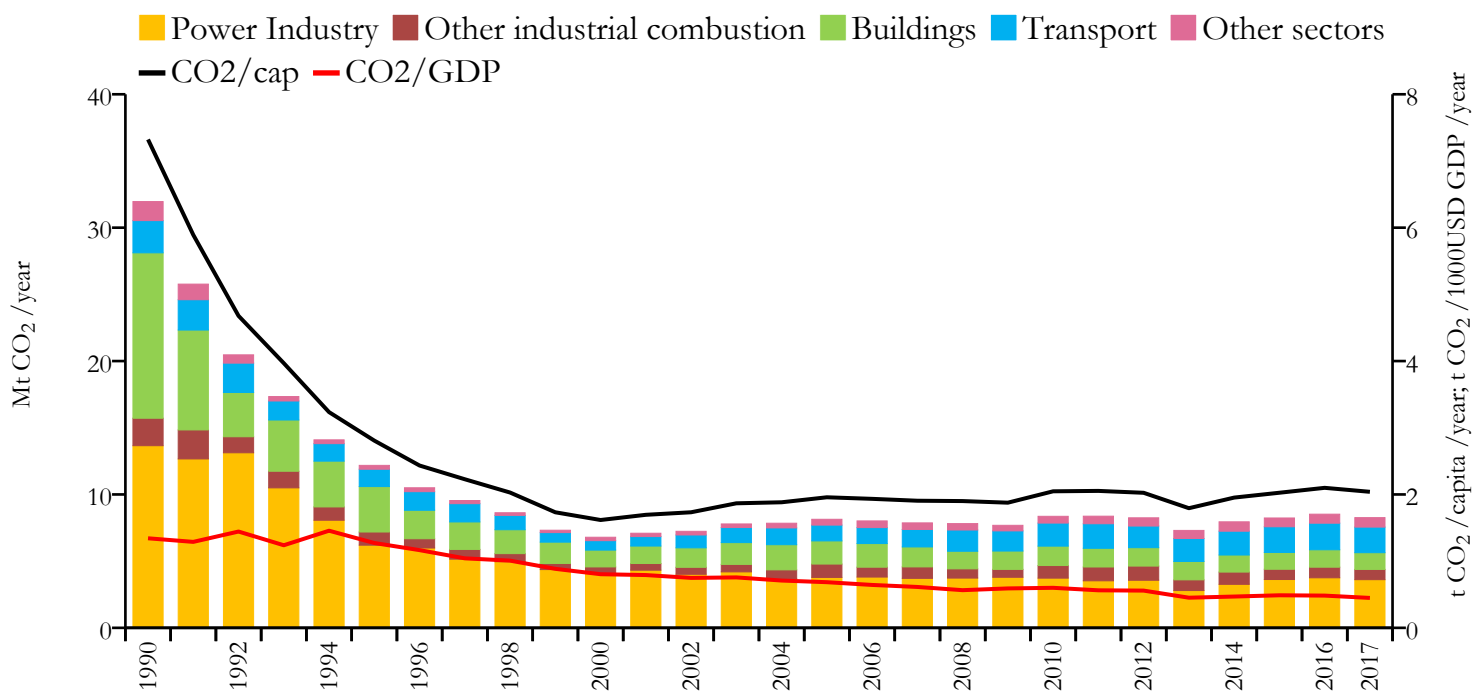


### 2017 vs 2005

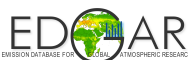




## Fossil CO<sub>2</sub> emissions by sector



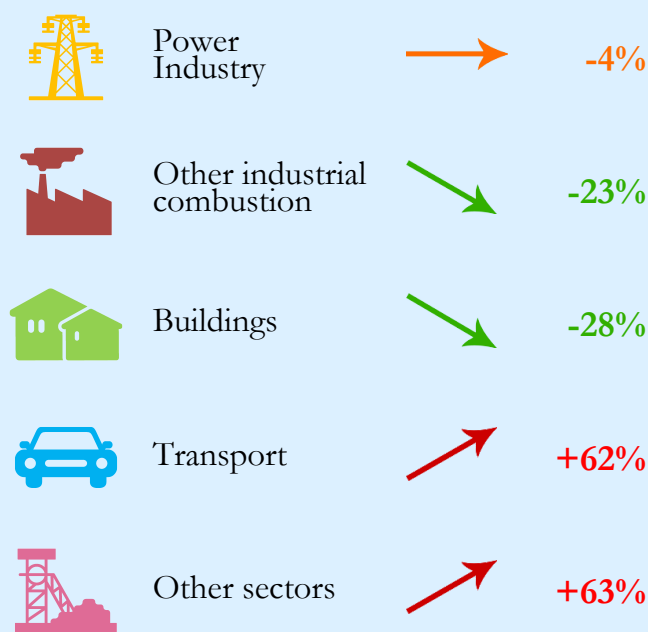
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	8.263	2.040	0.448	4051212
2005	8.139	1.957	0.684	4157699
1990	31.957	7.323	1.343	4364116



### 2017 vs 1990



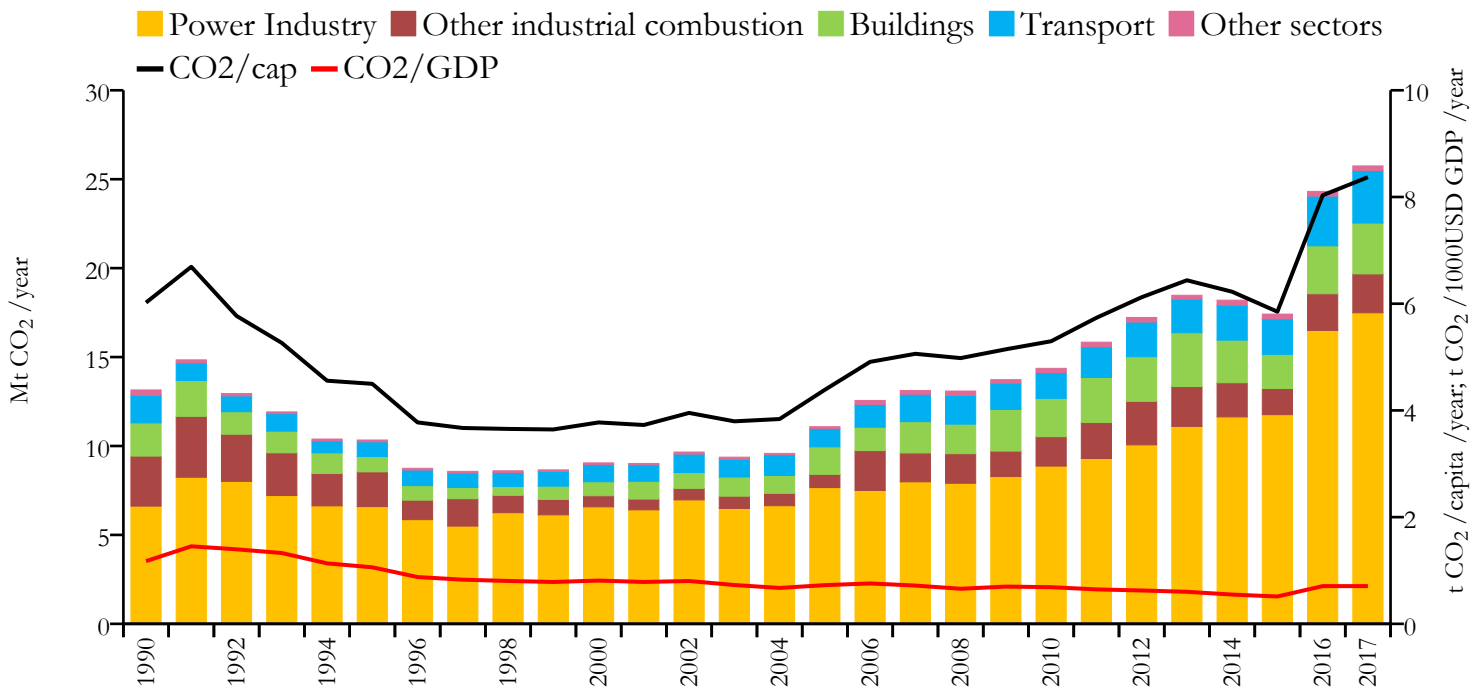
### 2017 vs 2005



# Mongolia



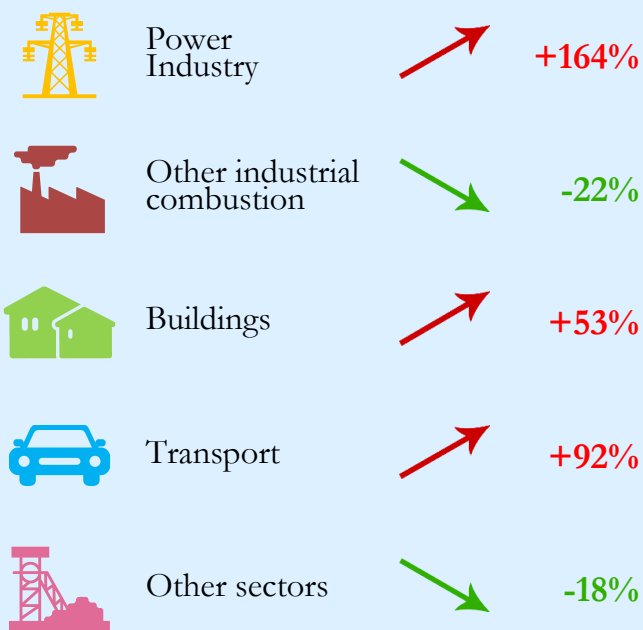
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	25.747	8.371	0.707	3075647
2005	11.083	4.387	0.725	2526446
1990	13.151	6.021	1.175	2184145



### 2017 vs 1990

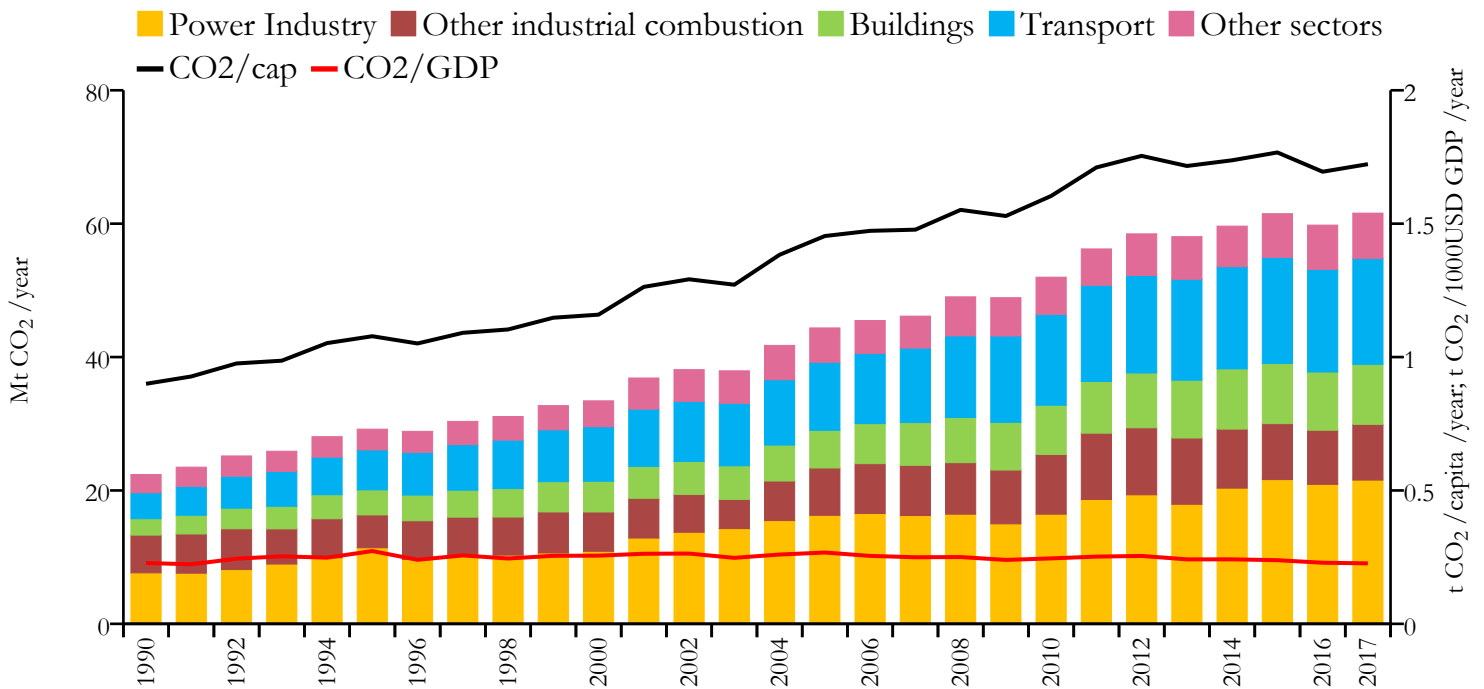


### 2017 vs 2005





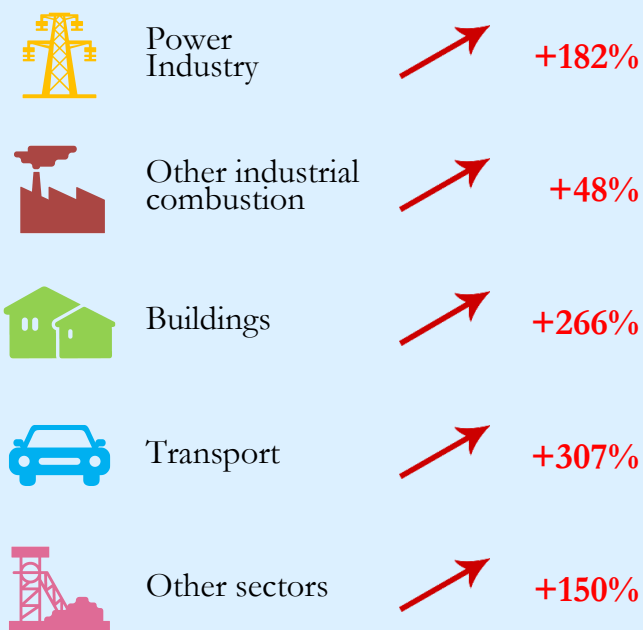
## Fossil CO<sub>2</sub> emissions by sector



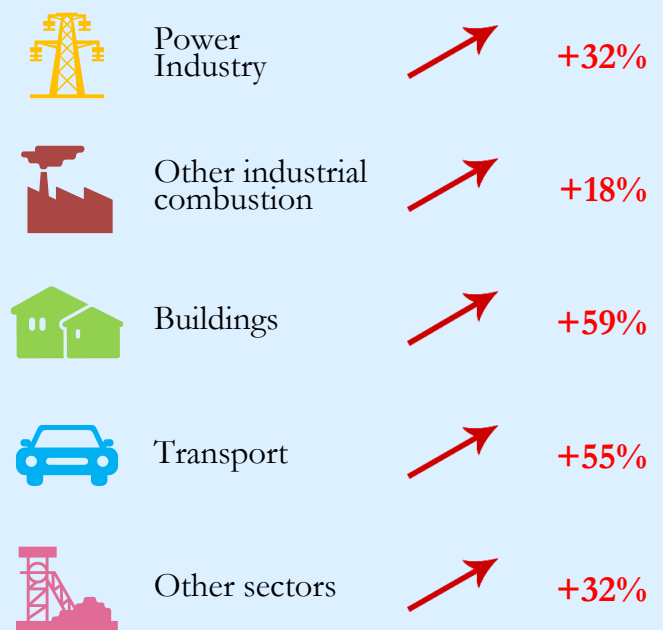
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	61.584	1.723	0.227	35739580
2005	44.368	1.454	0.267	30521070
1990	22.386	0.900	0.228	24879136



### 2017 vs 1990



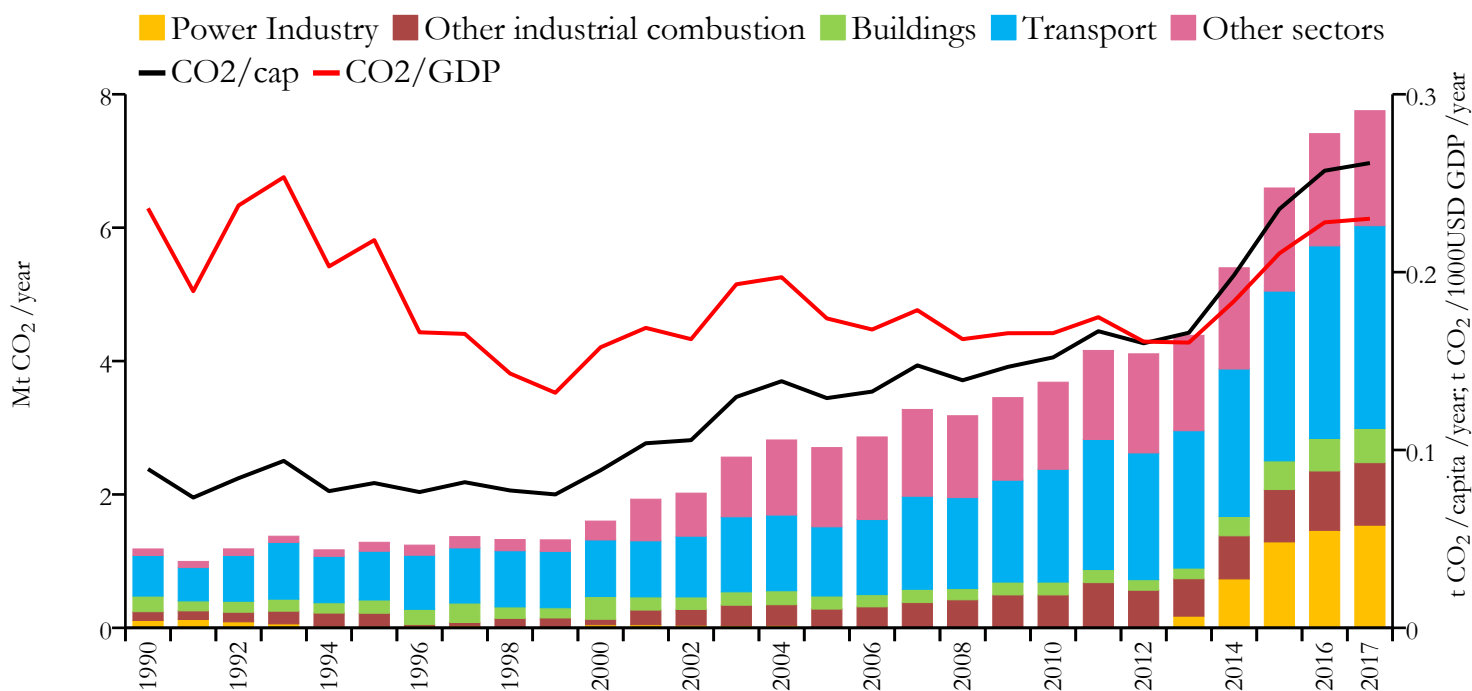
### 2017 vs 2005



# Mozambique



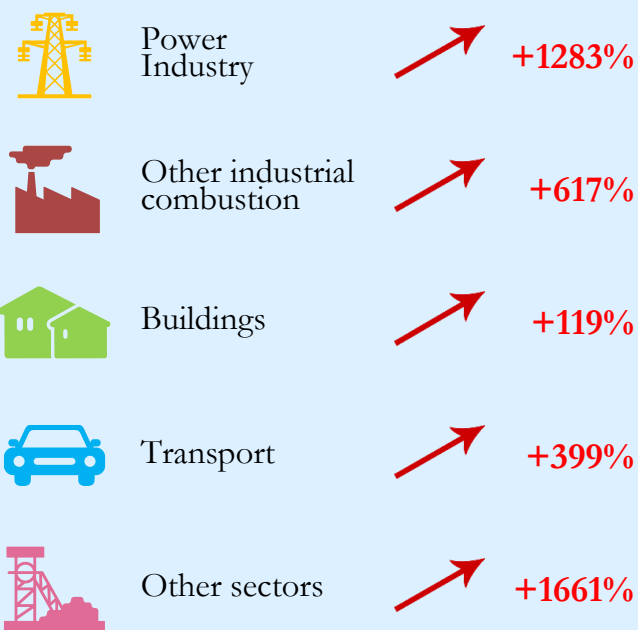
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	7.754	0.261	0.230	29668834
2005	2.703	0.129	0.174	20923070
1990	1.183	0.089	0.236	13247649



### 2017 vs 1990



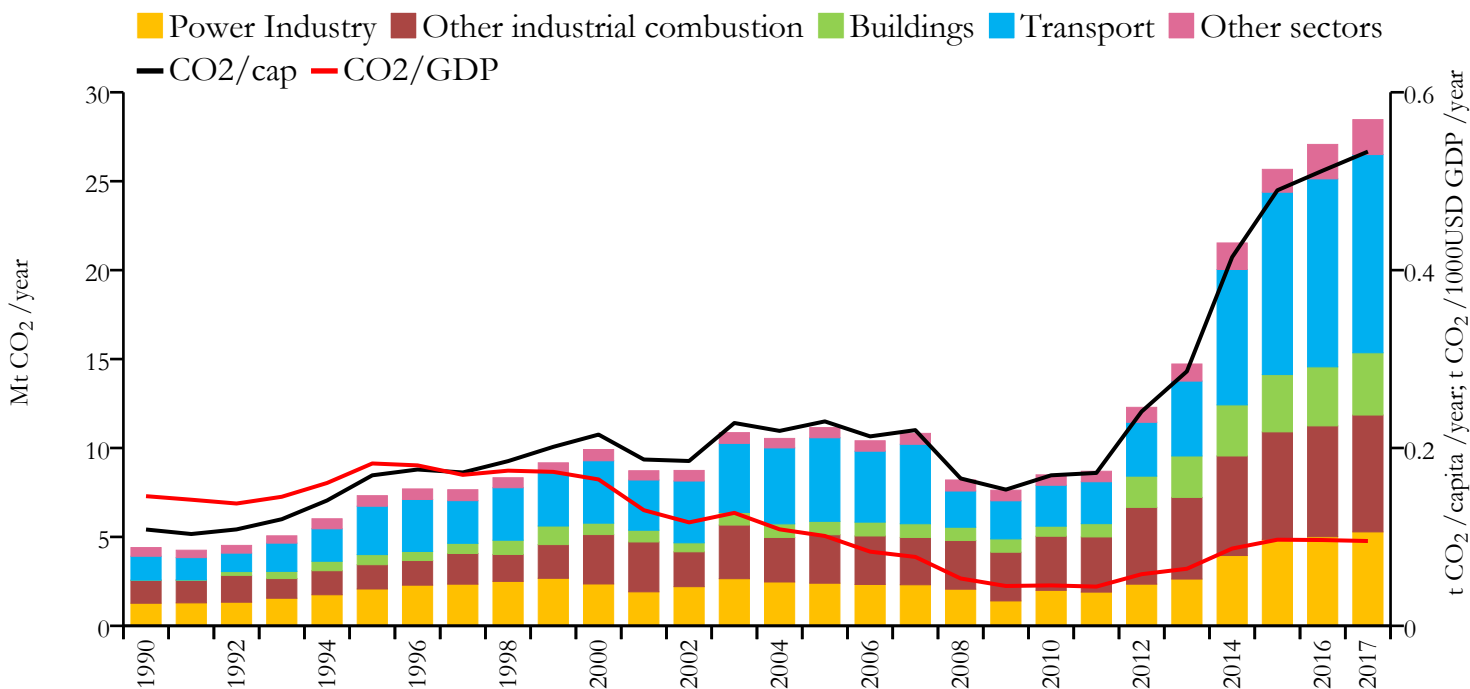
### 2017 vs 2005



# Myanmar/Burma



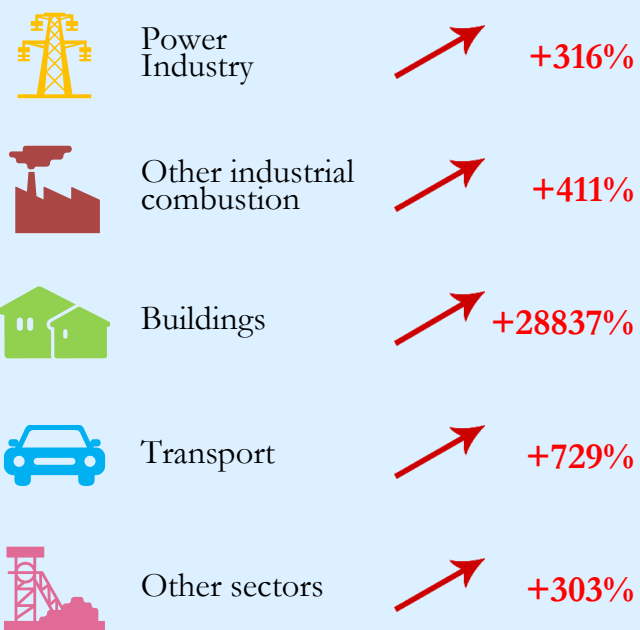
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	28.462	0.533	0.095	53370609
2005	11.146	0.230	0.101	48482614
1990	4.401	0.108	0.146	40626250



### 2017 vs 1990

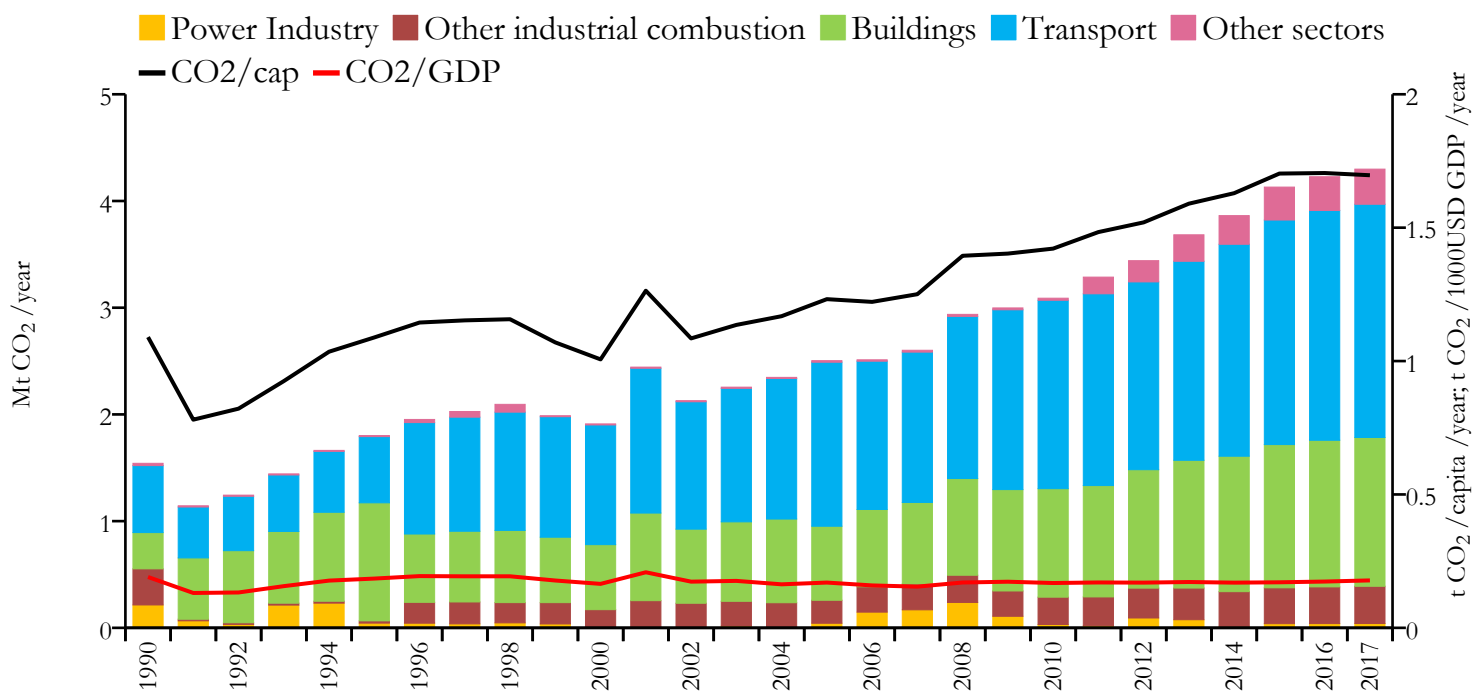


### 2017 vs 2005





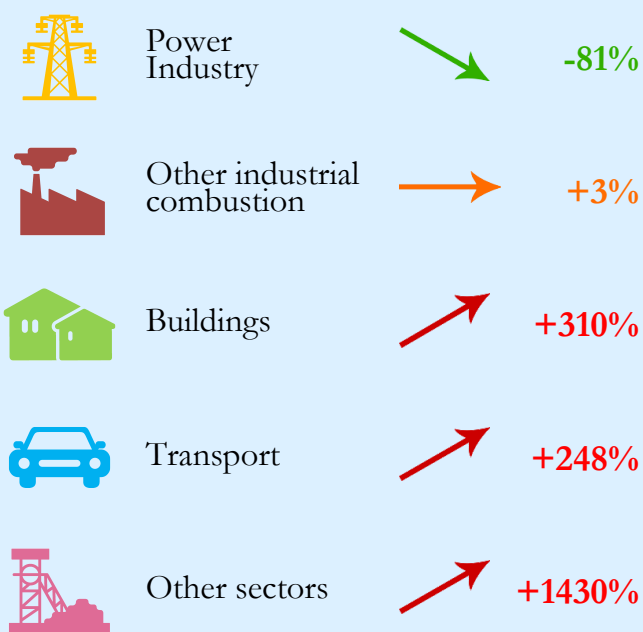
## Fossil CO<sub>2</sub> emissions by sector



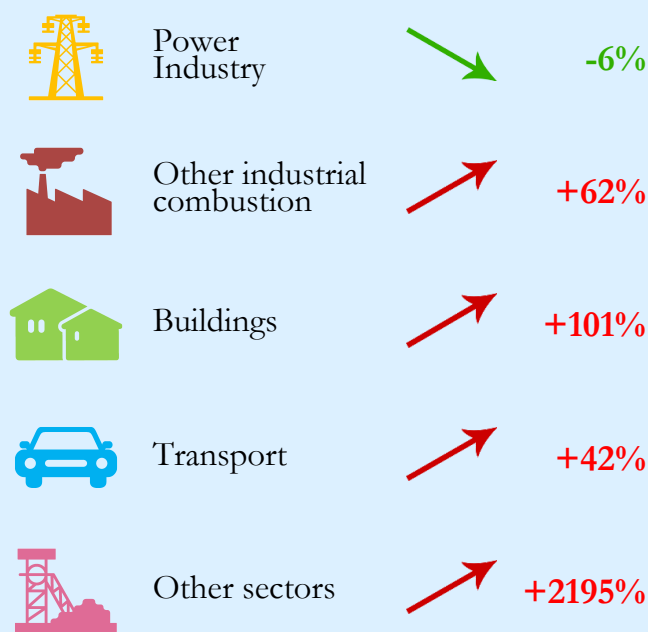
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	4.299	1.697	0.178	2533794
2005	2.504	1.232	0.170	2032196
1990	1.542	1.090	0.191	1414692



### 2017 vs 1990

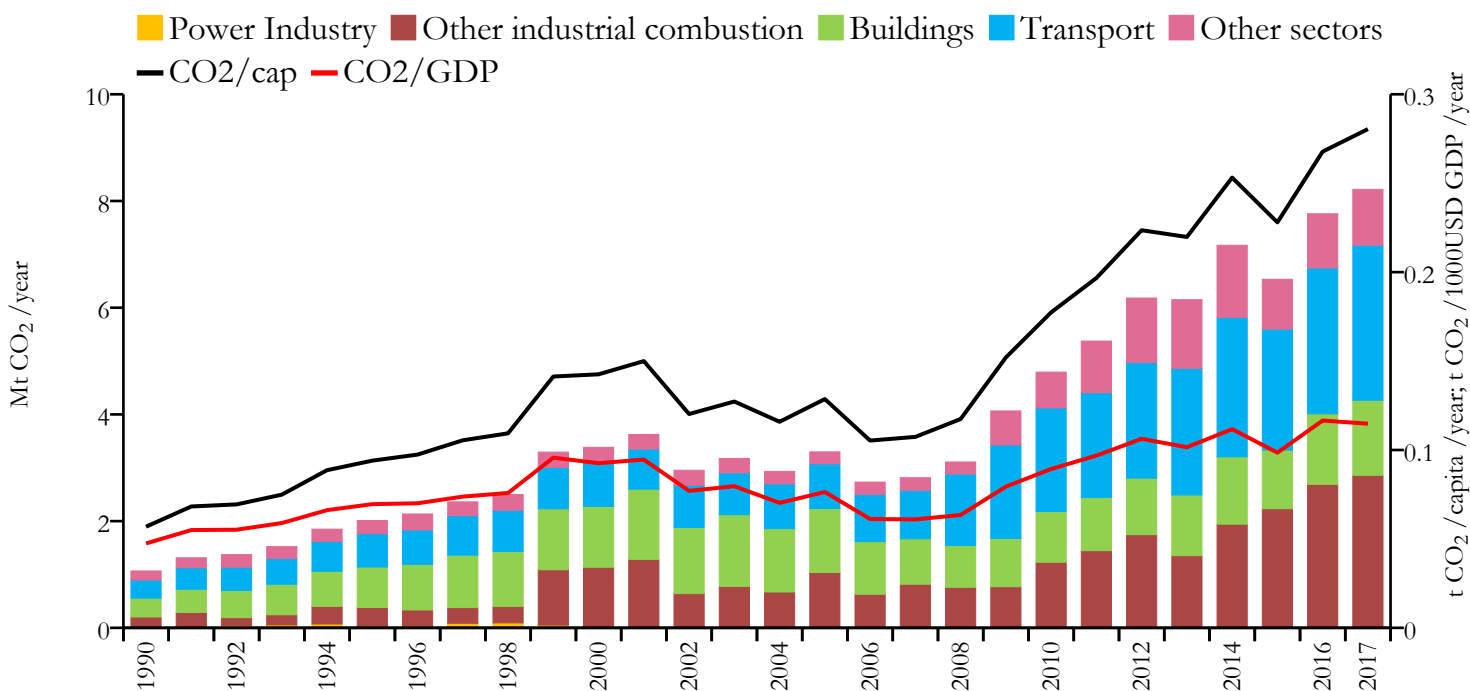


### 2017 vs 2005





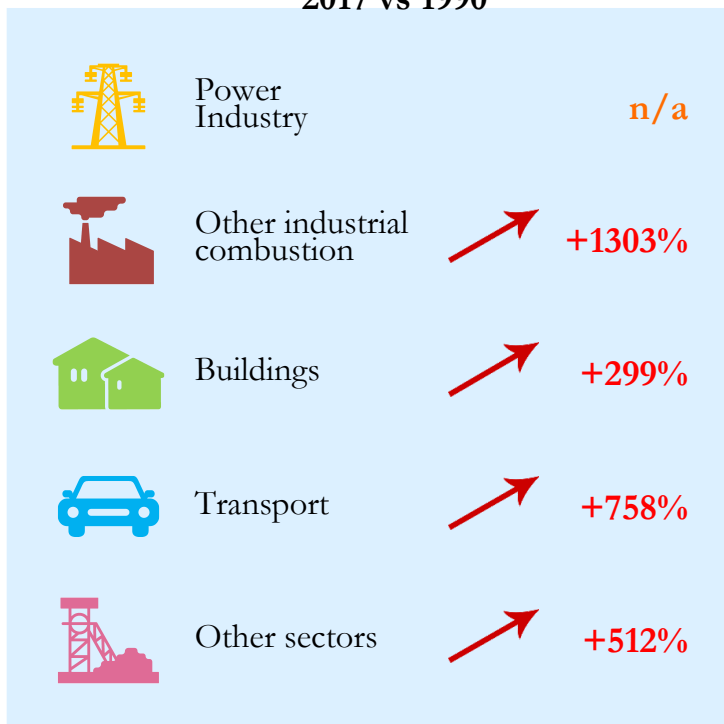
## Fossil CO<sub>2</sub> emissions by sector



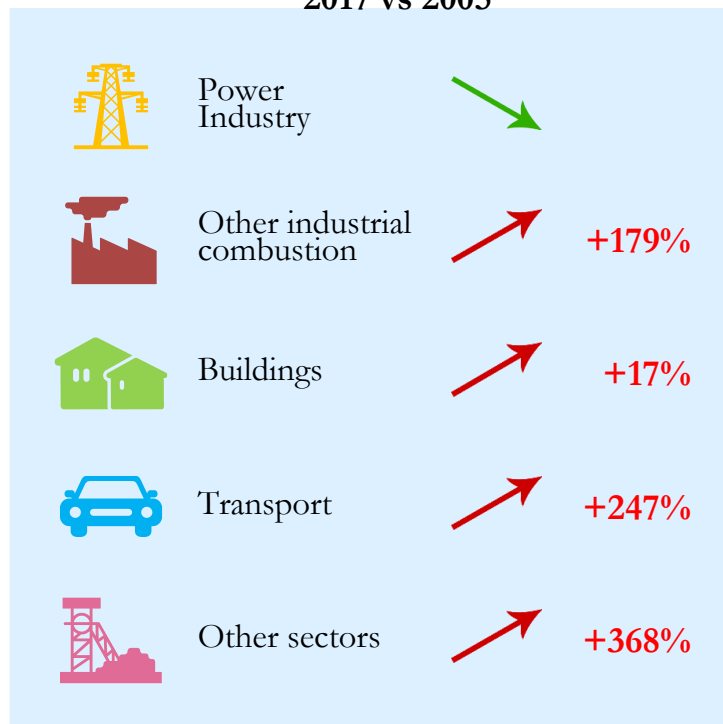
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	8.218	0.280	0.115	29304998
2005	3.298	0.129	0.076	25640287
1990	1.066	0.057	0.047	18749406



### 2017 vs 1990



### 2017 vs 2005

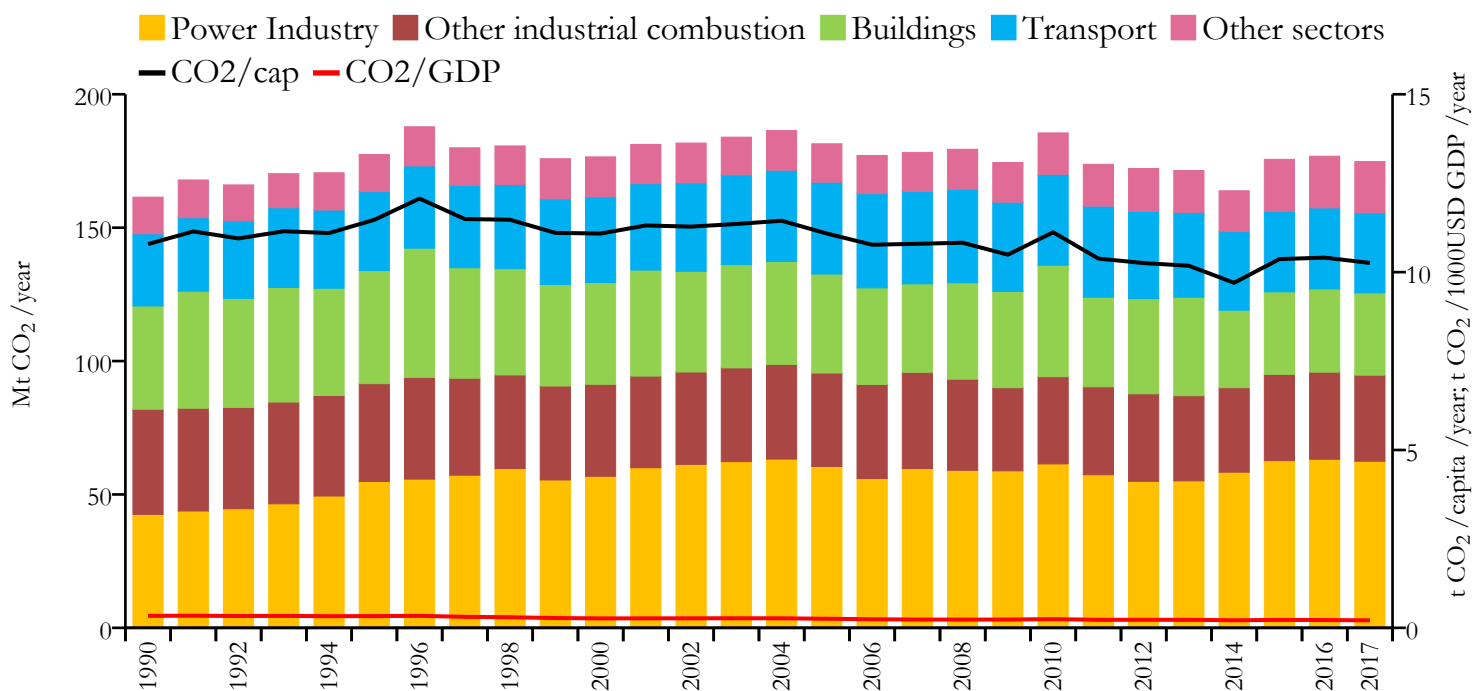




# Netherlands



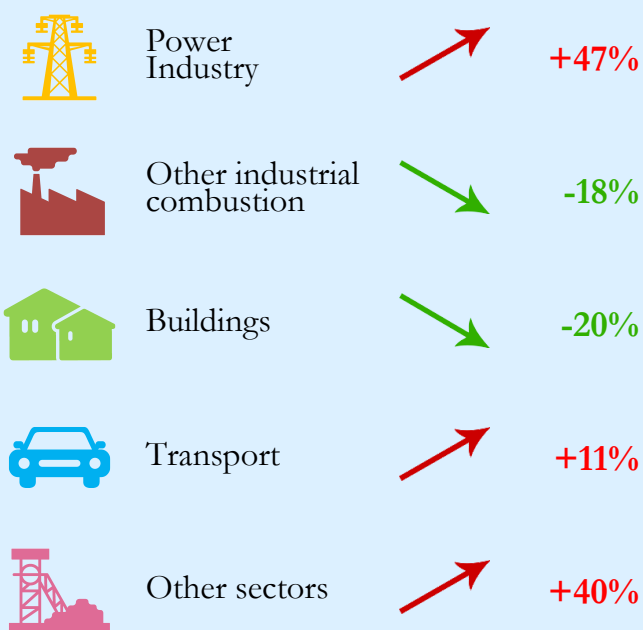
## Fossil CO<sub>2</sub> emissions by sector



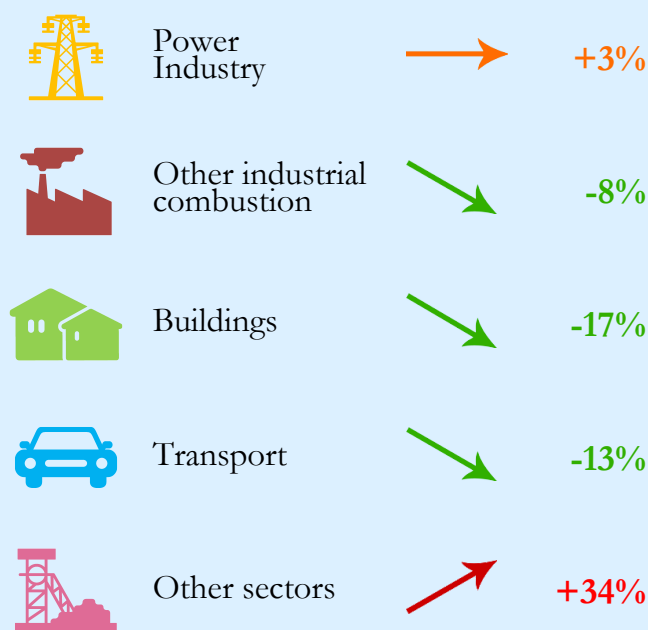
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	174.770	10.259	0.210	17035938
2005	181.433	11.085	0.256	16367158
1990	161.447	10.788	0.336	14965448



### 2017 vs 1990



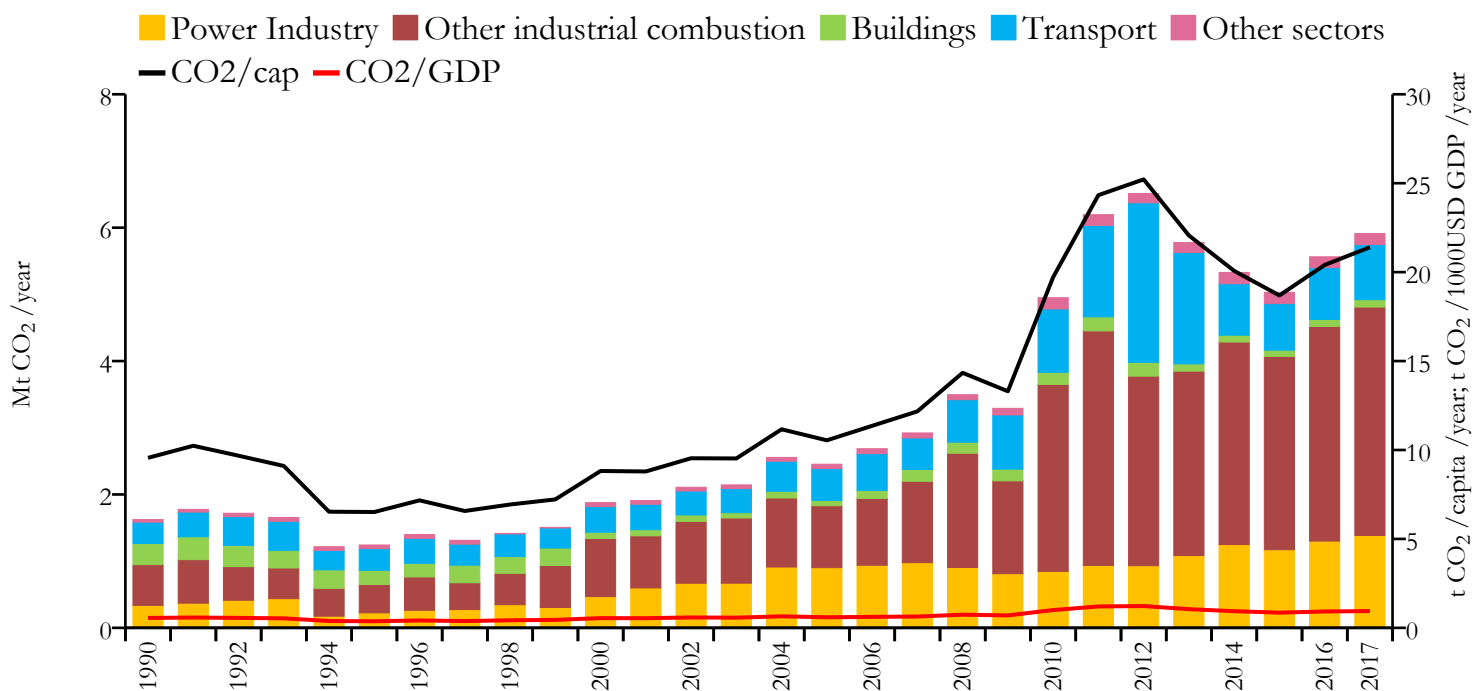
### 2017 vs 2005



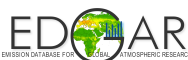
# New Caledonia



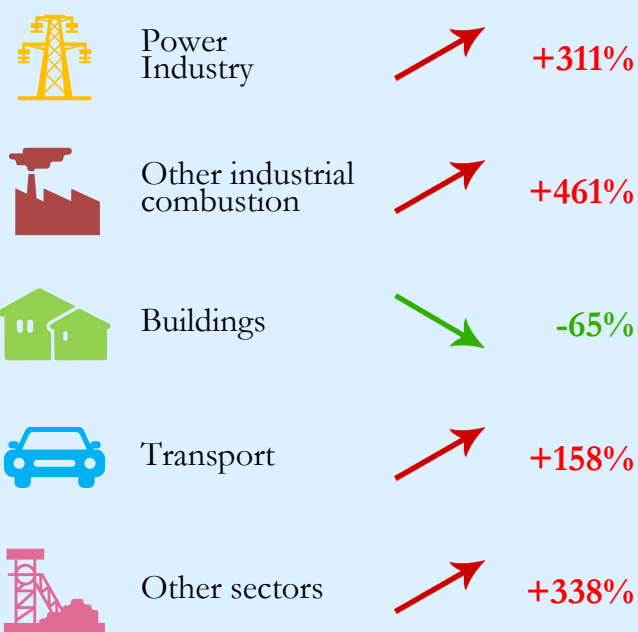
## Fossil CO<sub>2</sub> emissions by sector



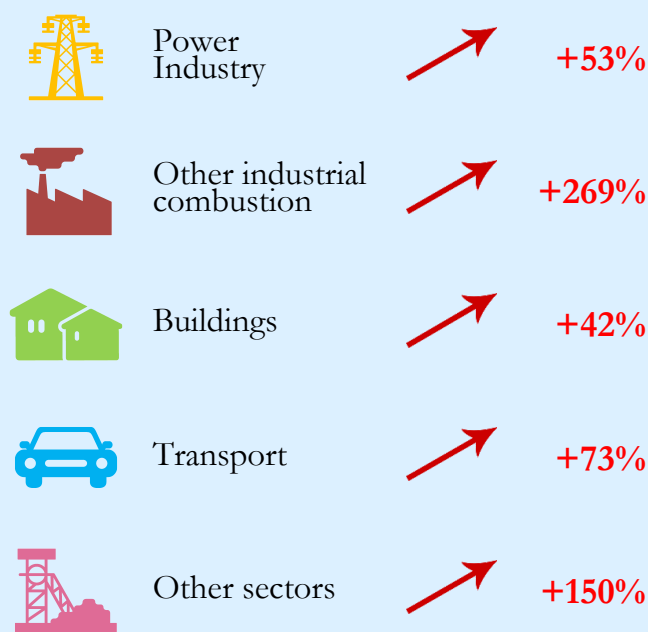
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.912	21.400	0.942	276255
2005	2.453	10.544	0.593	232686
1990	1.623	9.558	0.556	169787



### 2017 vs 1990



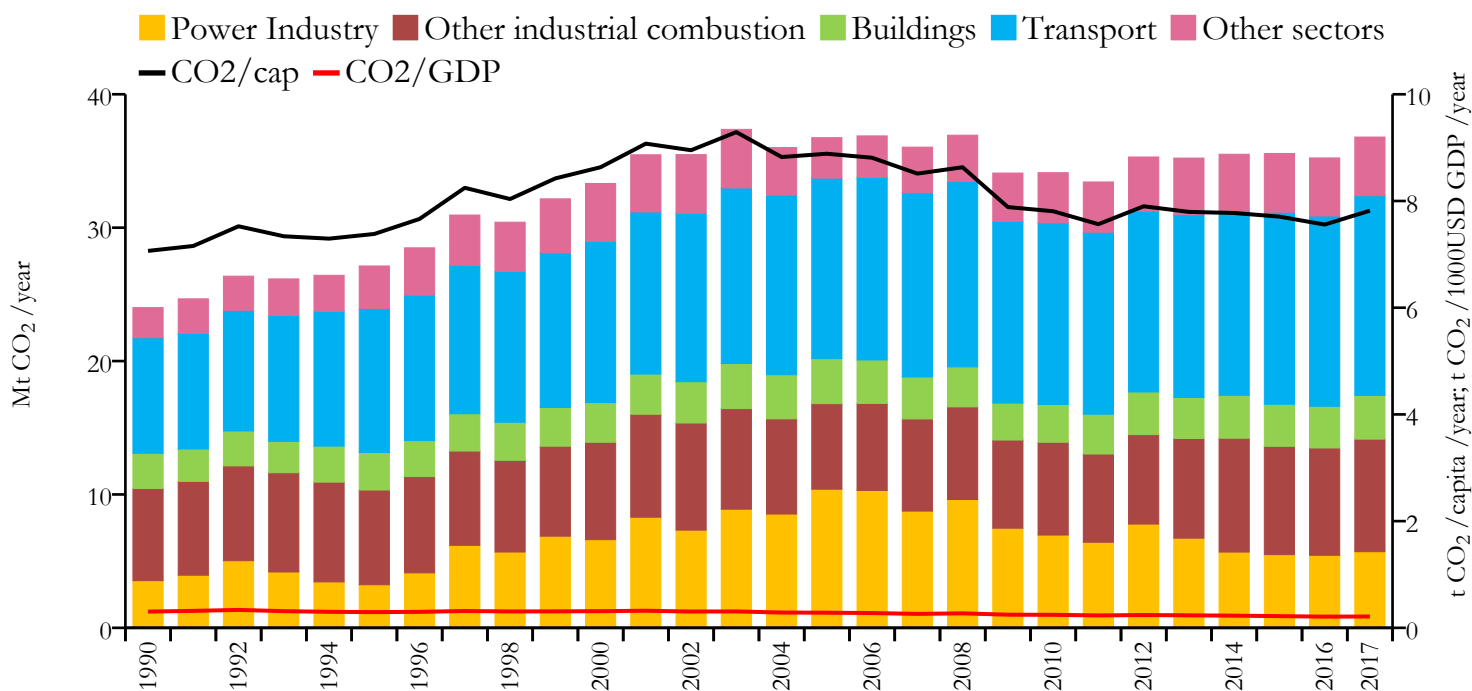
### 2017 vs 2005



# New Zealand



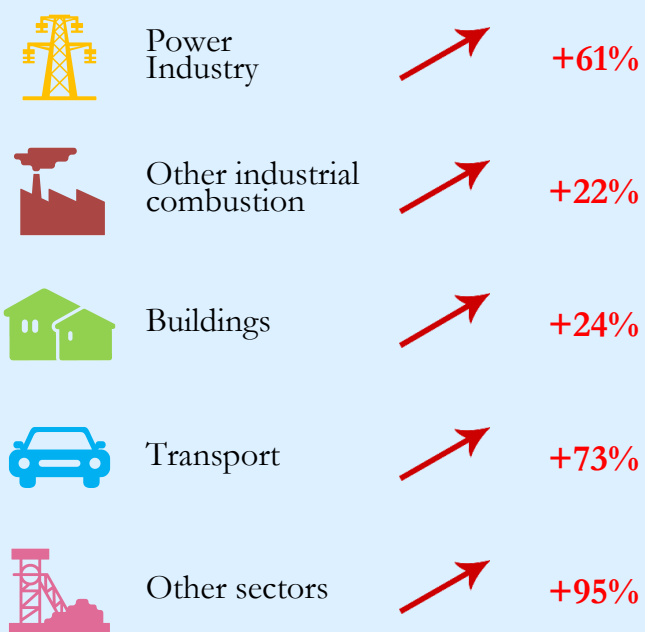
## Fossil CO<sub>2</sub> emissions by sector



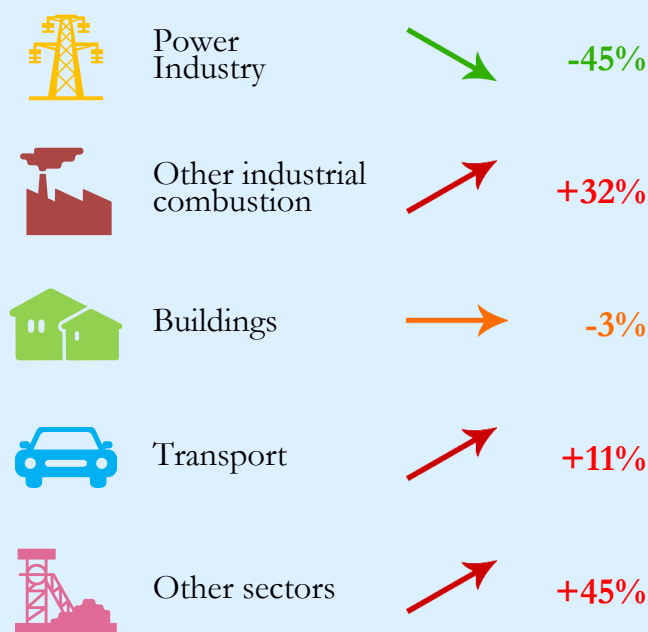
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	36.795	7.819	0.213	4705818
2005	36.746	8.886	0.284	4135355
1990	24.006	7.065	0.305	3398172



### 2017 vs 1990



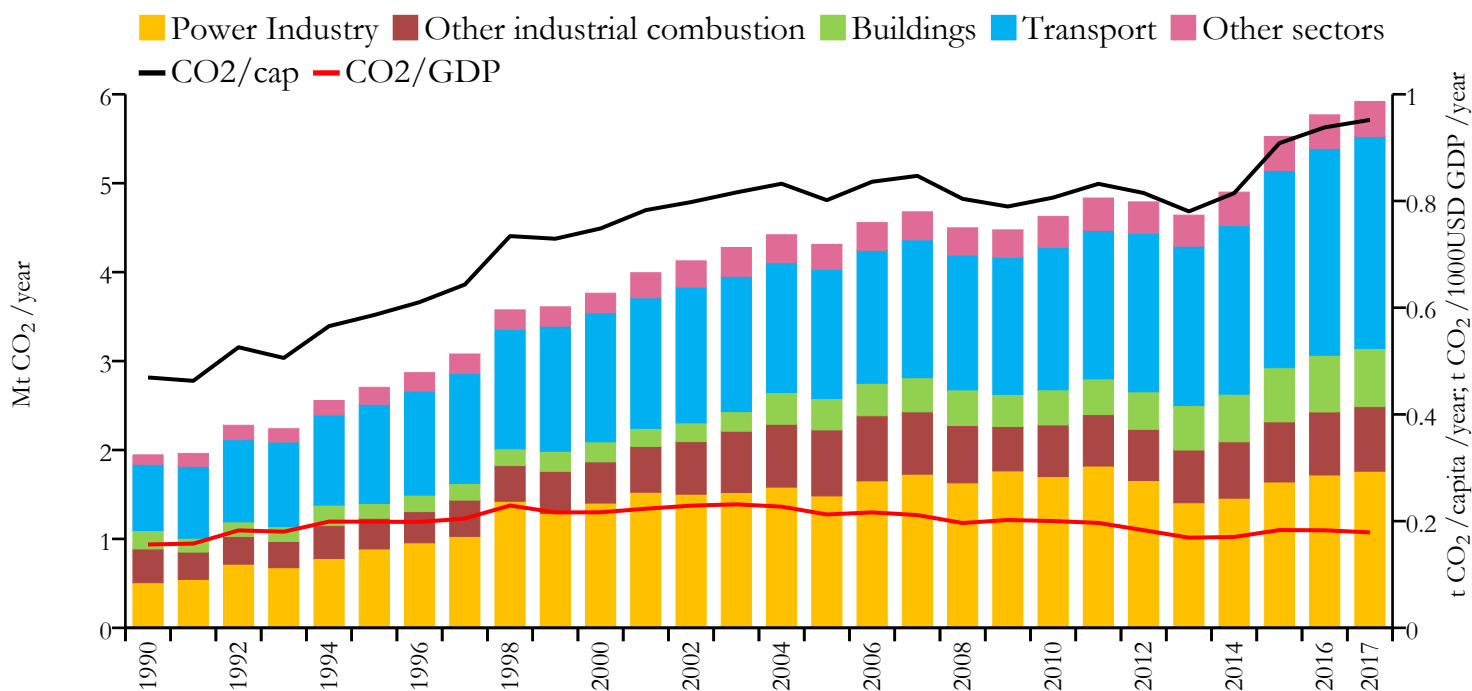
### 2017 vs 2005



# Nicaragua



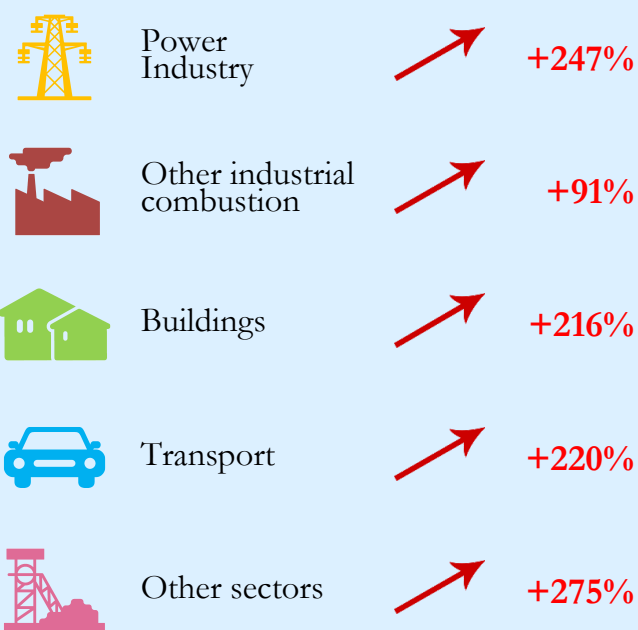
## Fossil CO<sub>2</sub> emissions by sector



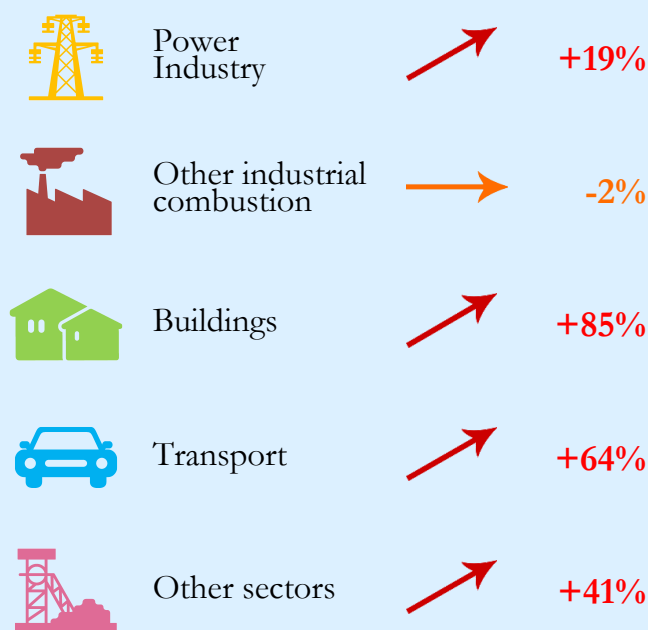
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.919	0.952	0.179	6217581
2005	4.312	0.802	0.212	5379328
1990	1.945	0.469	0.156	4144565



### 2017 vs 1990

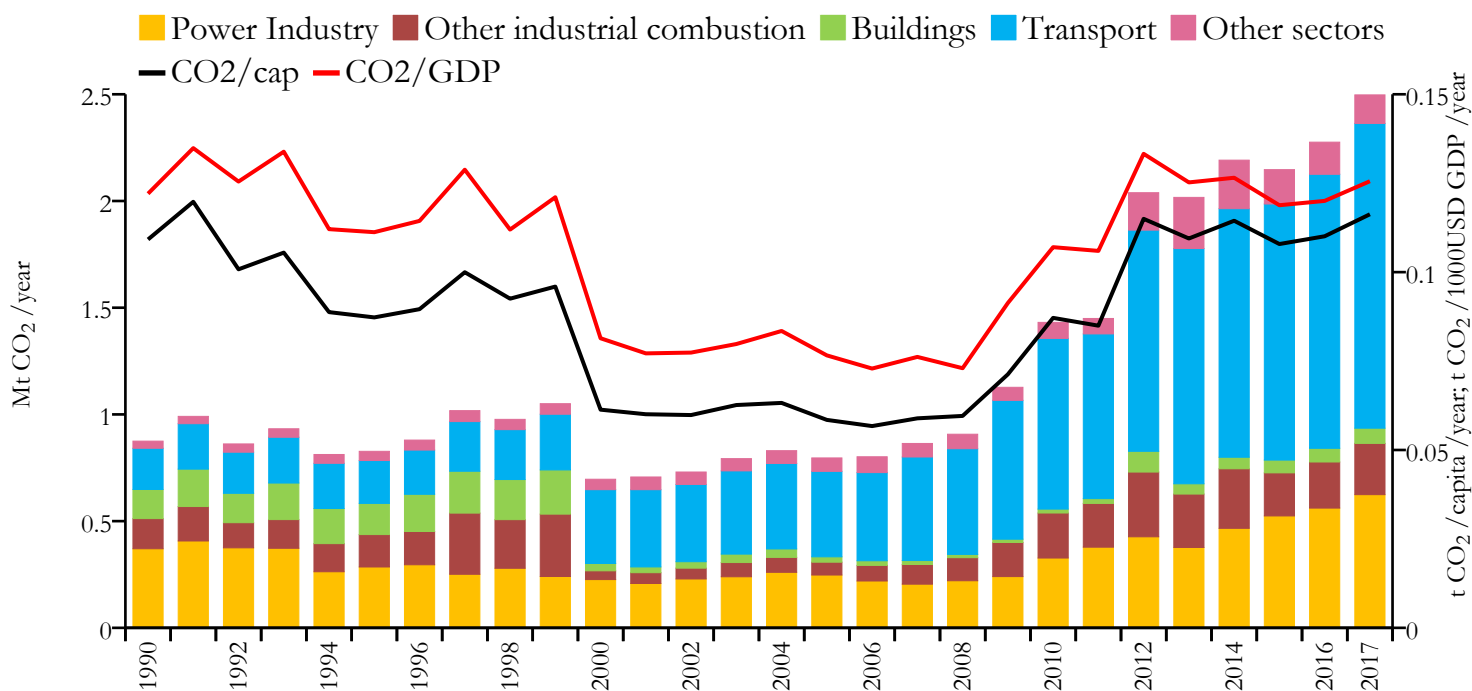


### 2017 vs 2005





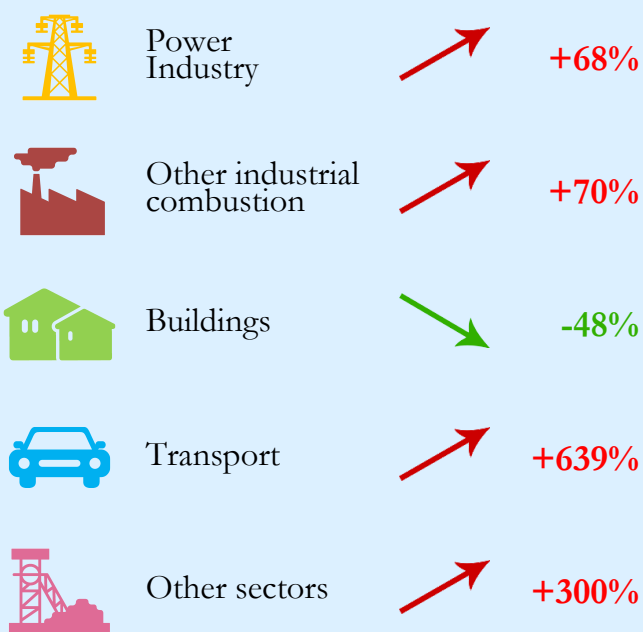
## Fossil CO<sub>2</sub> emissions by sector



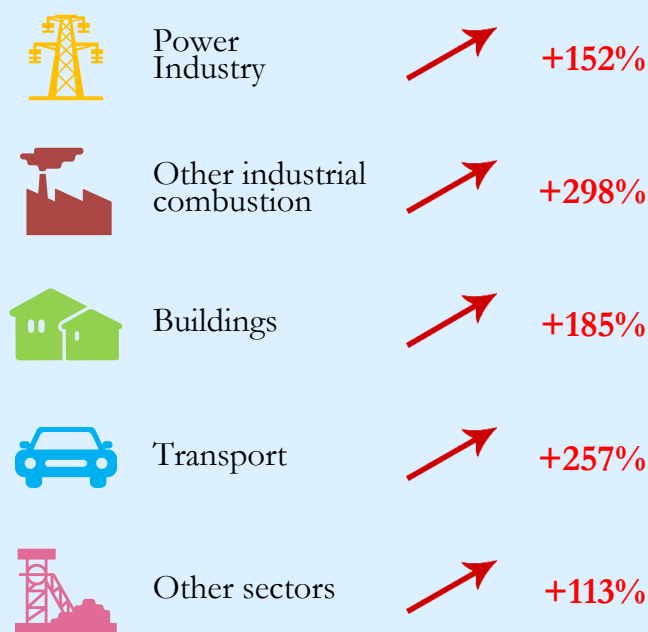
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.497	0.116	0.126	21477348
2005	0.796	0.058	0.077	13618449
1990	0.875	0.109	0.122	8012861



### 2017 vs 1990

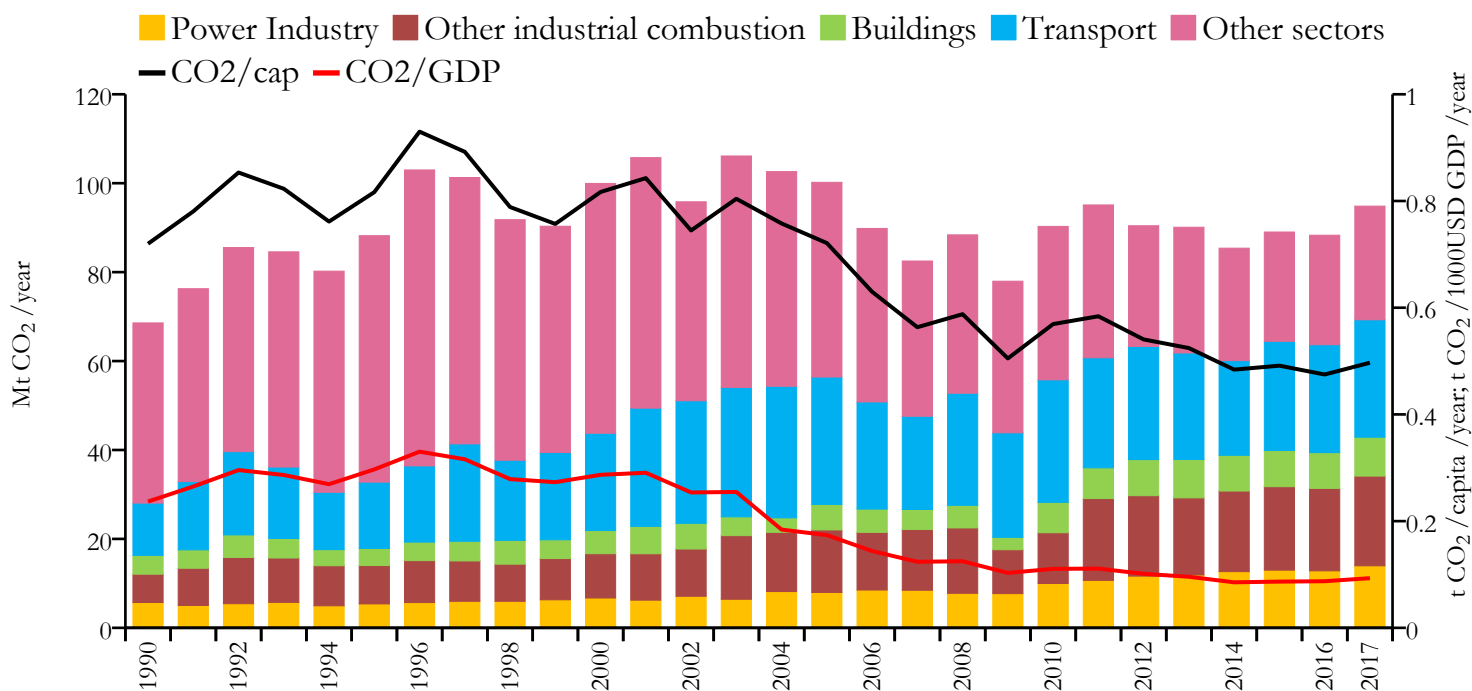


### 2017 vs 2005





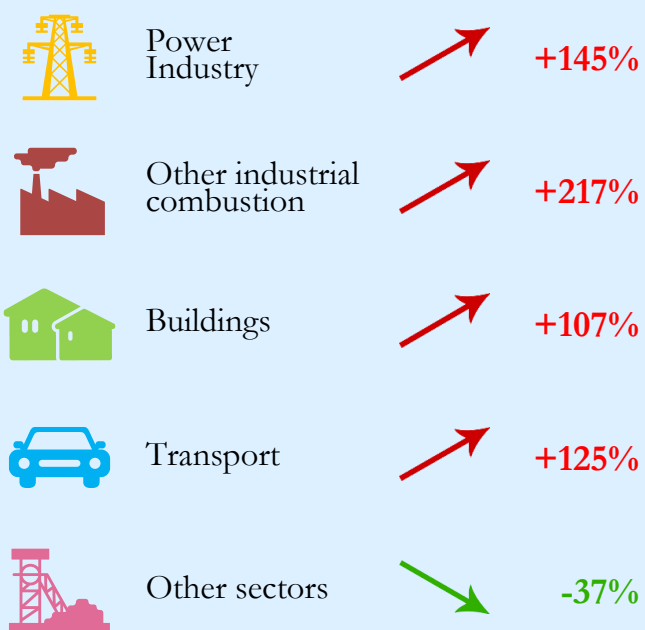
## Fossil CO<sub>2</sub> emissions by sector



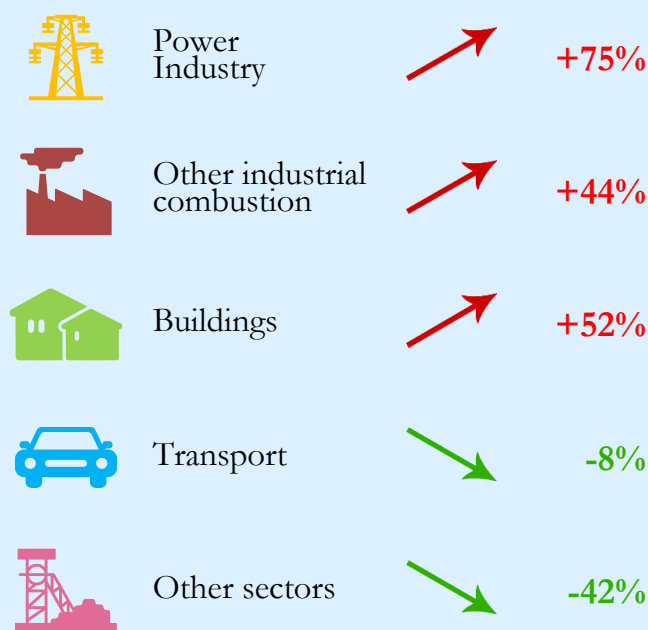
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	94.847	0.497	0.093	190886311
2005	100.196	0.721	0.174	138939478
1990	68.581	0.720	0.237	95269988



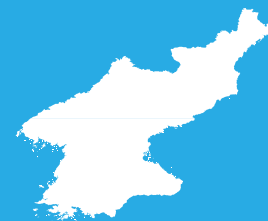
### 2017 vs 1990



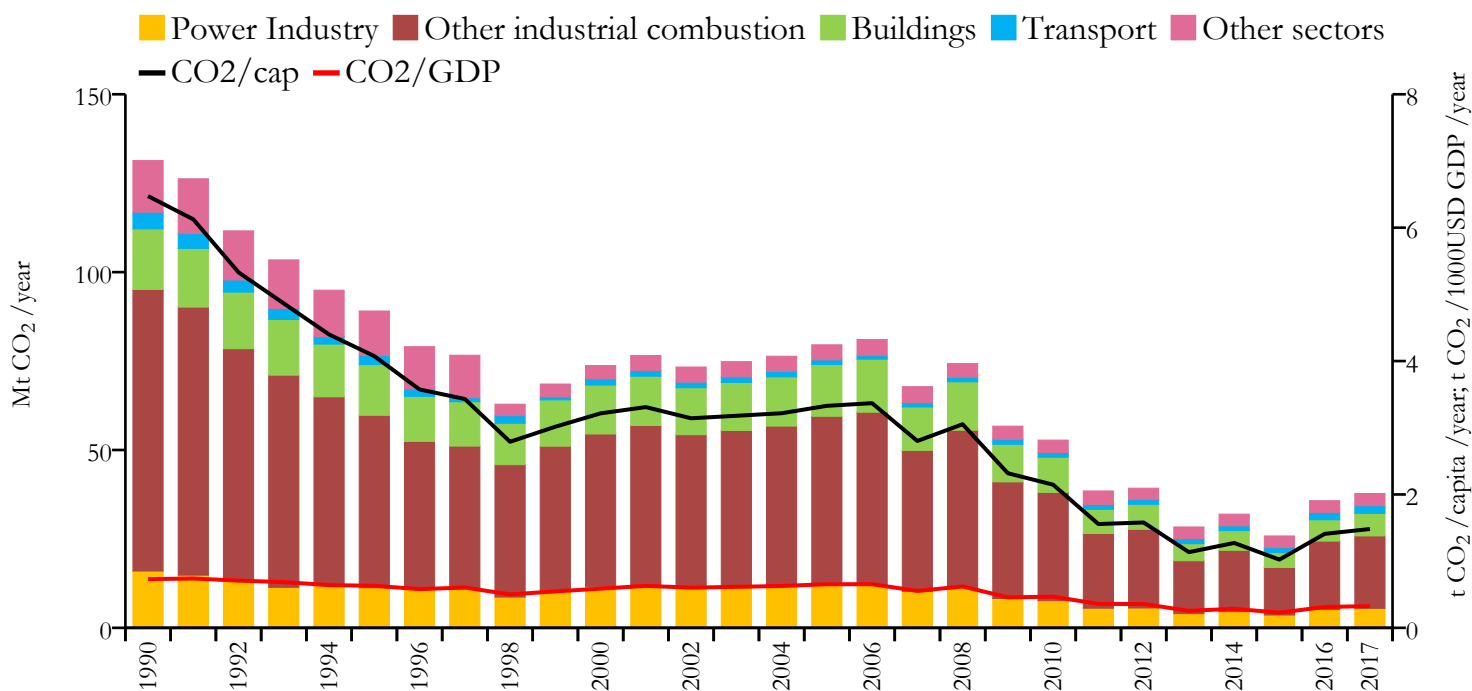
### 2017 vs 2005



# North Korea



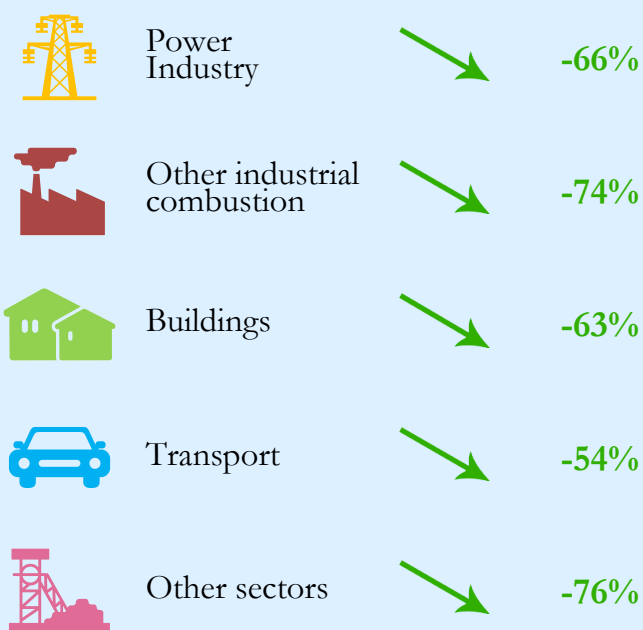
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	37.774	1.482	0.327	25490965
2005	79.568	3.329	0.654	23904167
1990	131.365	6.473	0.730	20293054



### 2017 vs 1990



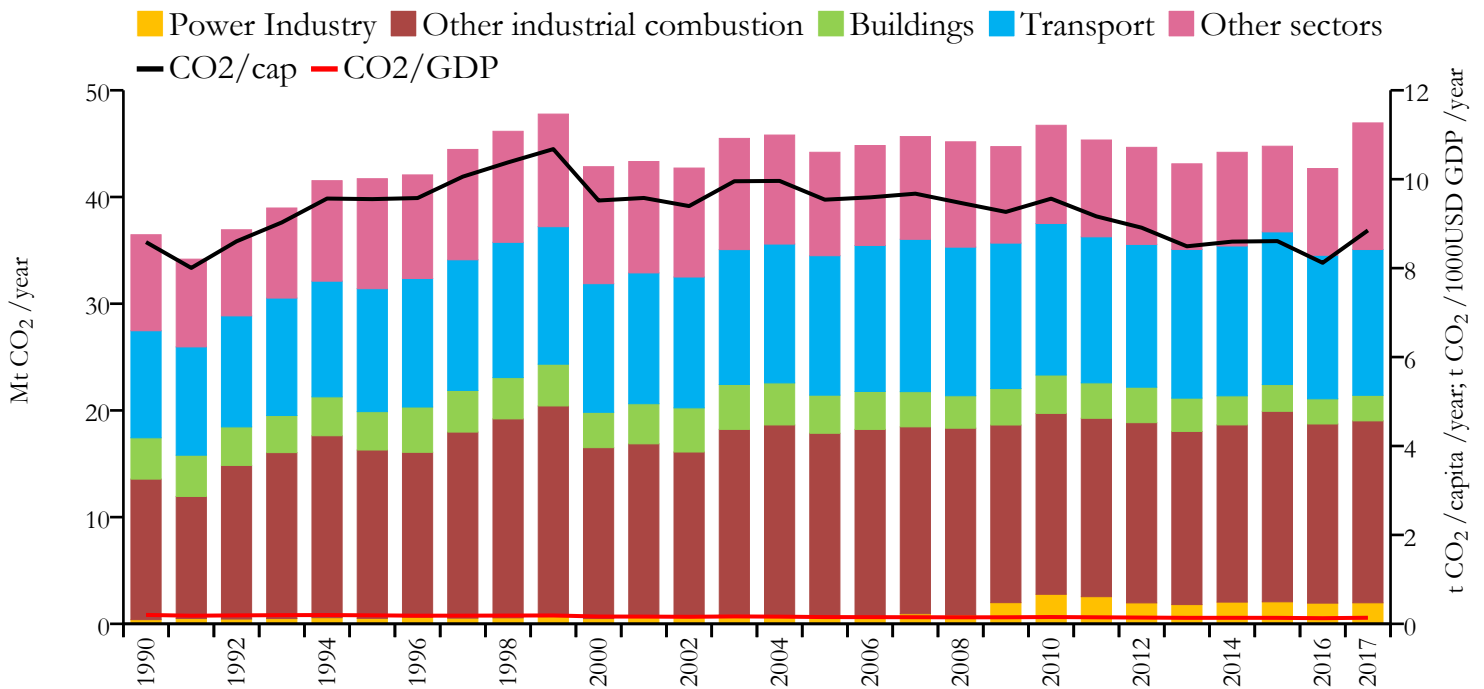
### 2017 vs 2005



# Norway



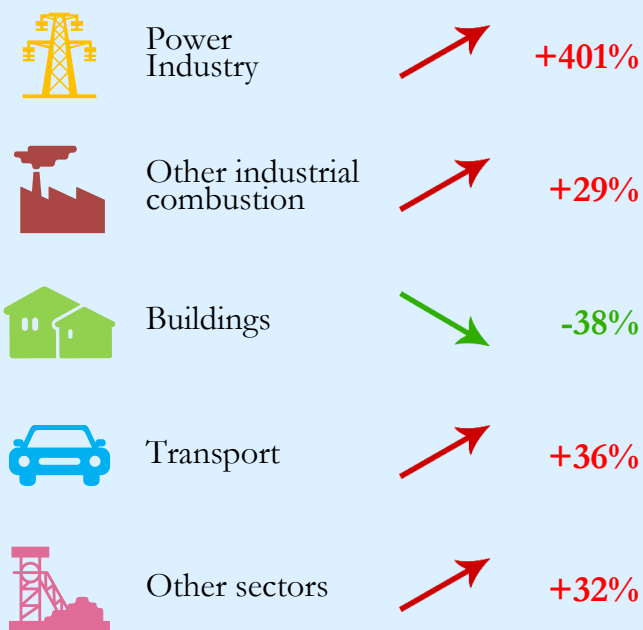
## Fossil CO<sub>2</sub> emissions by sector



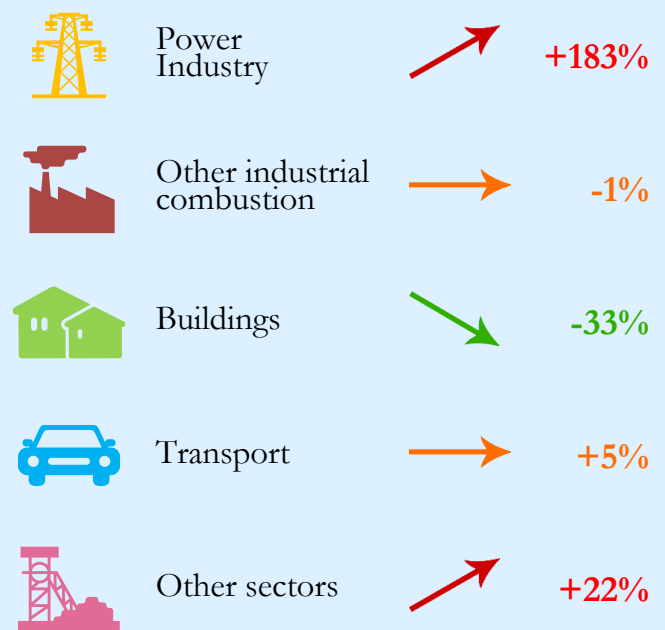
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	46.943	8.848	0.137	5305383
2005	44.191	9.540	0.152	4632364
1990	36.463	8.585	0.201	4247285



### 2017 vs 1990



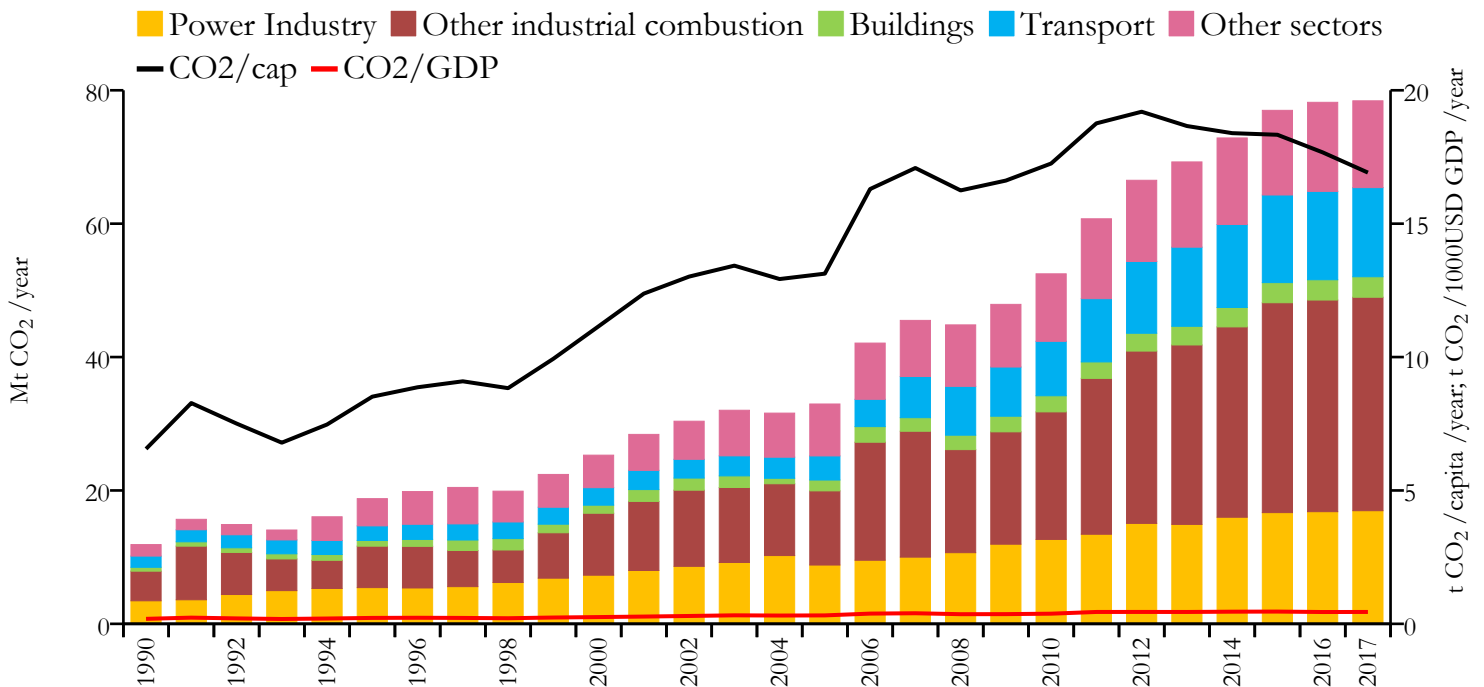
### 2017 vs 2005







## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	78.421	16.915	0.446	4636262
2005	32.964	13.126	0.317	2511269
1990	11.884	6.558	0.187	1812160

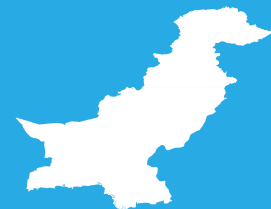


### 2017 vs 1990

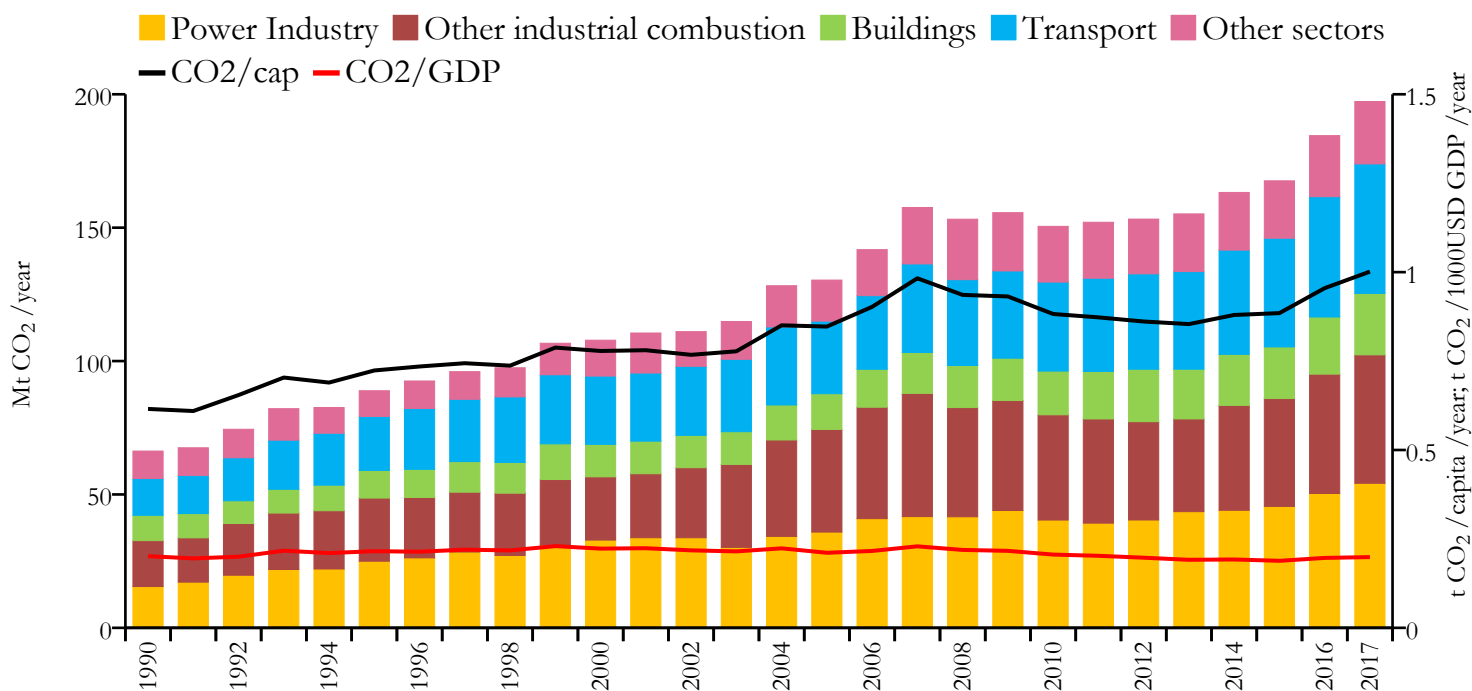


### 2017 vs 2005





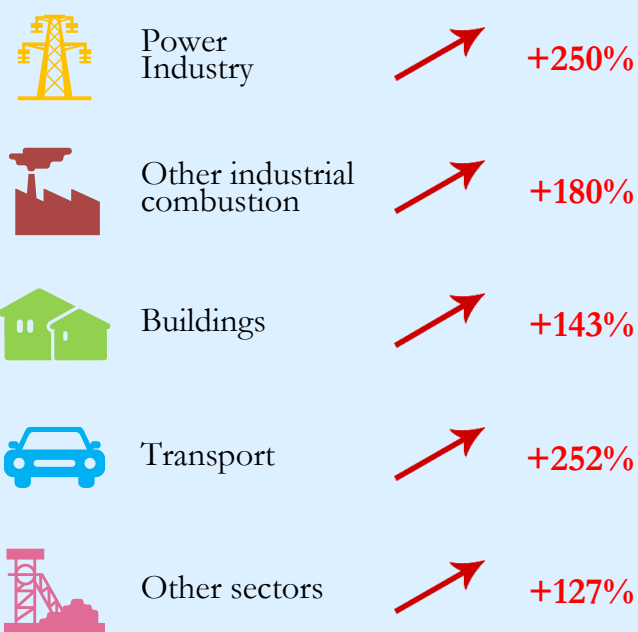
## Fossil CO<sub>2</sub> emissions by sector



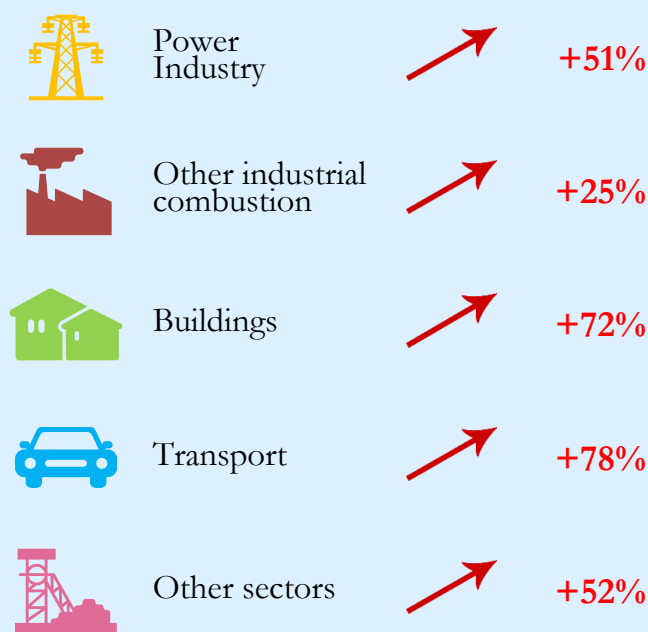
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	197.297	1.001	0.199	197015955
2005	130.354	0.847	0.211	153909667
1990	66.270	0.615	0.201	107678614



### 2017 vs 1990

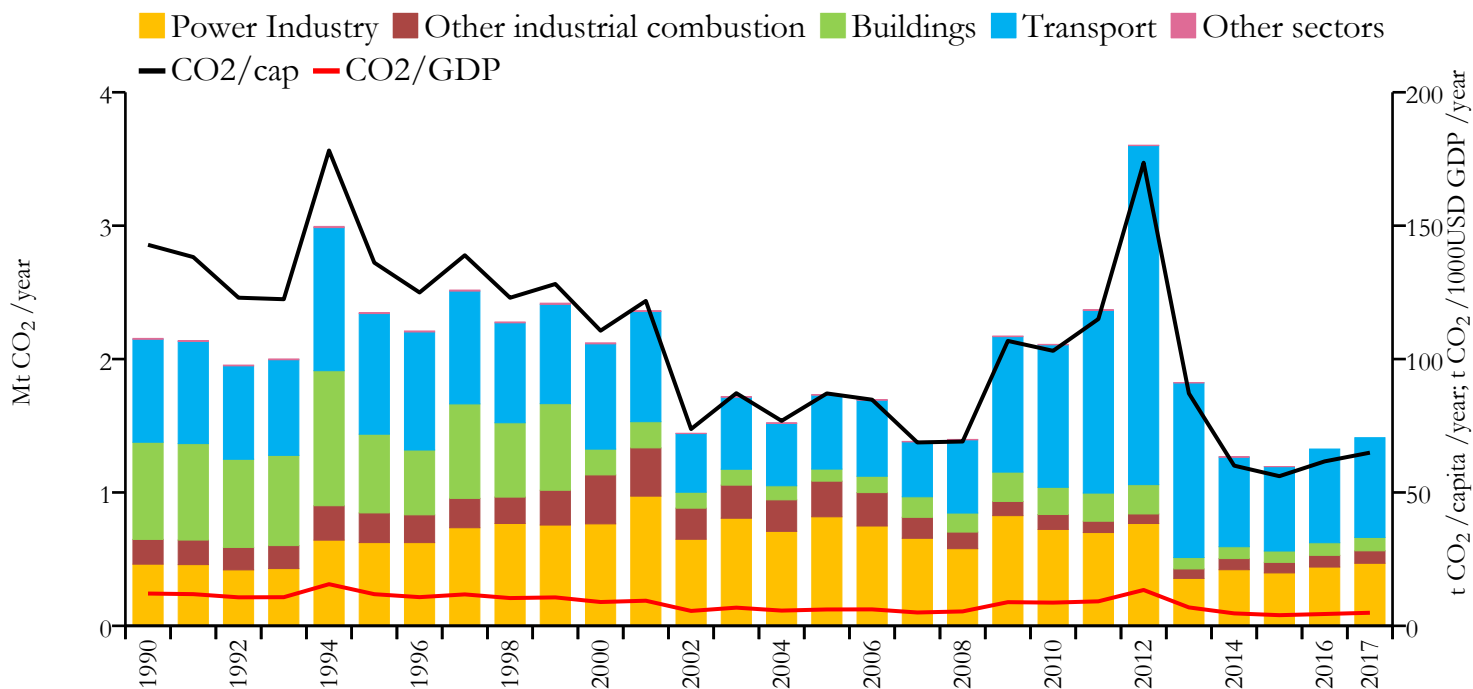


### 2017 vs 2005





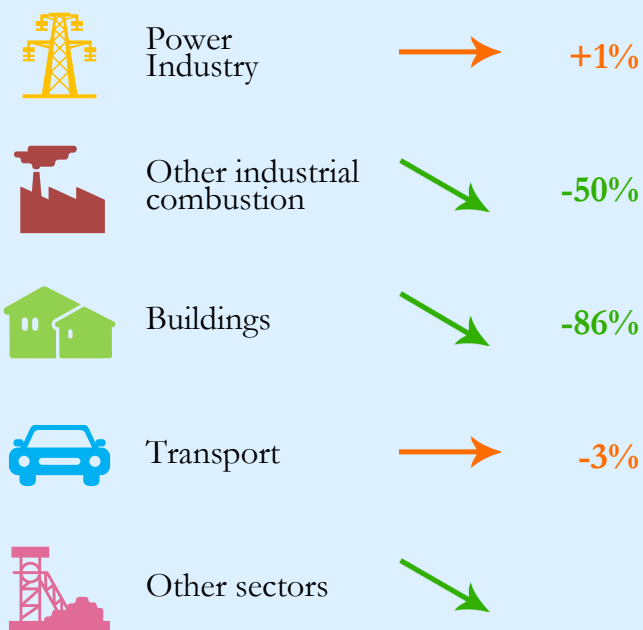
## Fossil CO<sub>2</sub> emissions by sector



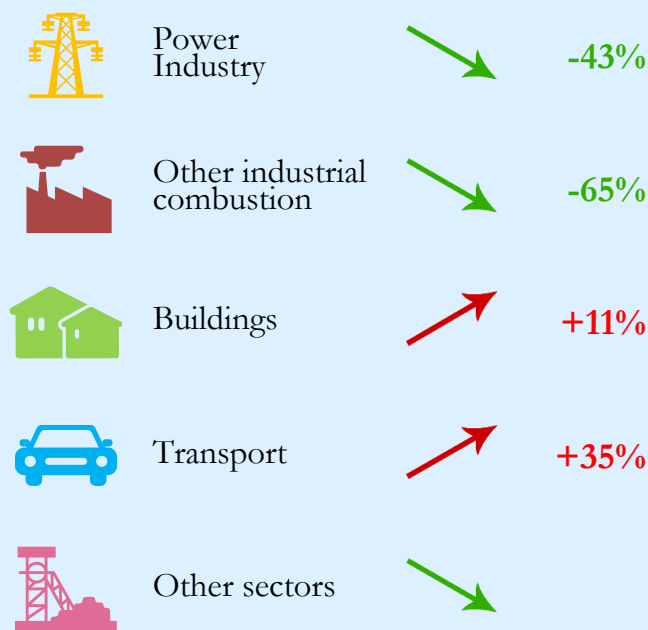
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.411	64.913	4.903	21729
2005	1.734	87.114	6.138	19906
1990	2.155	142.826	12.104	15088



### 2017 vs 1990

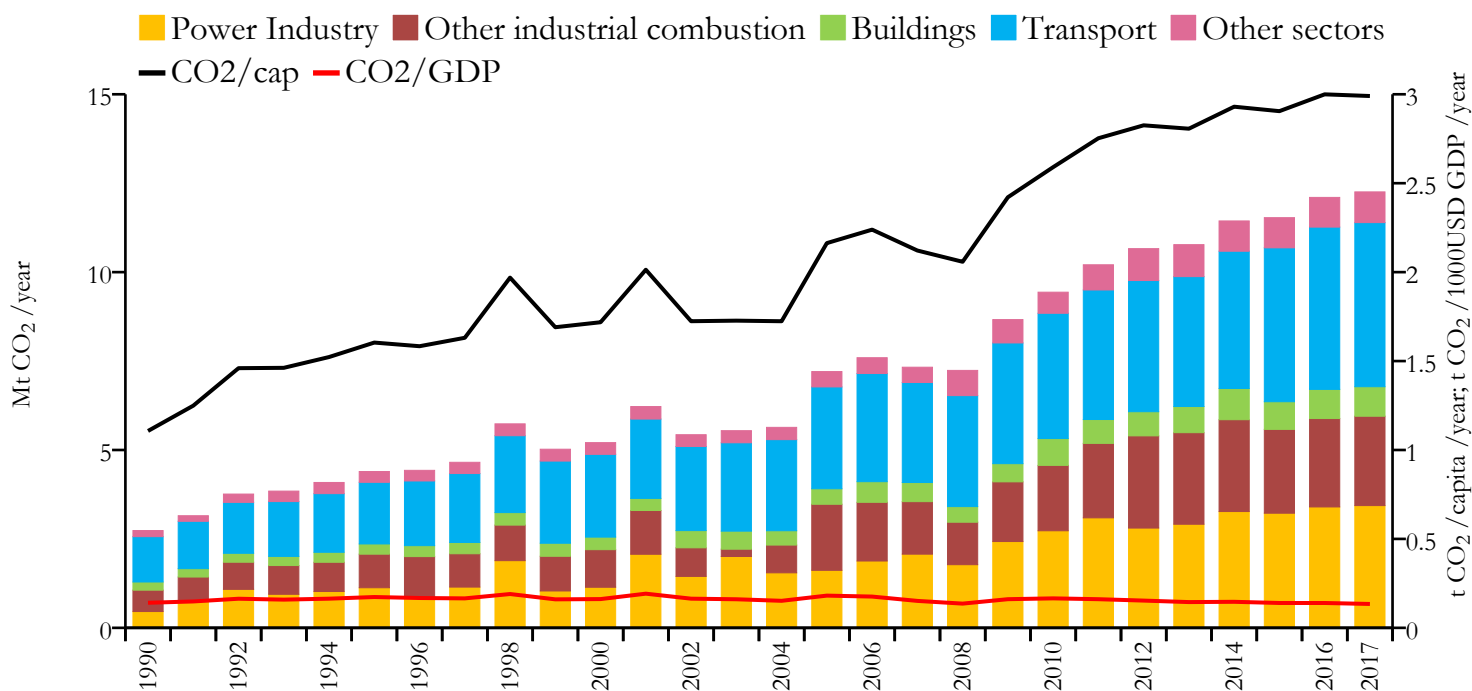


### 2017 vs 2005

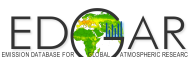




## Fossil CO<sub>2</sub> emissions by sector



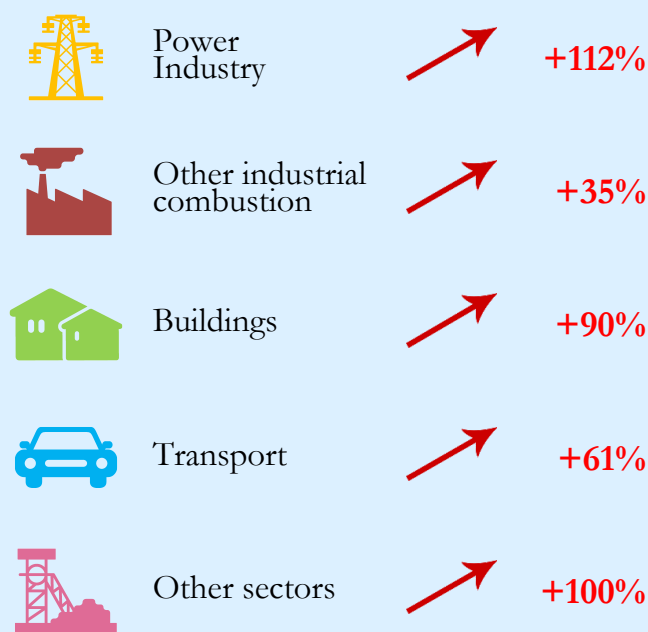
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	12.256	2.990	0.134	4098587
2005	7.204	2.163	0.181	3330465
1990	2.735	1.107	0.141	2471009



### 2017 vs 1990



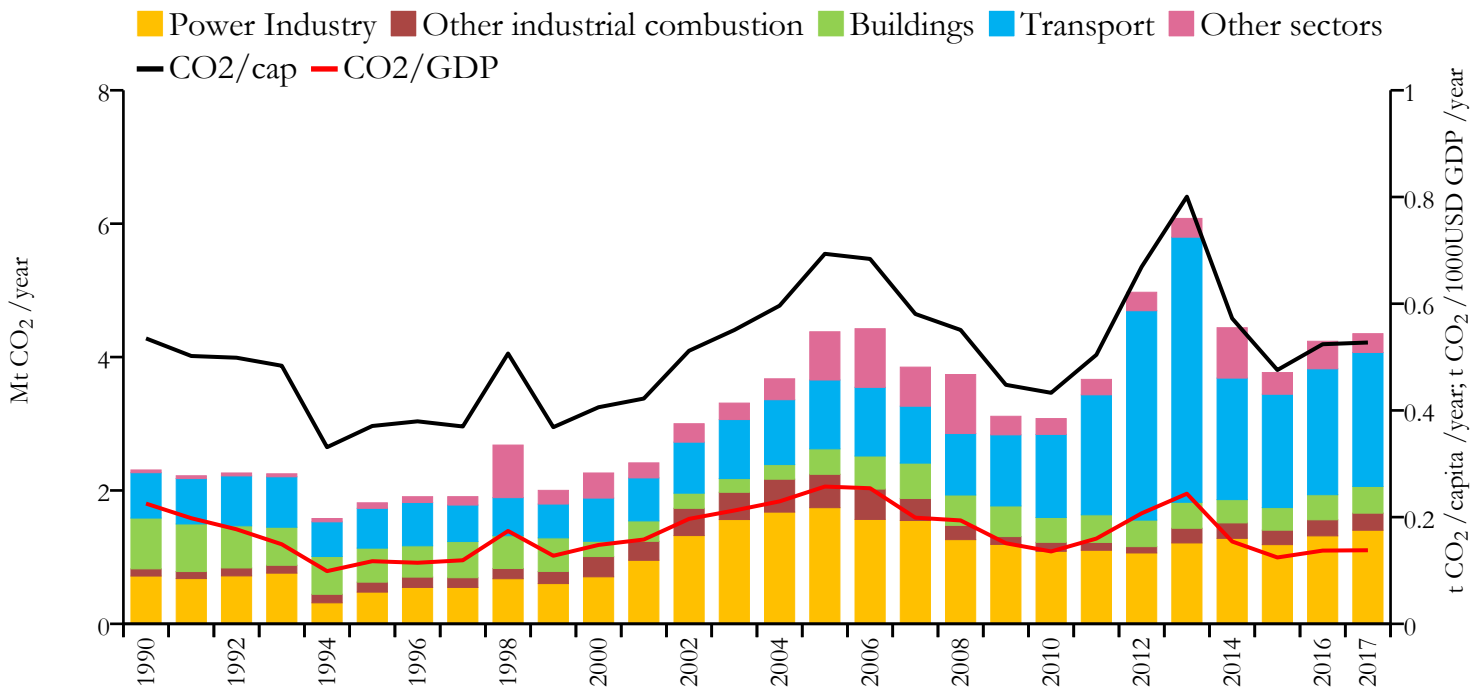
### 2017 vs 2005



# Papua New Guinea



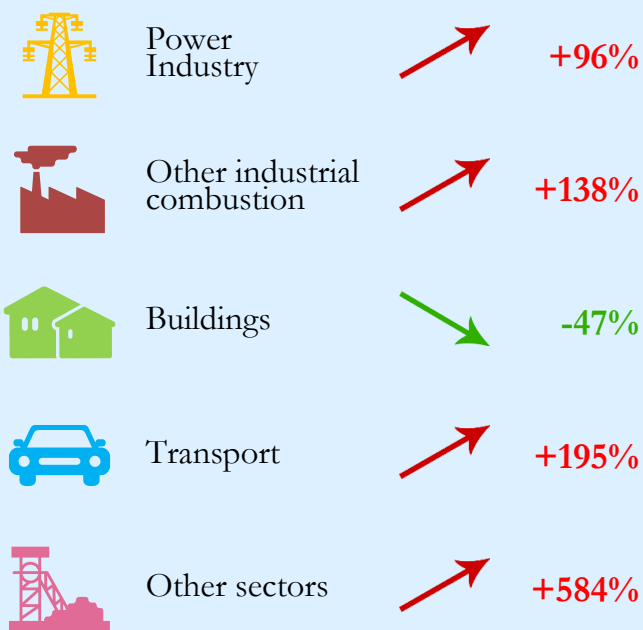
## Fossil CO<sub>2</sub> emissions by sector



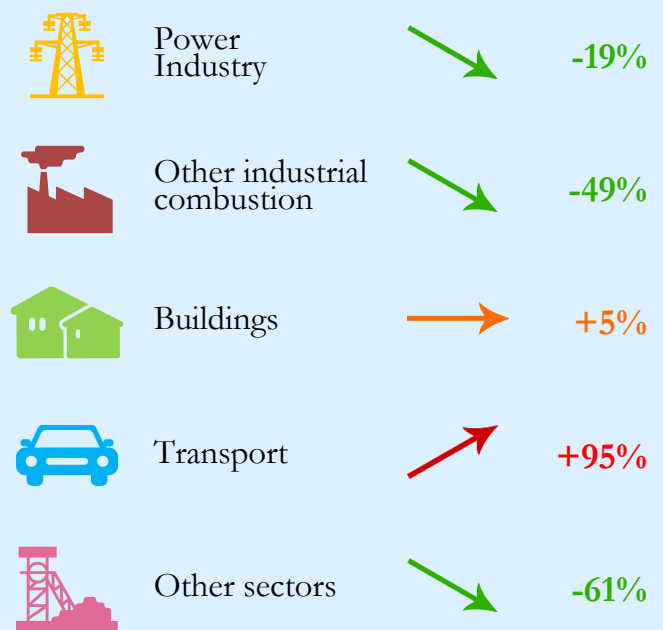
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	4.351	0.527	0.138	8251162
2005	4.379	0.693	0.257	6314709
1990	2.307	0.535	0.225	4313059



### 2017 vs 1990



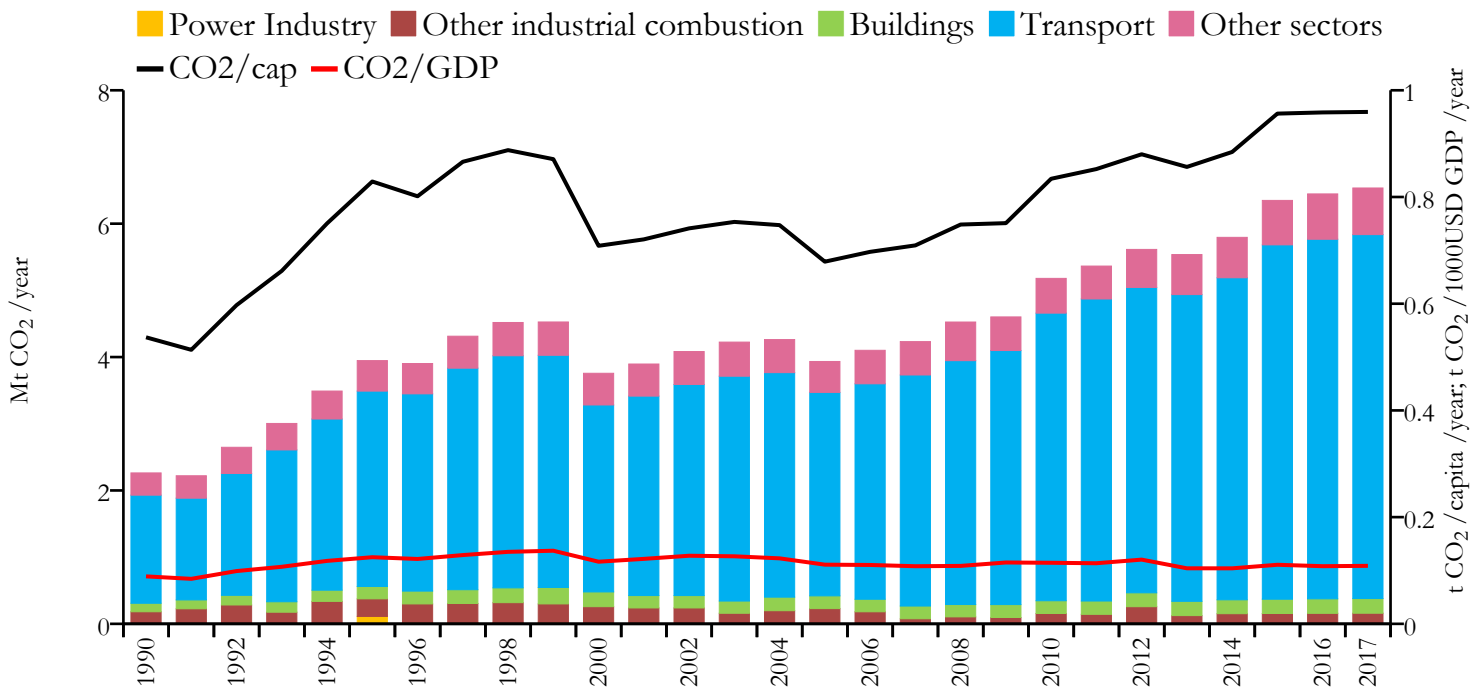
### 2017 vs 2005



# Paraguay



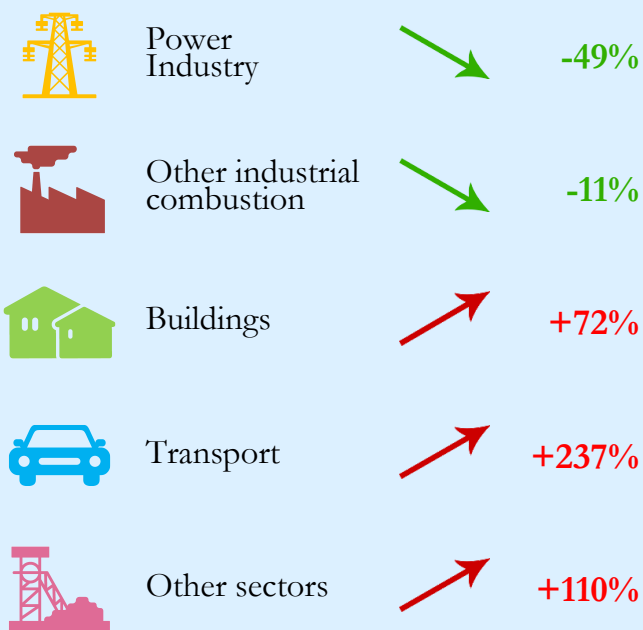
## Fossil CO<sub>2</sub> emissions by sector



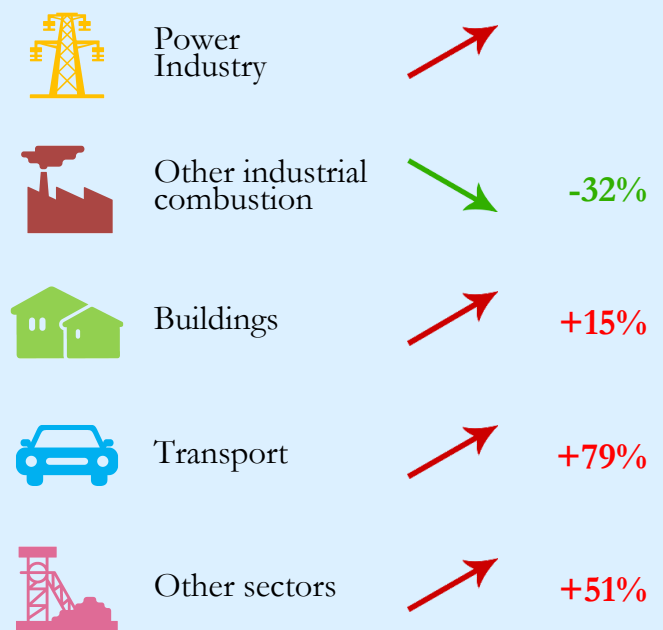
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	6.535	0.959	0.109	6811297
2005	3.934	0.679	0.111	5795494
1990	2.263	0.537	0.089	4213742



### 2017 vs 1990

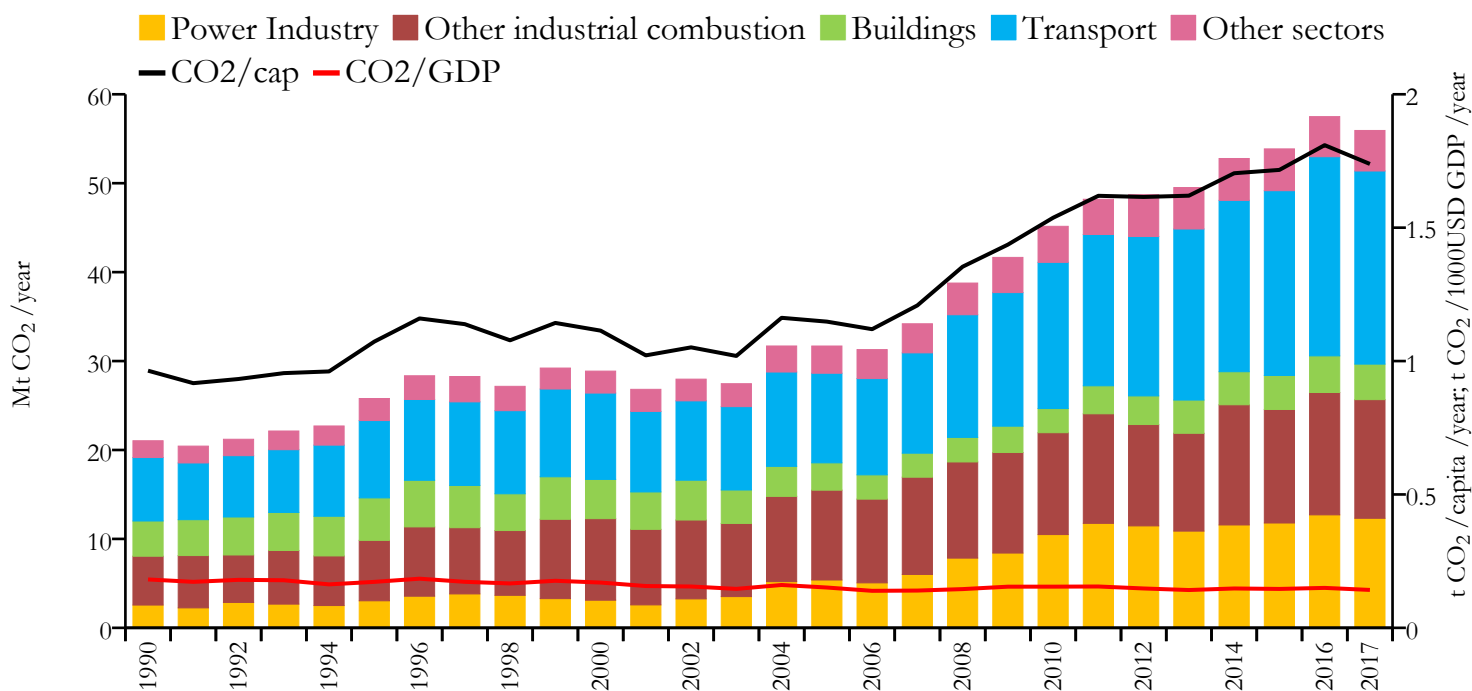


### 2017 vs 2005

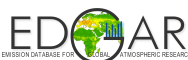




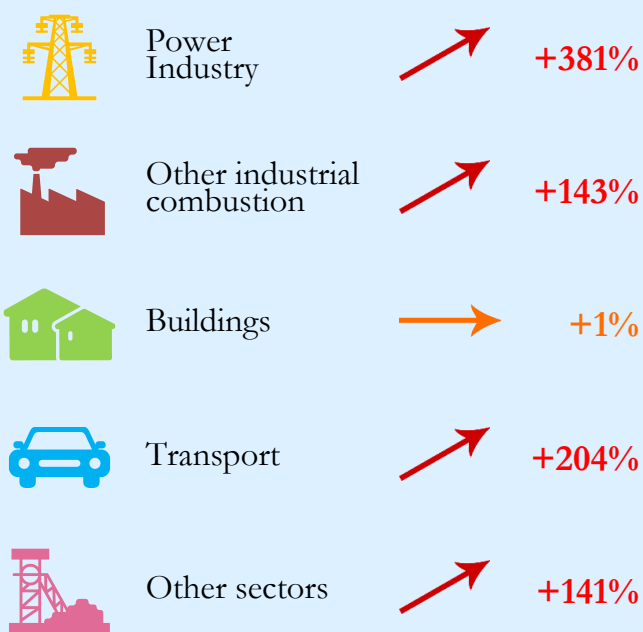
## Fossil CO<sub>2</sub> emissions by sector



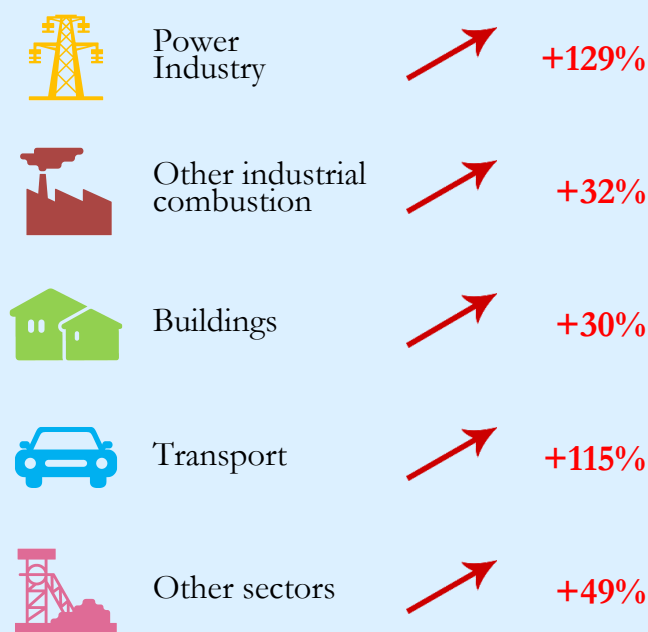
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	55.931	1.739	0.142	32165485
2005	31.692	1.148	0.151	27610410
1990	21.039	0.964	0.181	21826658



### 2017 vs 1990



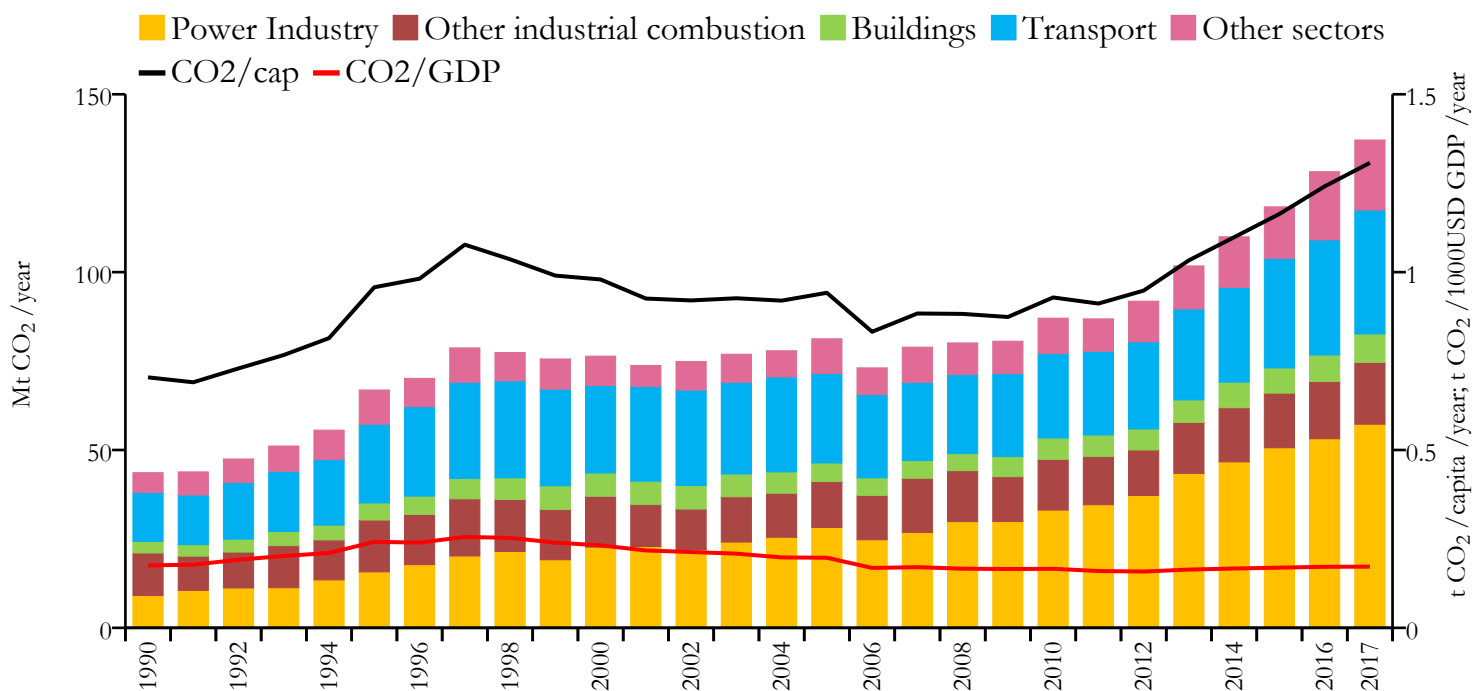
### 2017 vs 2005



# Philippines



## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	137.154	1.307	0.172	104918090
2005	81.261	0.942	0.197	86274237
1990	43.623	0.704	0.176	61947348



### 2017 vs 1990

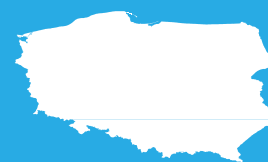


### 2017 vs 2005

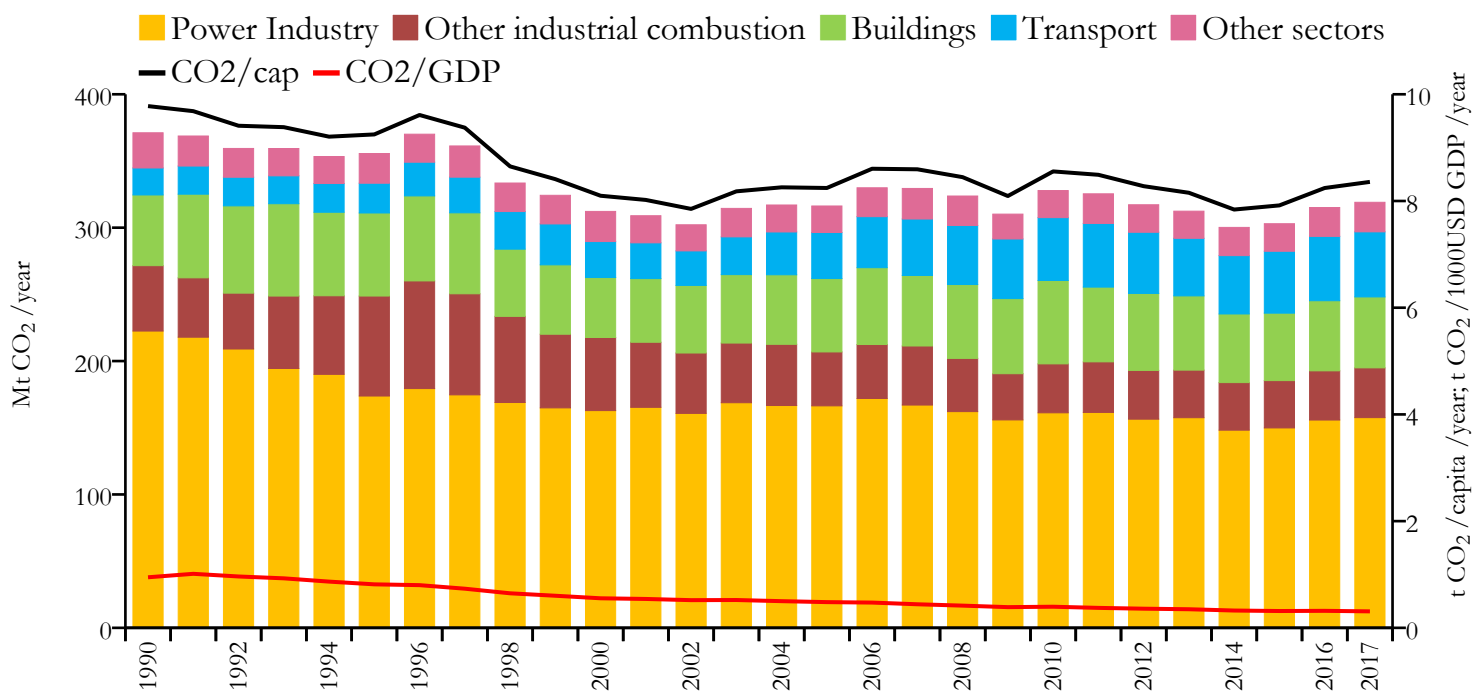




# Poland



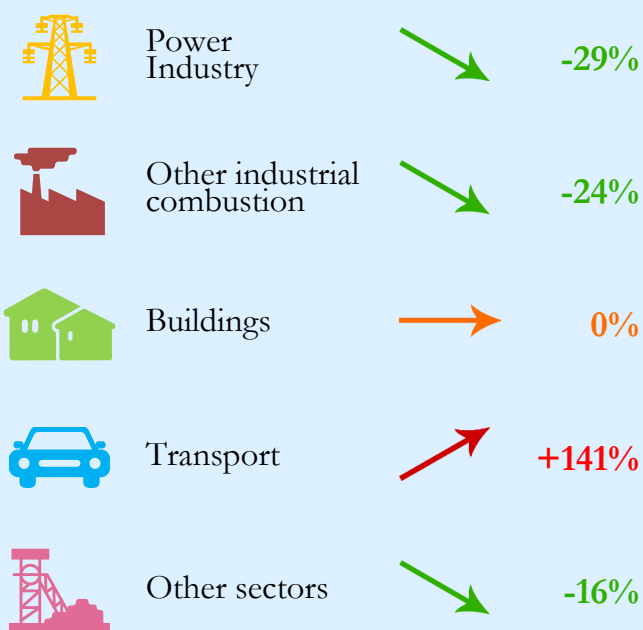
## Fossil CO<sub>2</sub> emissions by sector



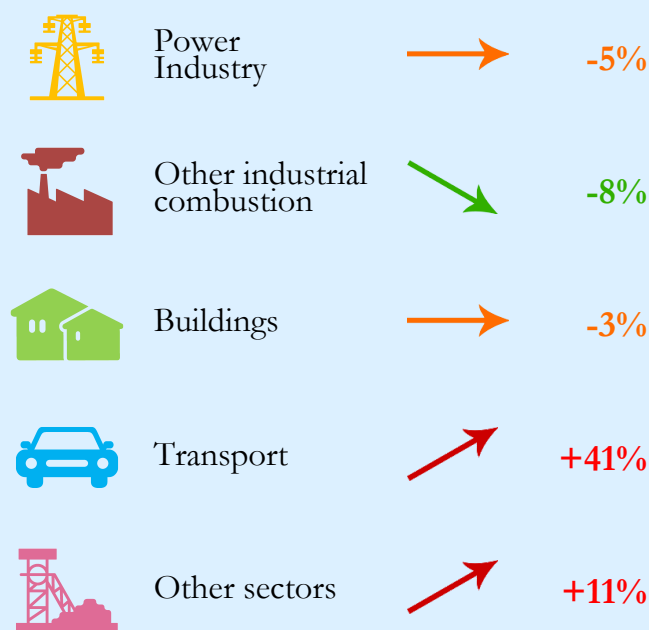
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	319.028	8.358	0.309	38170712
2005	316.256	8.244	0.482	38362666
1990	371.139	9.779	0.948	37954553



### 2017 vs 1990



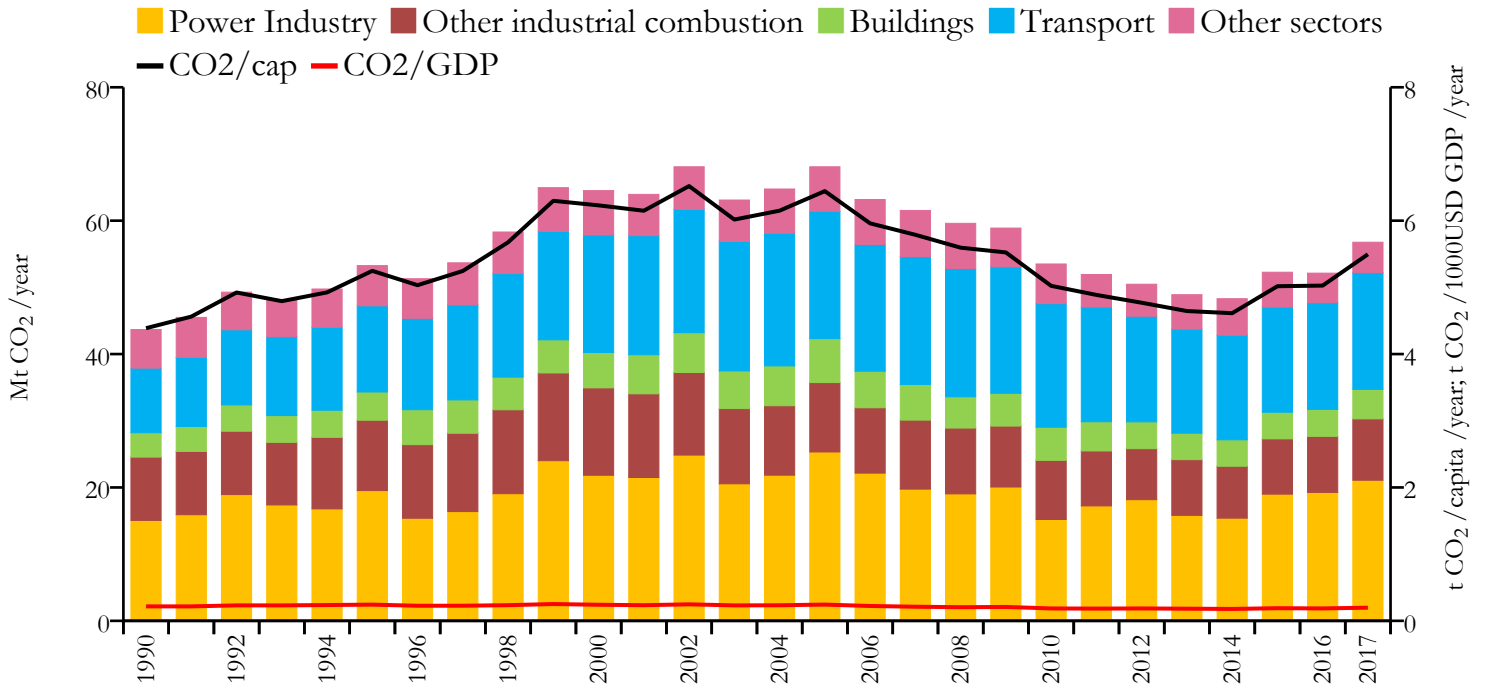
### 2017 vs 2005



# Portugal



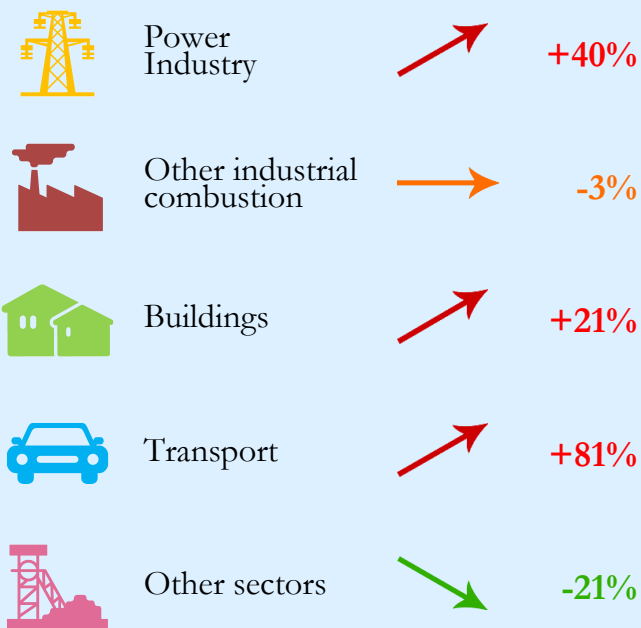
## Fossil CO<sub>2</sub> emissions by sector



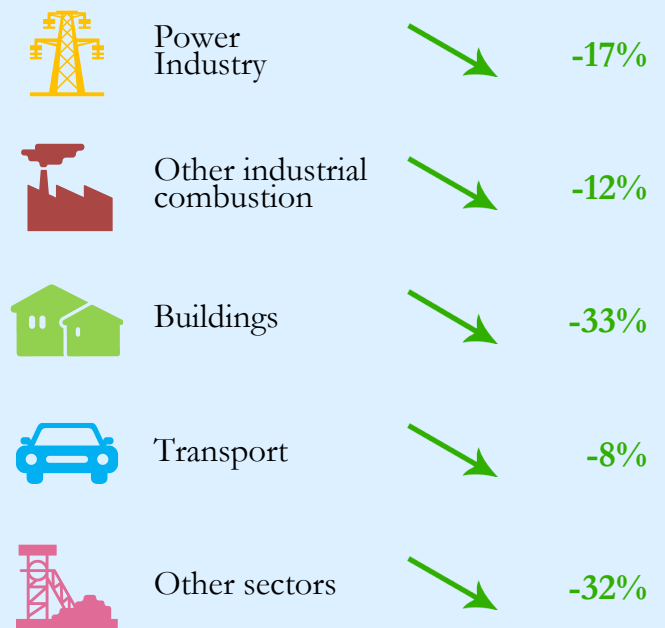
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	56.771	5.496	0.197	10329506
2005	68.077	6.443	0.244	10565723
1990	43.672	4.388	0.217	9953327



### 2017 vs 1990



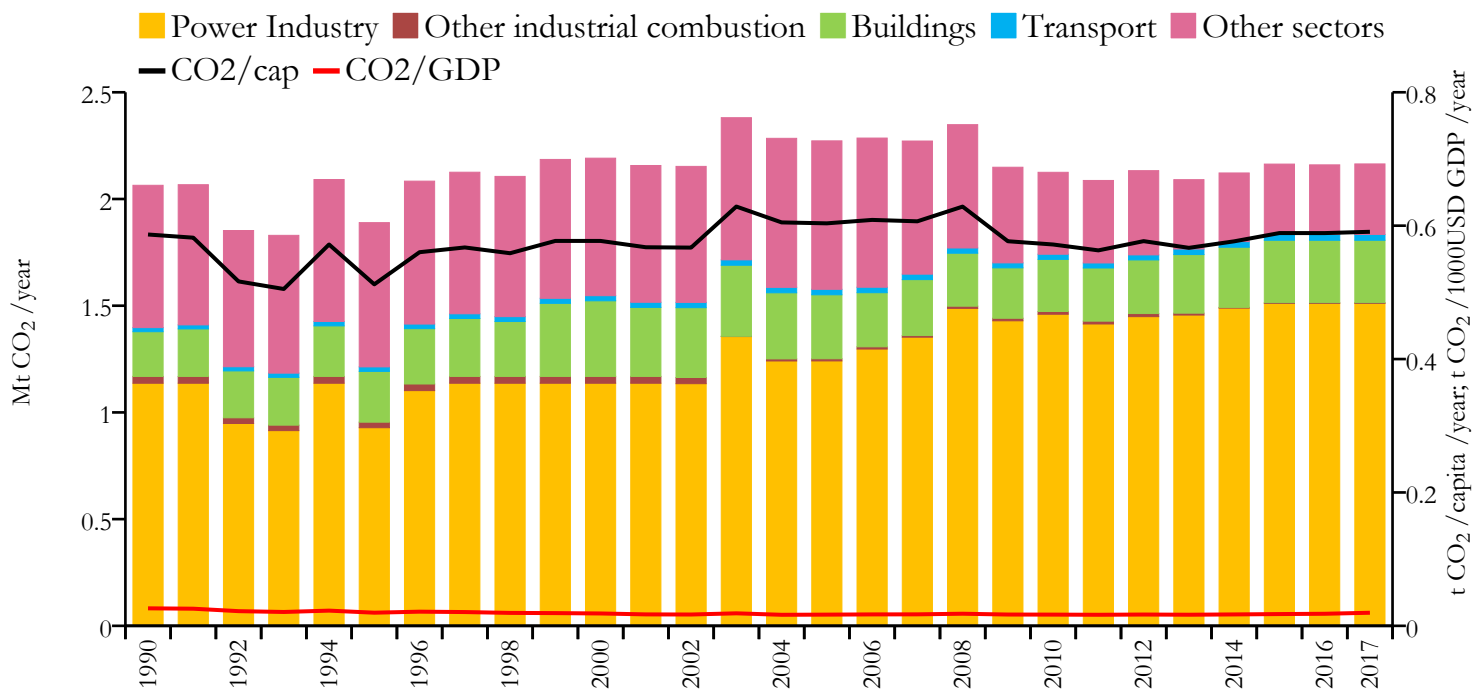
### 2017 vs 2005



# Puerto Rico



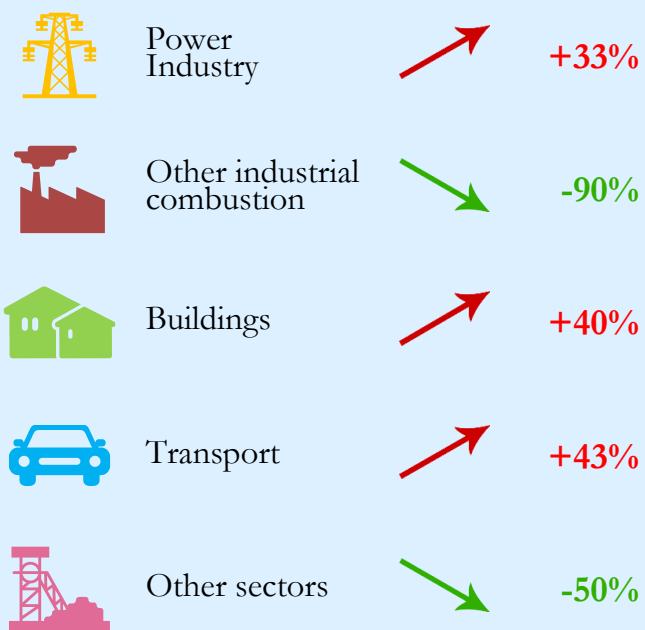
## Fossil CO<sub>2</sub> emissions by sector



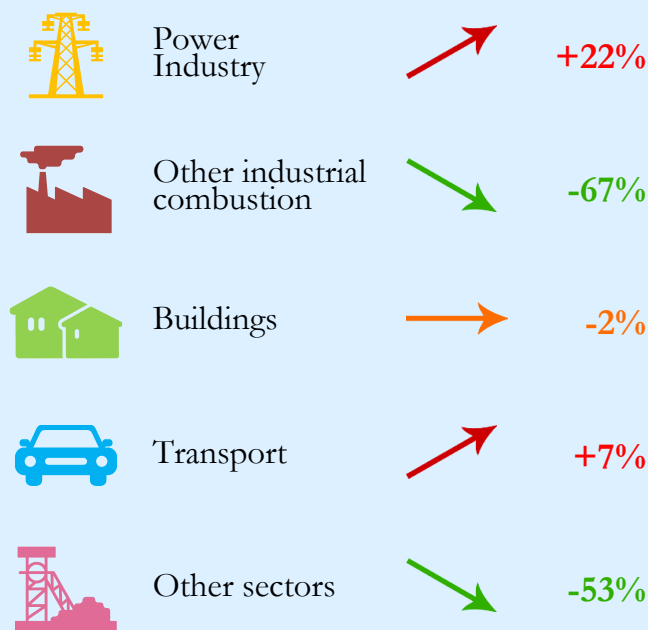
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.164	0.591	0.020	3663131
2005	2.272	0.603	0.017	3765399
1990	2.064	0.587	0.026	3517975



### 2017 vs 1990

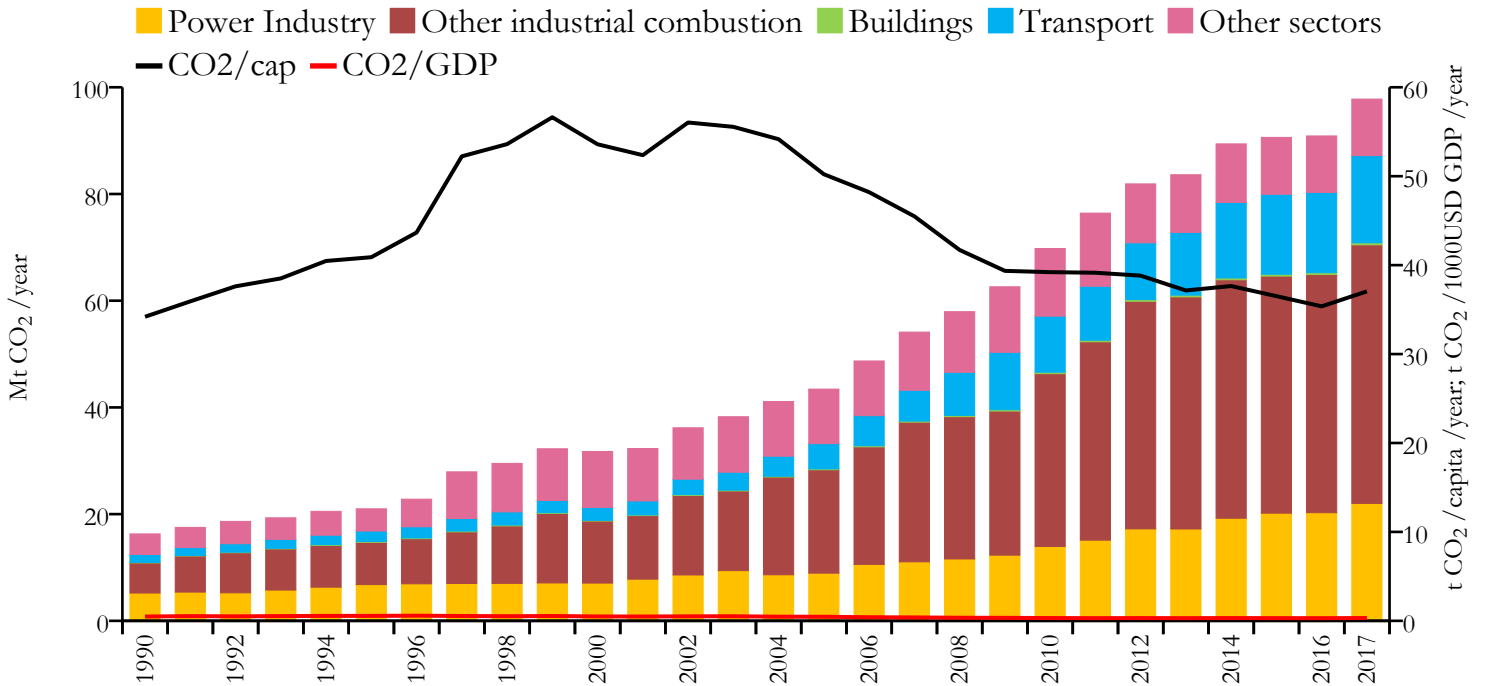


### 2017 vs 2005





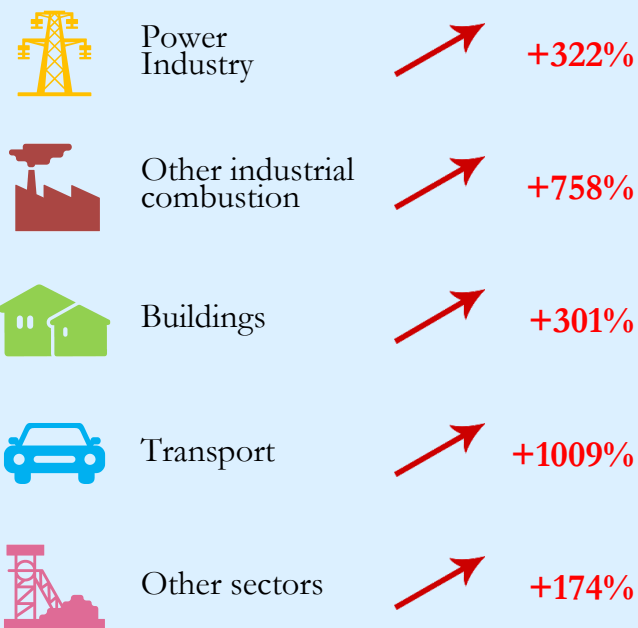
## Fossil CO<sub>2</sub> emissions by sector



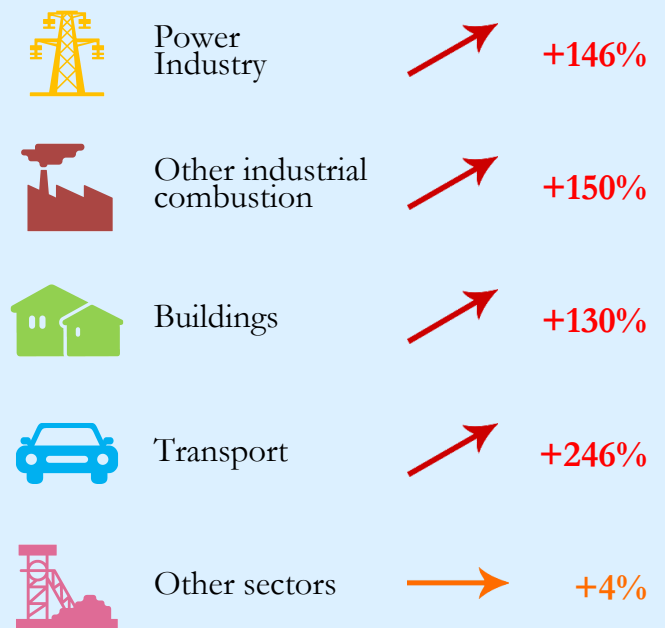
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	97.787	37.052	0.317	2639211
2005	43.435	50.221	0.457	864863
1990	16.291	34.194	0.484	476445

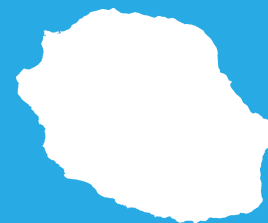


### 2017 vs 1990

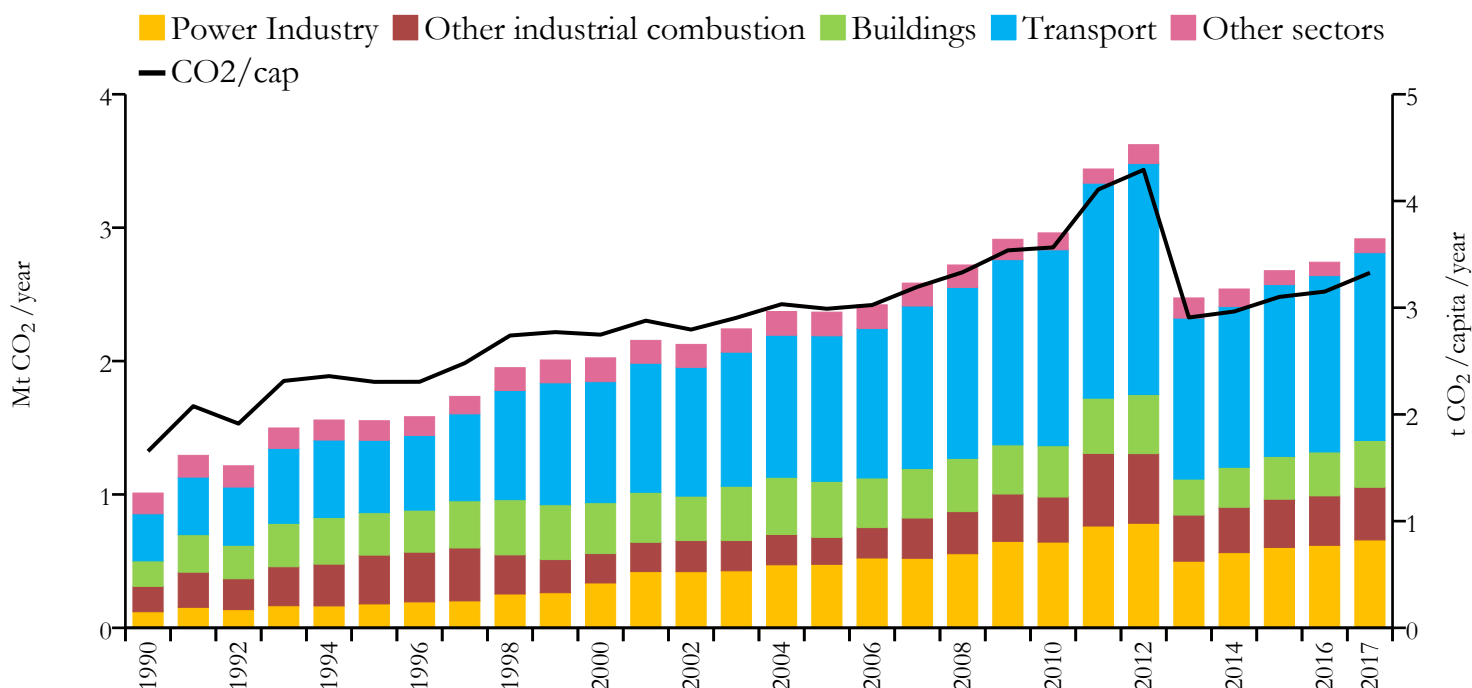


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



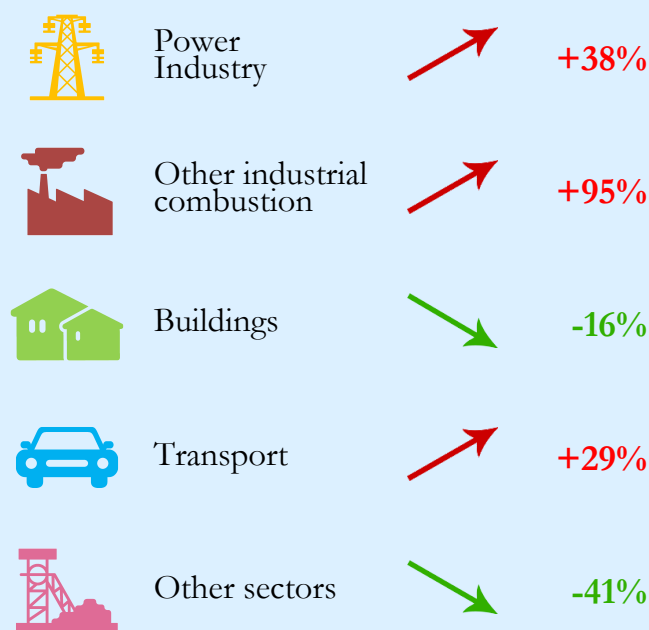
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.916	3.327	n/a	876562
2005	2.367	2.990	n/a	791598
1990	1.010	1.655	n/a	610582



### 2017 vs 1990



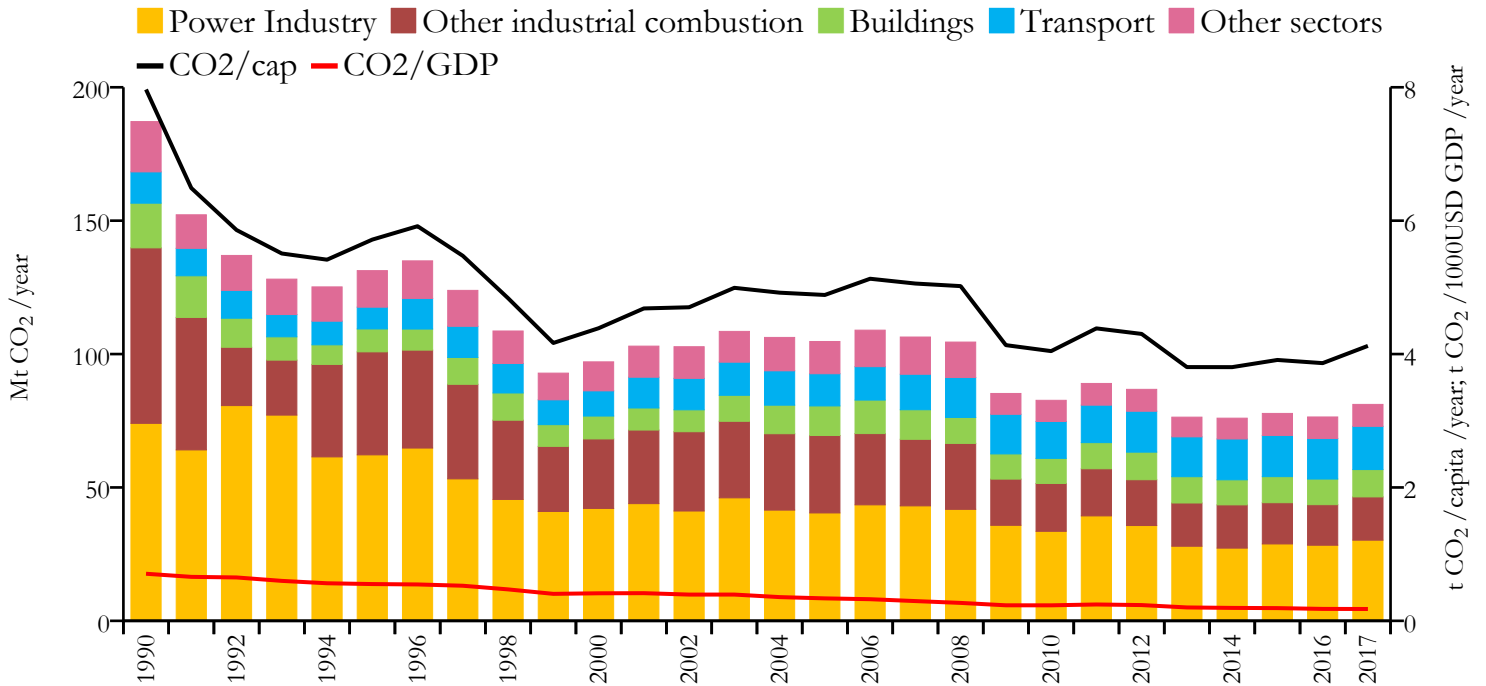
### 2017 vs 2005



# Romania



## Fossil CO<sub>2</sub> emissions by sector



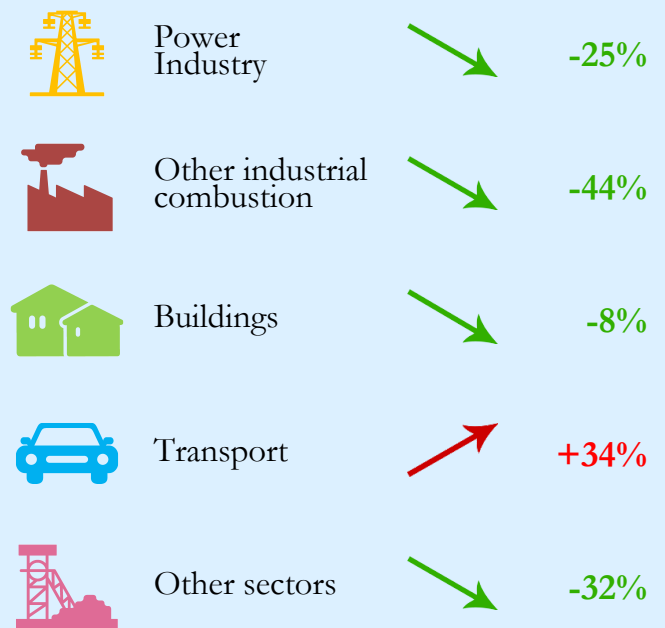
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	81.131	4.123	0.178	19679306
2005	104.713	4.886	0.337	21431018
1990	187.142	7.967	0.706	23489373



### 2017 vs 1990



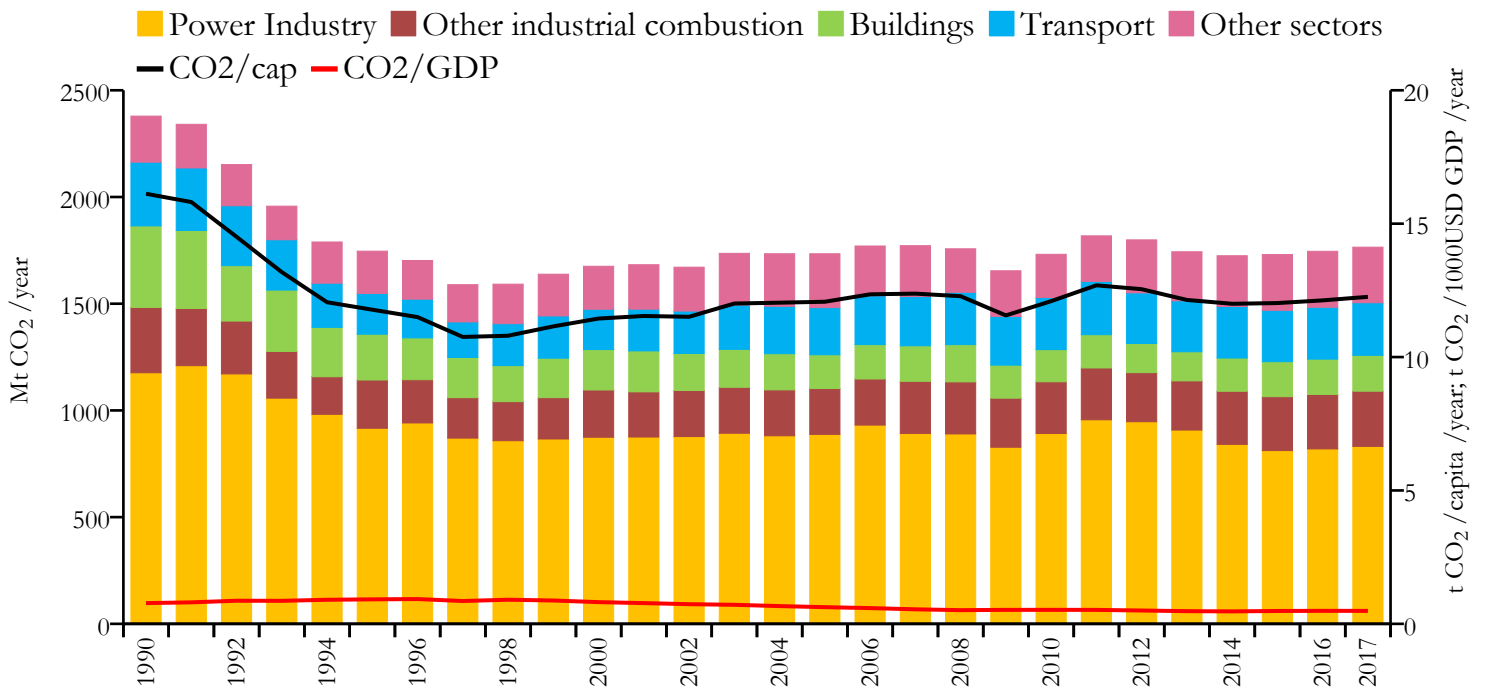
### 2017 vs 2005



# Russia



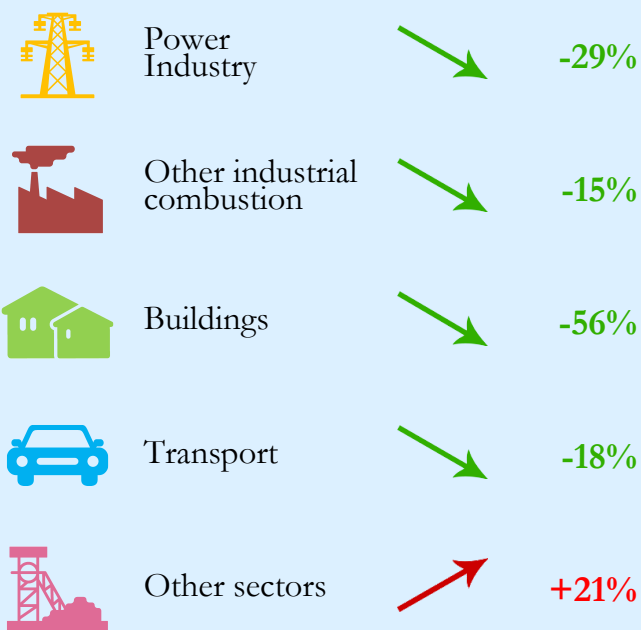
## Fossil CO<sub>2</sub> emissions by sector



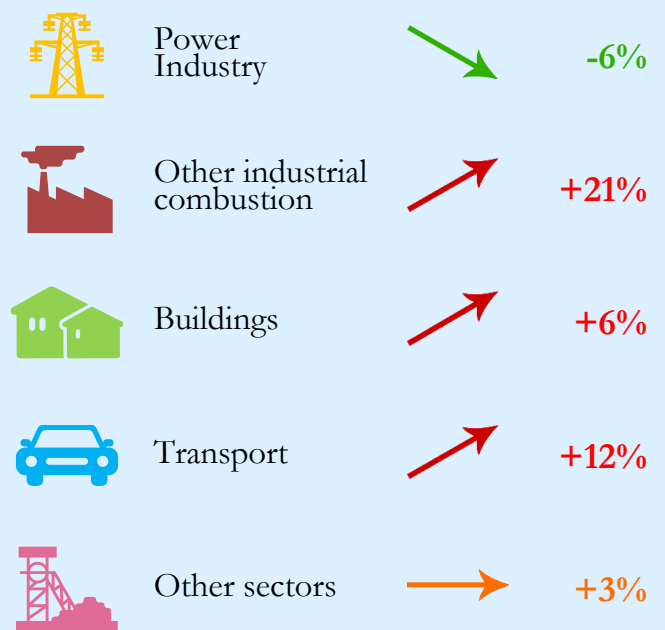
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1764.866	12.257	0.485	143989754
2005	1733.950	12.073	0.625	143618185
1990	2378.921	16.121	0.777	147564066

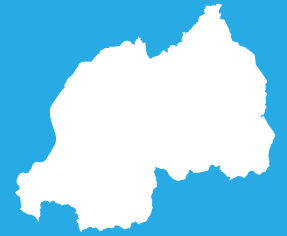


### 2017 vs 1990

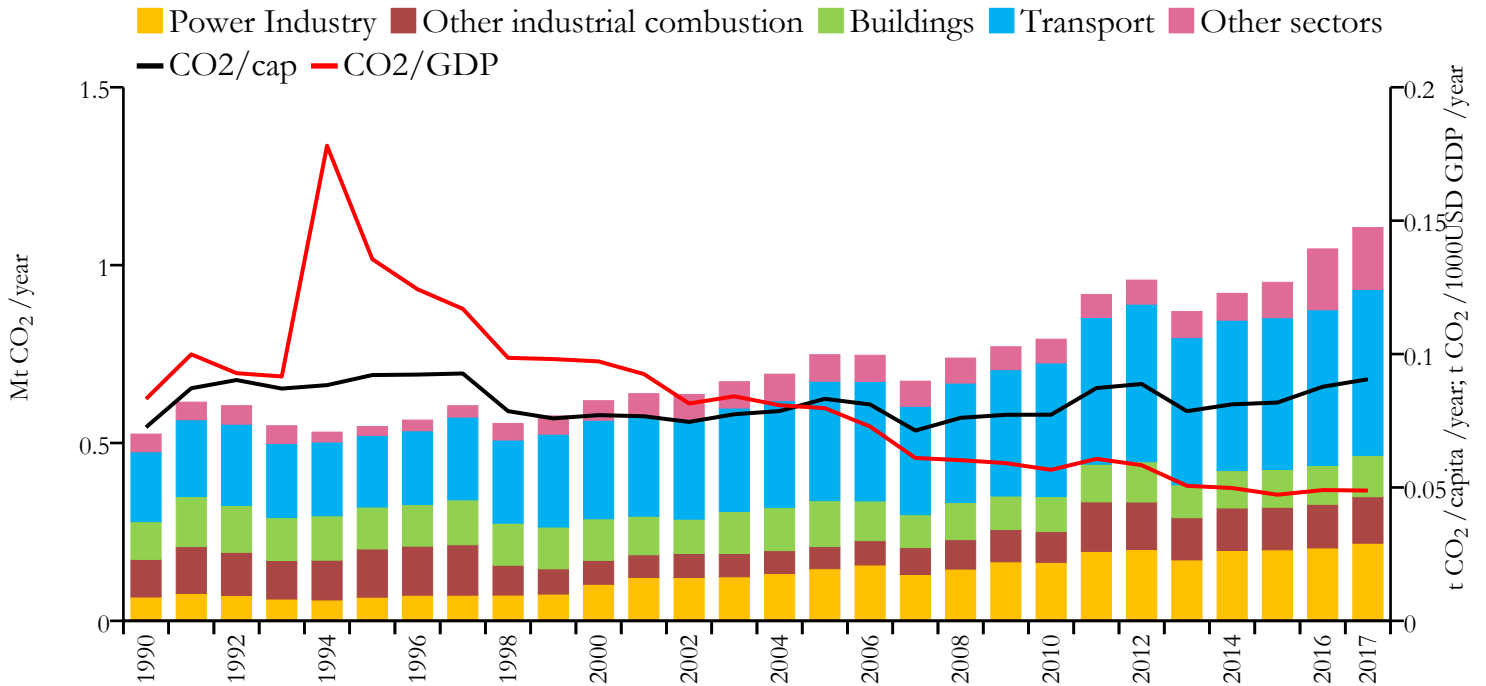


### 2017 vs 2005





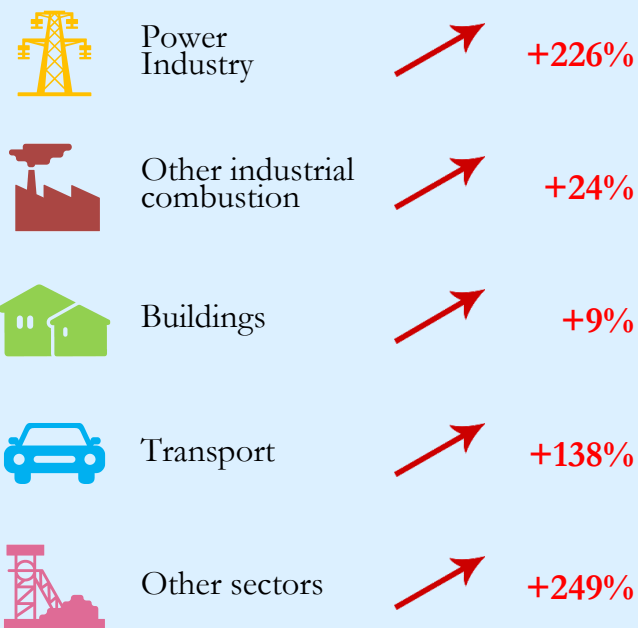
## Fossil CO<sub>2</sub> emissions by sector



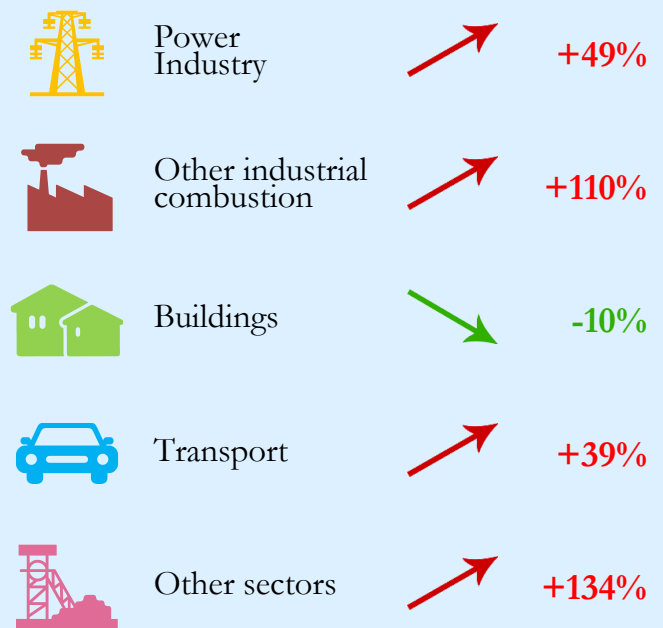
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.106	0.091	0.049	12208407
2005	0.748	0.083	0.080	8991735
1990	0.525	0.073	0.083	7235798



### 2017 vs 1990



### 2017 vs 2005

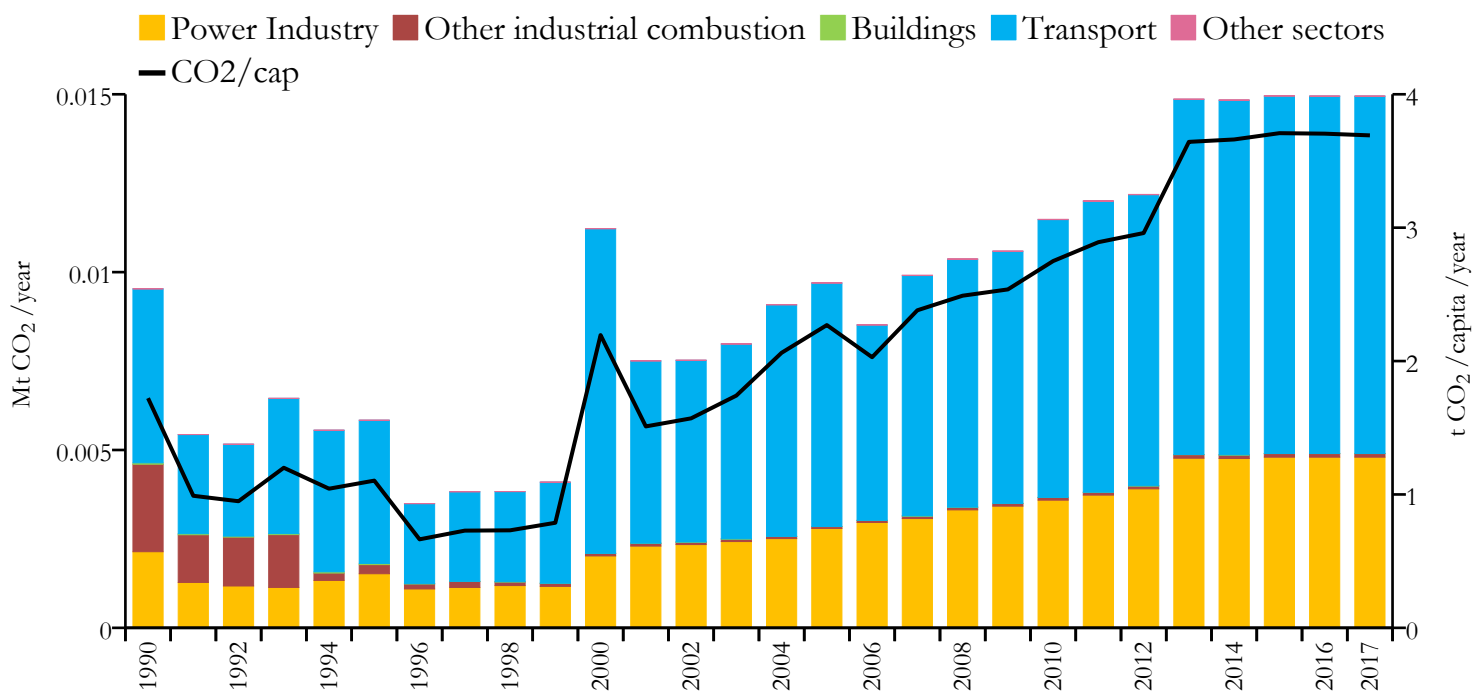




# Saint Helena, Ascension and Tristan da Cunha



## Fossil CO<sub>2</sub> emissions by sector



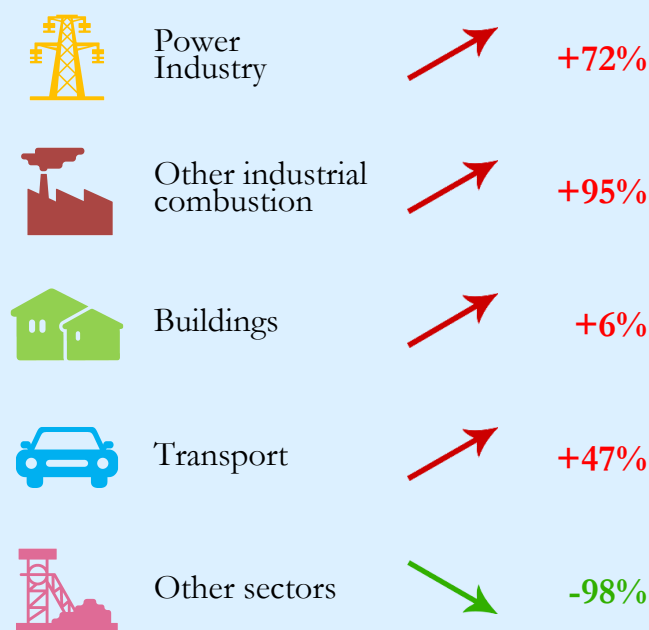
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.015	3.692	n/a	4049
2005	0.010	2.270	n/a	4275
1990	0.010	1.722	n/a	5535



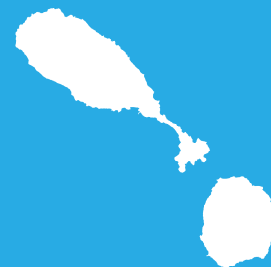
### 2017 vs 1990



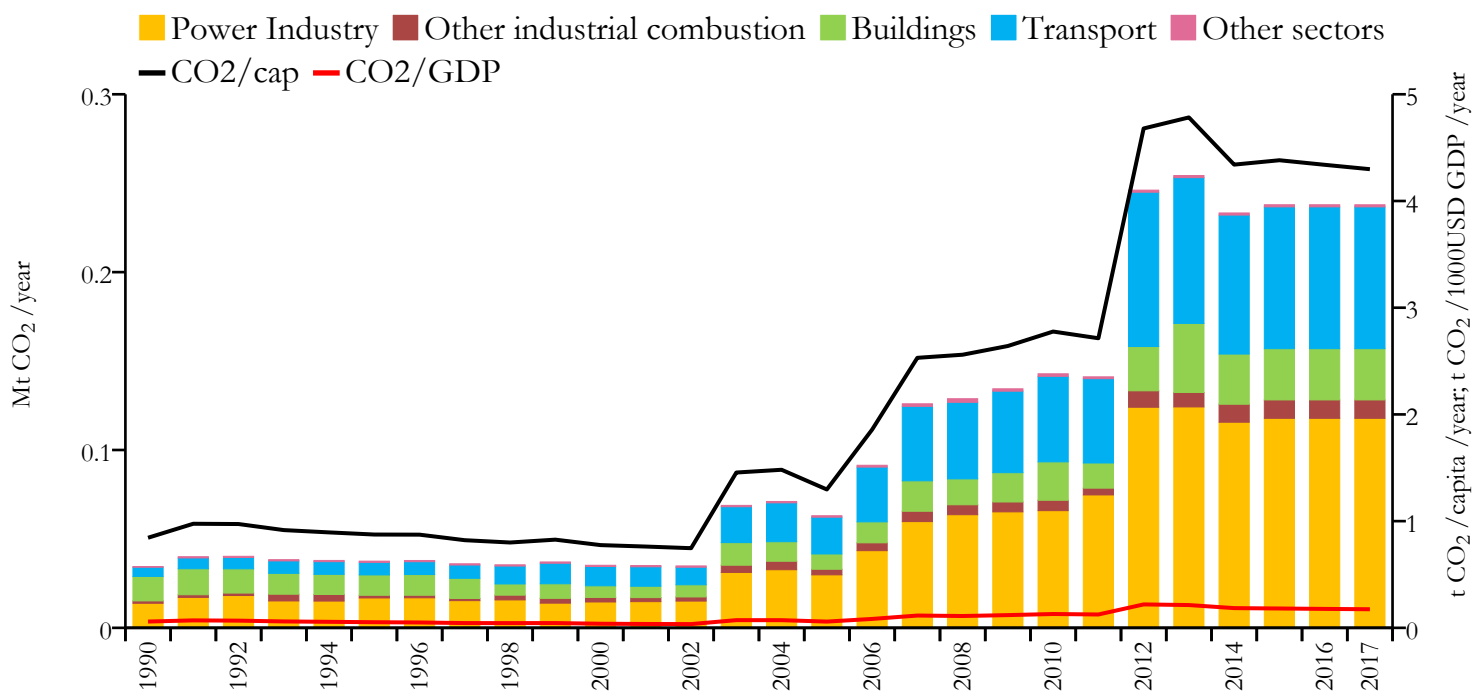
### 2017 vs 2005



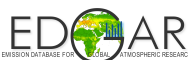
# Saint Kitts and Nevis



## Fossil CO<sub>2</sub> emissions by sector



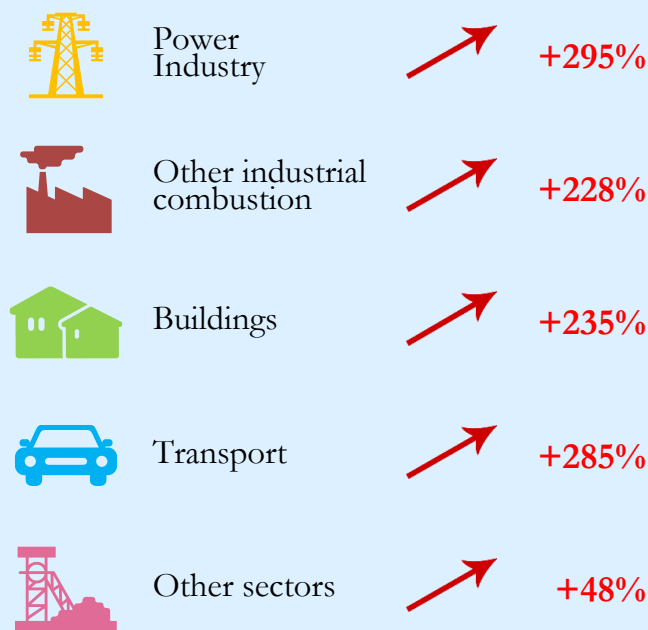
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.238	4.298	0.174	55345
2005	0.063	1.297	0.059	48611
1990	0.034	0.844	0.059	40834



### 2017 vs 1990

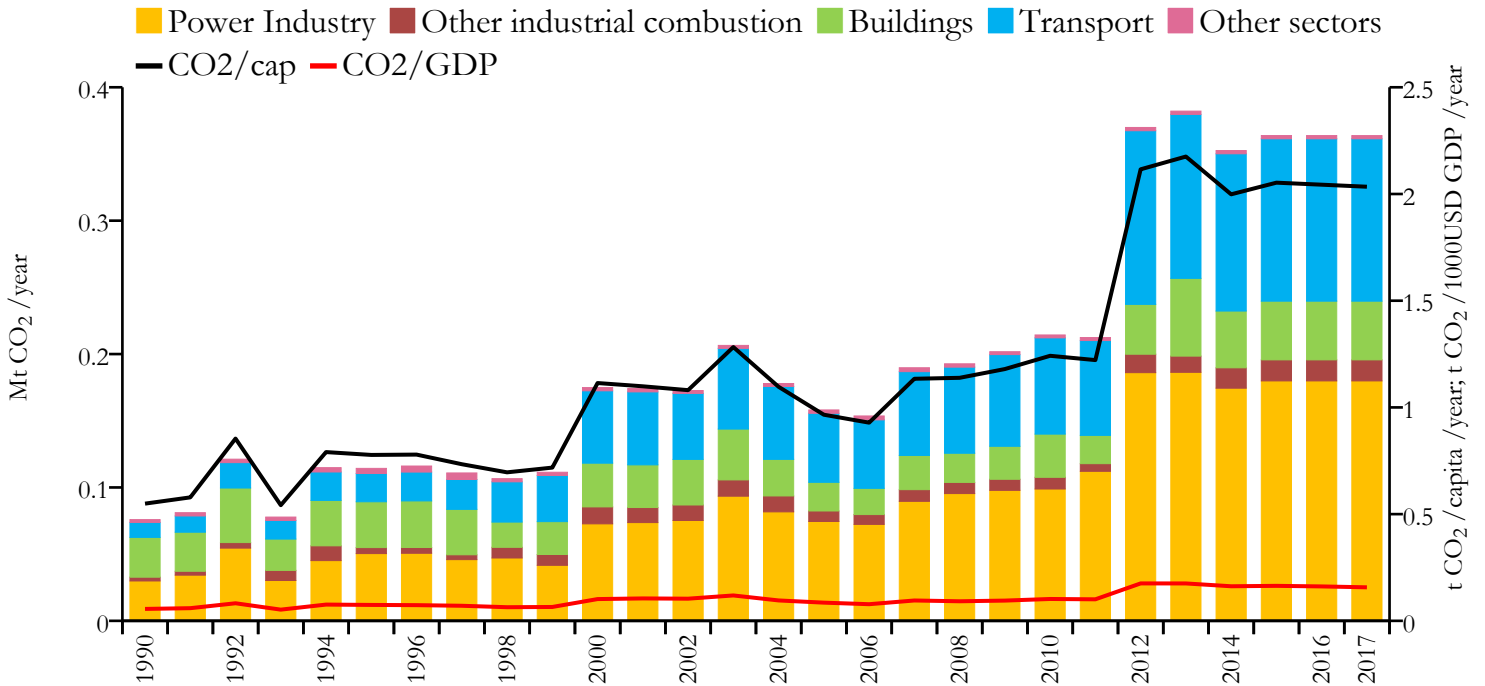


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



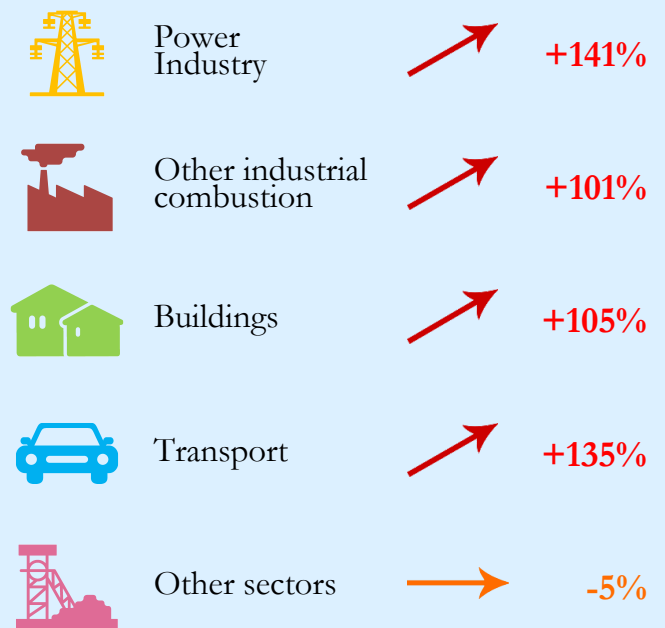
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.364	2.034	0.157	178844
2005	0.158	0.966	0.085	163714
1990	0.076	0.549	0.056	138185



### 2017 vs 1990



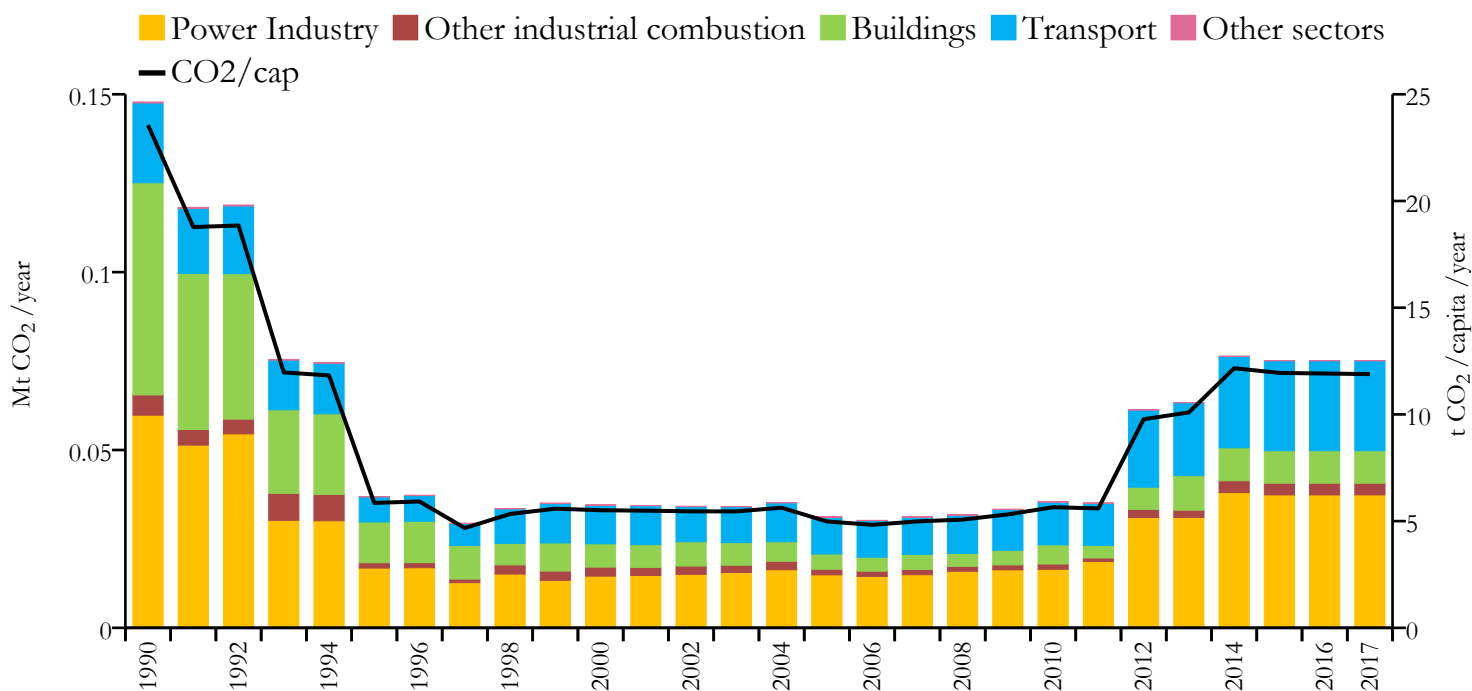
### 2017 vs 2005



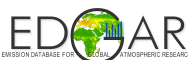
# Saint Pierre and Miquelon



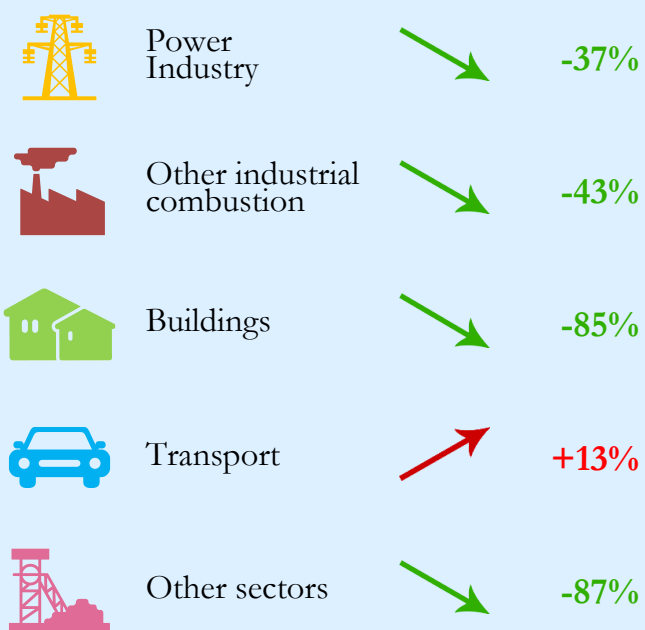
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.075	11.888	n/a	6320
2005	0.031	4.985	n/a	6261
1990	0.148	23.556	n/a	6276



### 2017 vs 1990



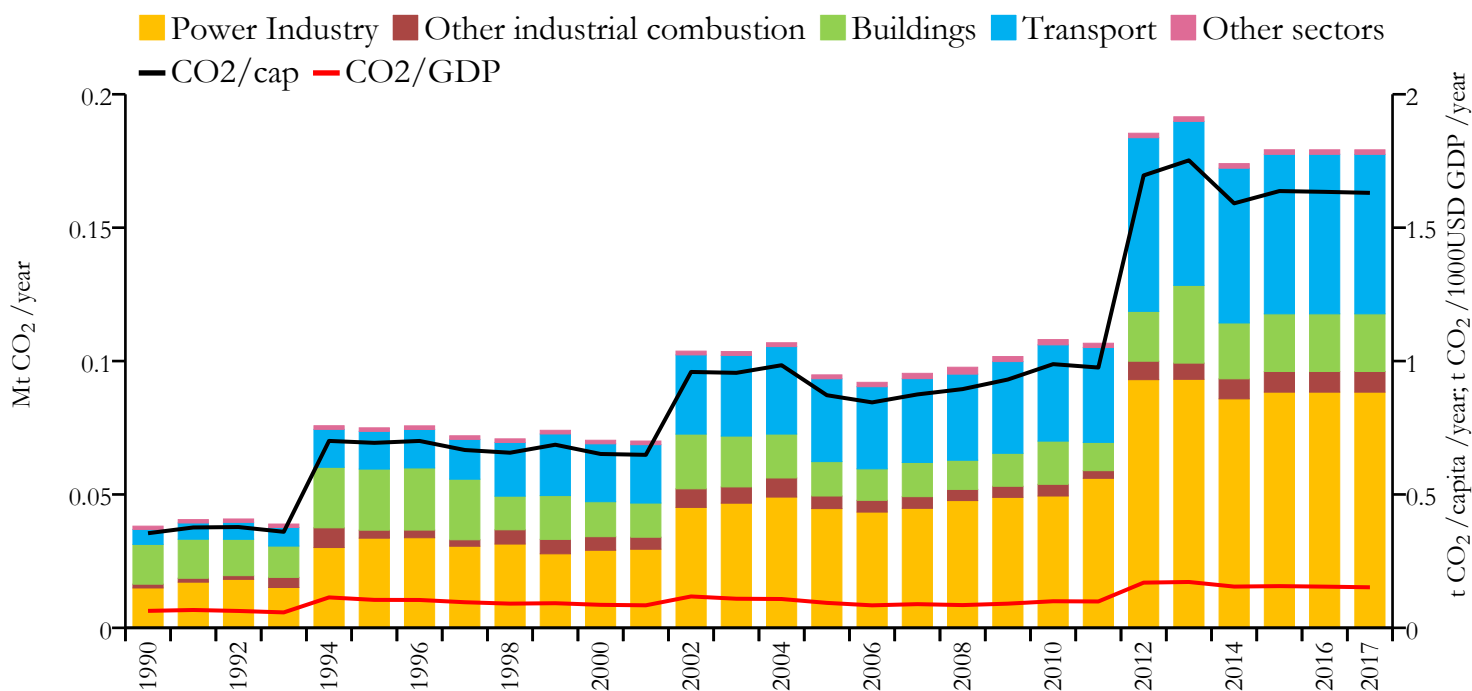
### 2017 vs 2005



# Saint Vincent and the Grenadines



## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.179	1.630	0.152	109897
2005	0.095	0.872	0.094	108744
1990	0.038	0.355	0.064	107505



### 2017 vs 1990



Power Industry



**+491%**



Other industrial combustion



**+443%**



Buildings



**+45%**



Transport



**+966%**



Other sectors



**+37%**

### 2017 vs 2005



Power Industry



**+98%**



Other industrial combustion



**+64%**



Buildings



**+68%**



Transport



**+93%**



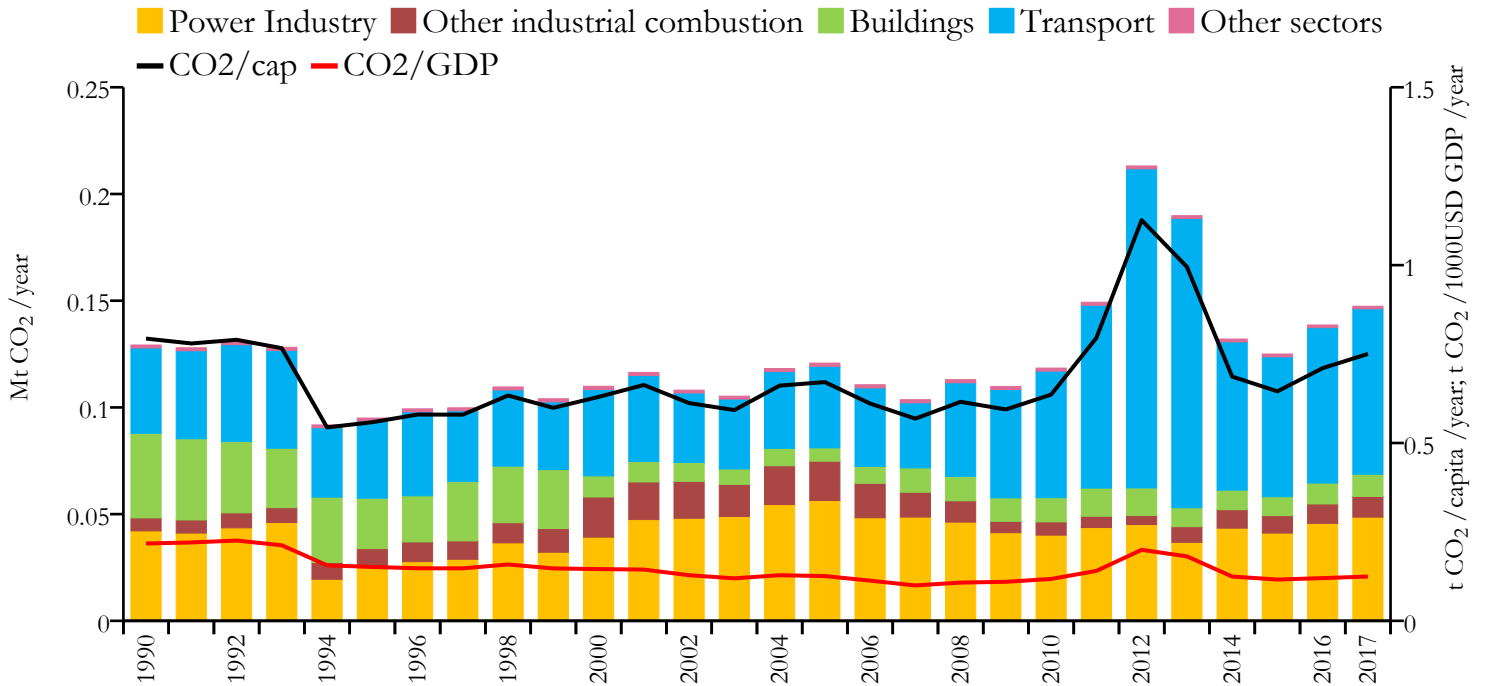
Other sectors



**+15%**



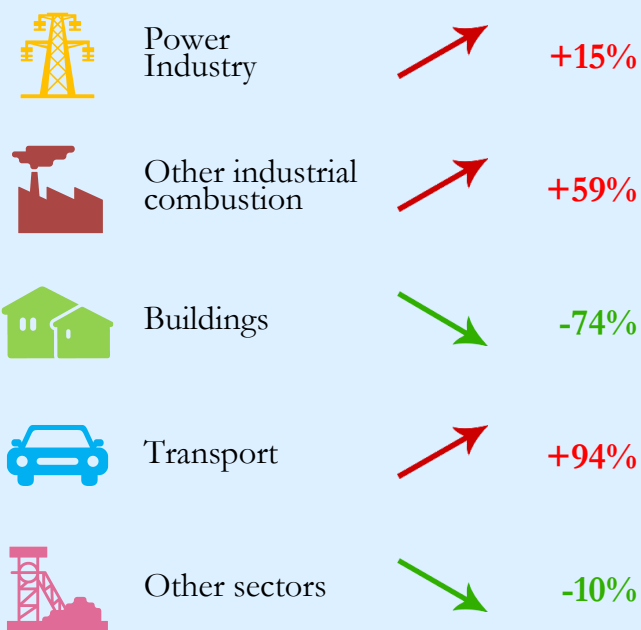
## Fossil CO<sub>2</sub> emissions by sector



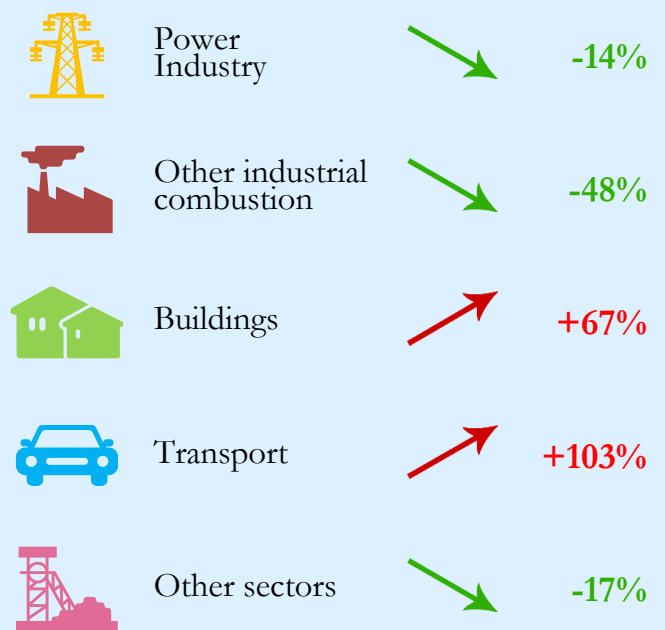
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.147	0.750	0.125	196440
2005	0.121	0.671	0.126	179929
1990	0.129	0.794	0.217	162866



### 2017 vs 1990



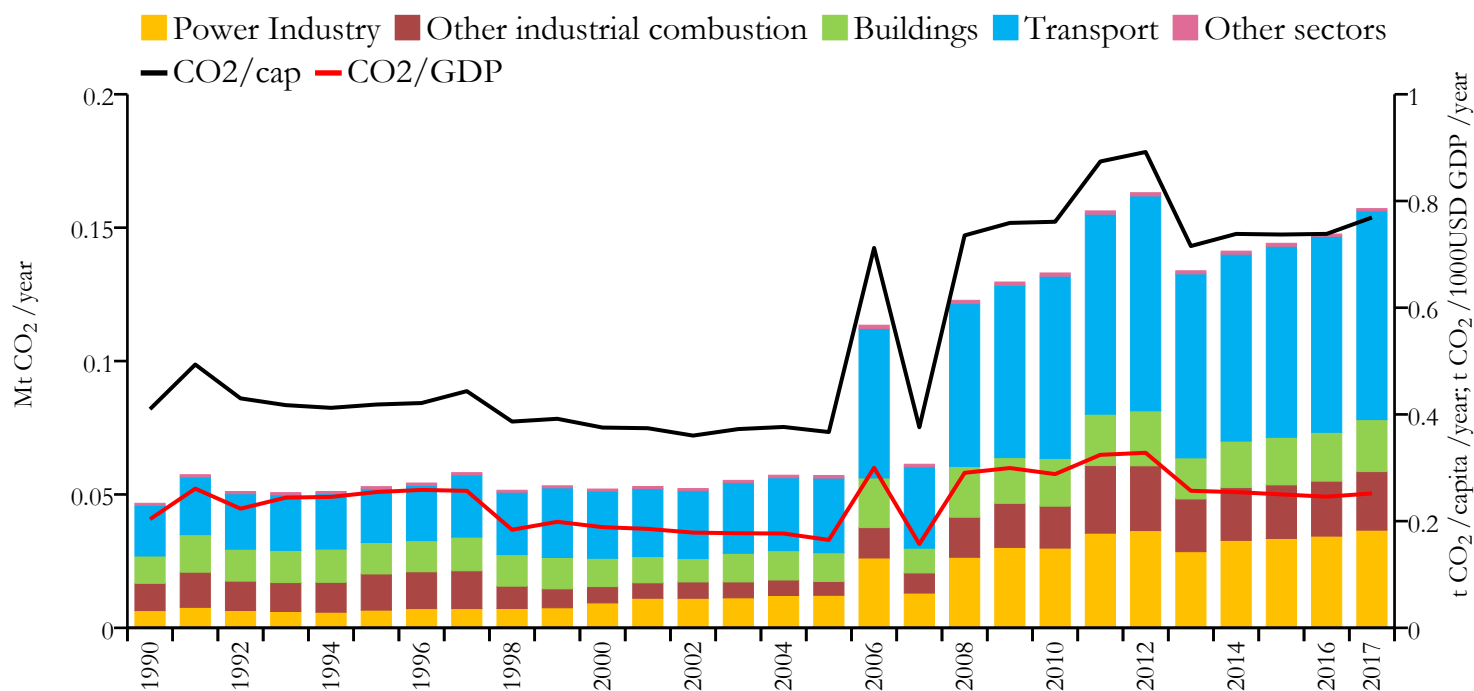
### 2017 vs 2005



# São Tomé and Príncipe



## Fossil CO<sub>2</sub> emissions by sector



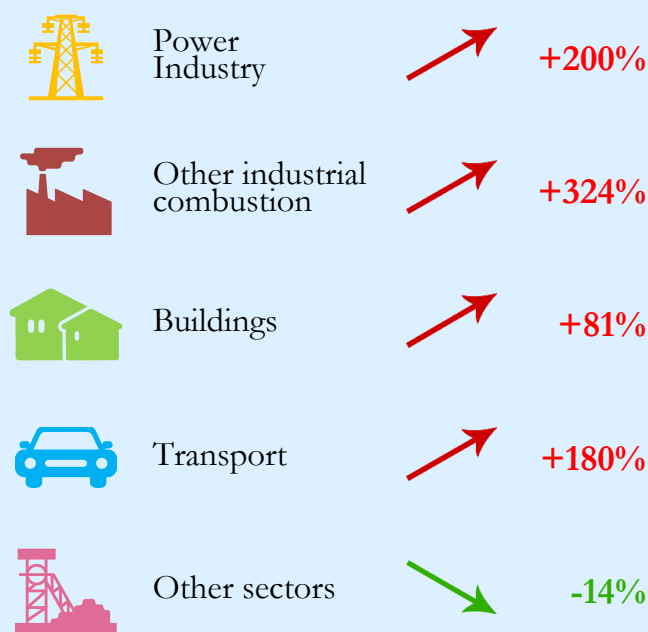
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.157	0.769	0.252	204327
2005	0.057	0.367	0.165	155630
1990	0.047	0.410	0.204	113893



### 2017 vs 1990

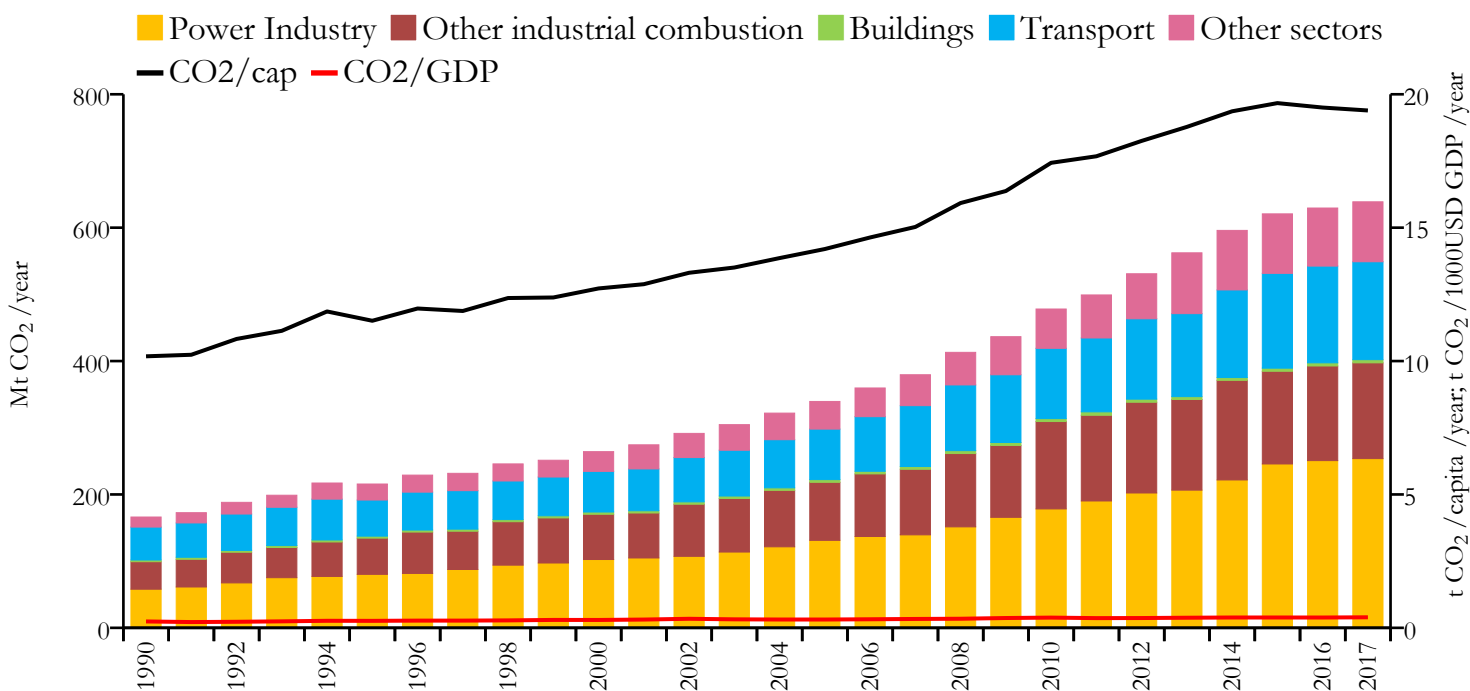


### 2017 vs 2005





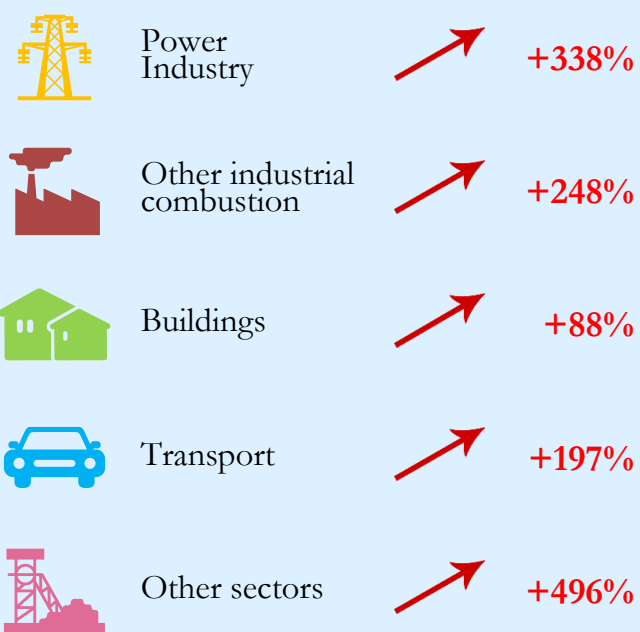
## Fossil CO<sub>2</sub> emissions by sector



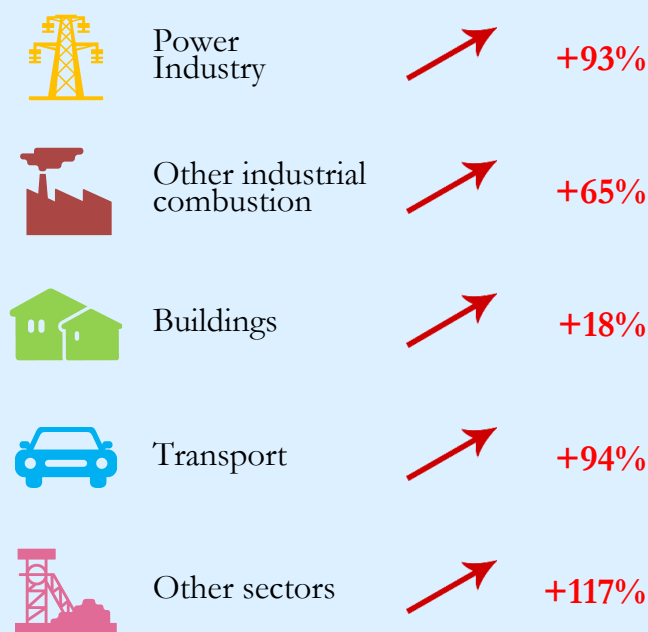
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	638.762	19.393	0.395	32938213
2005	339.441	14.199	0.312	23905654
1990	166.172	10.178	0.240	16326815



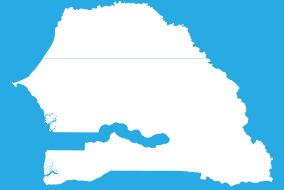
### 2017 vs 1990



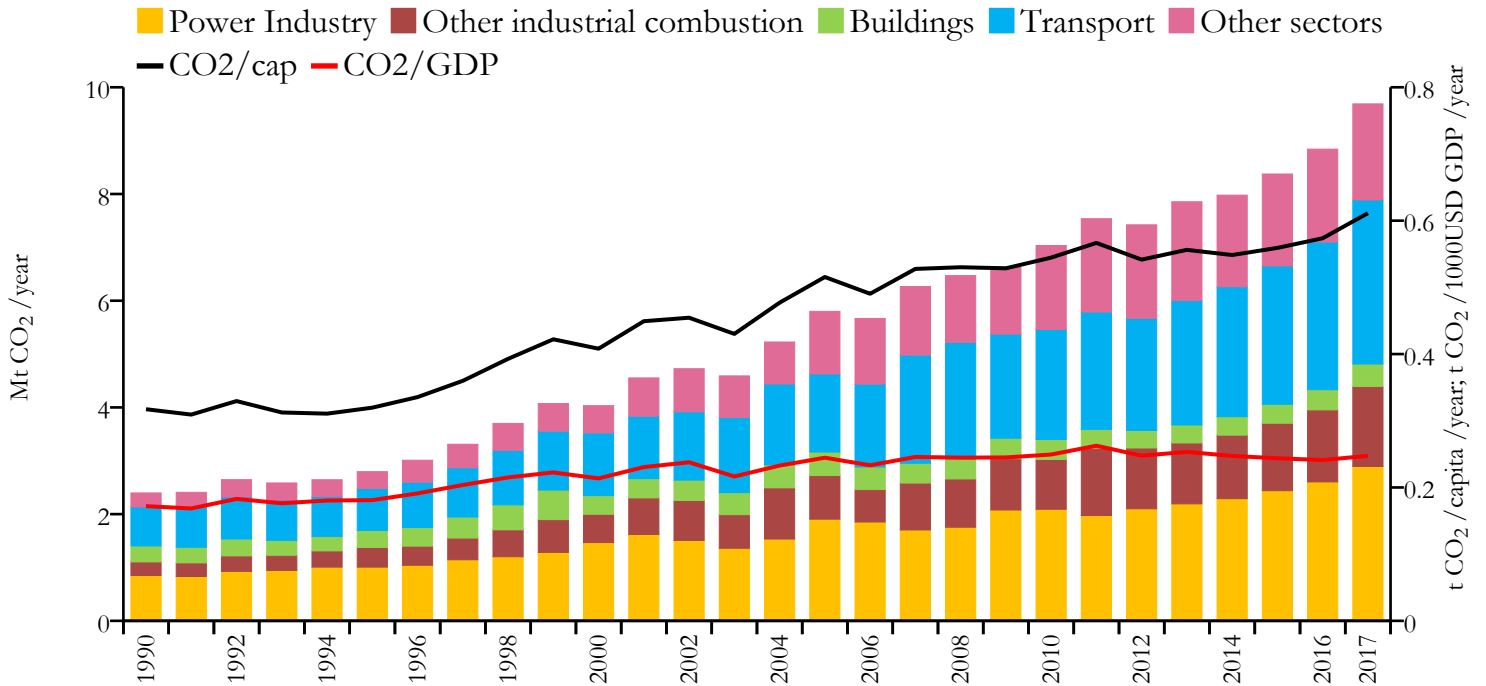
### 2017 vs 2005







## Fossil CO<sub>2</sub> emissions by sector



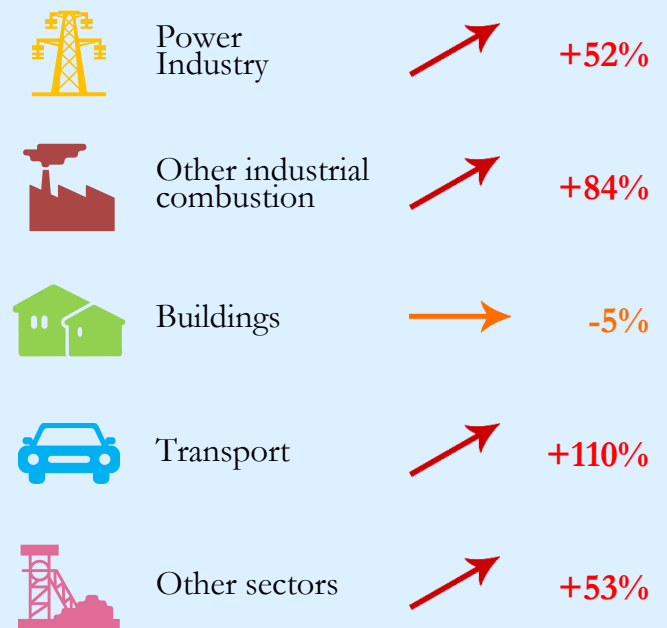
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	9.689	0.611	0.247	15850567
2005	5.800	0.516	0.245	11251266
1990	2.397	0.317	0.172	7555617



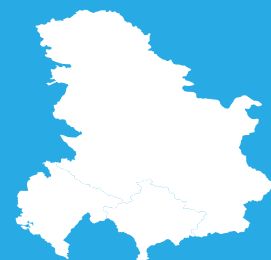
### 2017 vs 1990



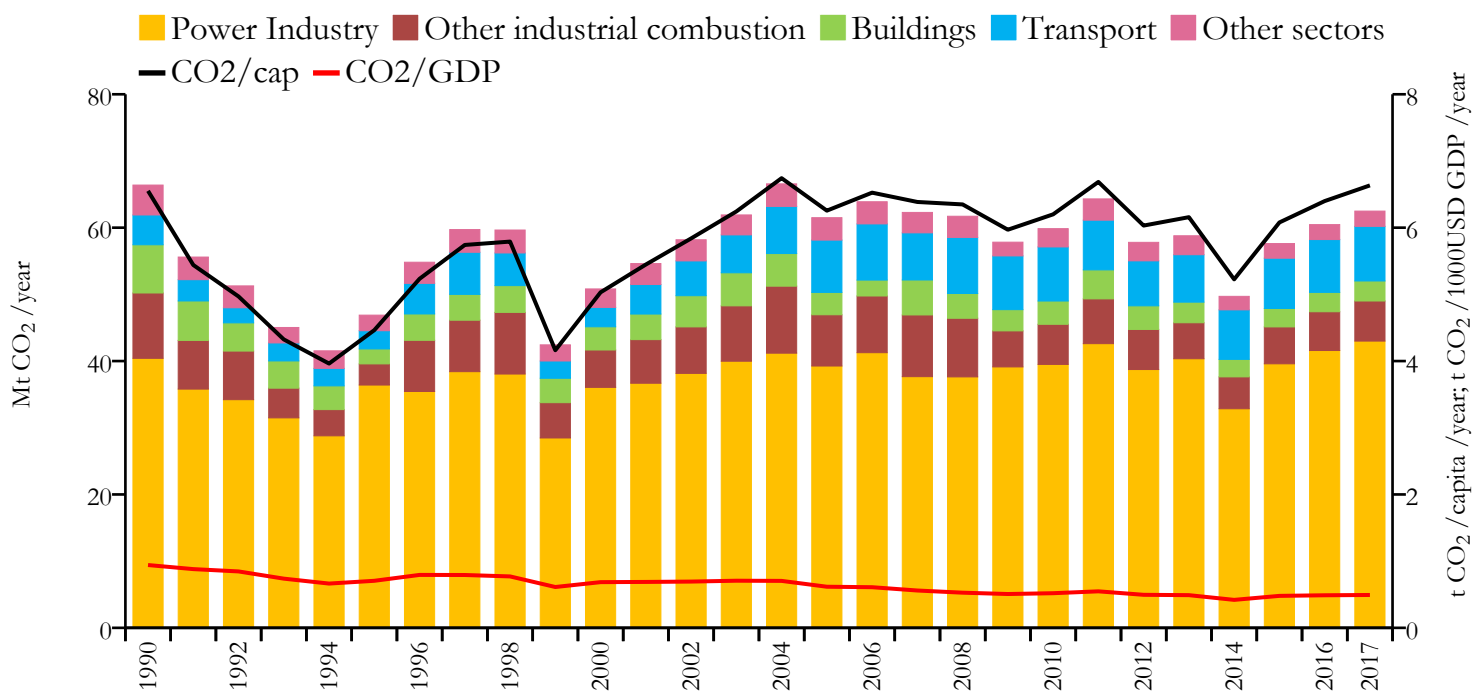
### 2017 vs 2005



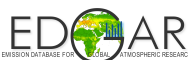
# Serbia and Montenegro



## Fossil CO<sub>2</sub> emissions by sector



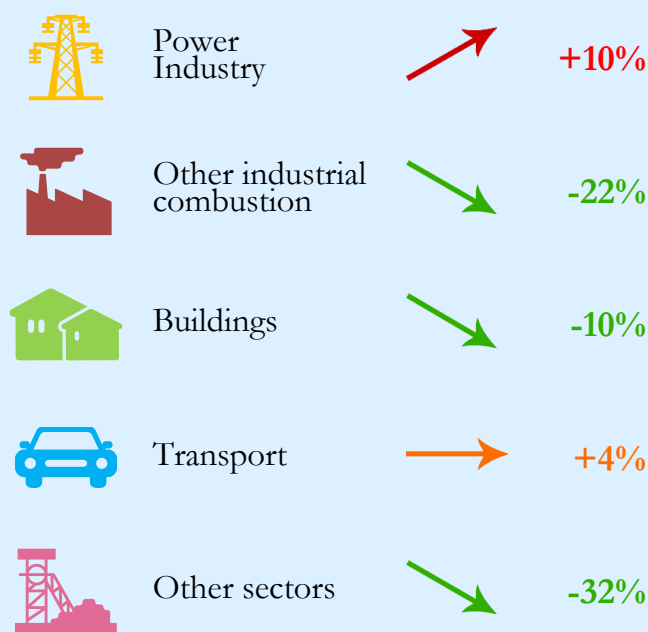
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	62.487	6.634	0.493	9419534
2005	61.497	6.255	0.616	9831374
1990	66.388	6.552	0.942	10132676



### 2017 vs 1990



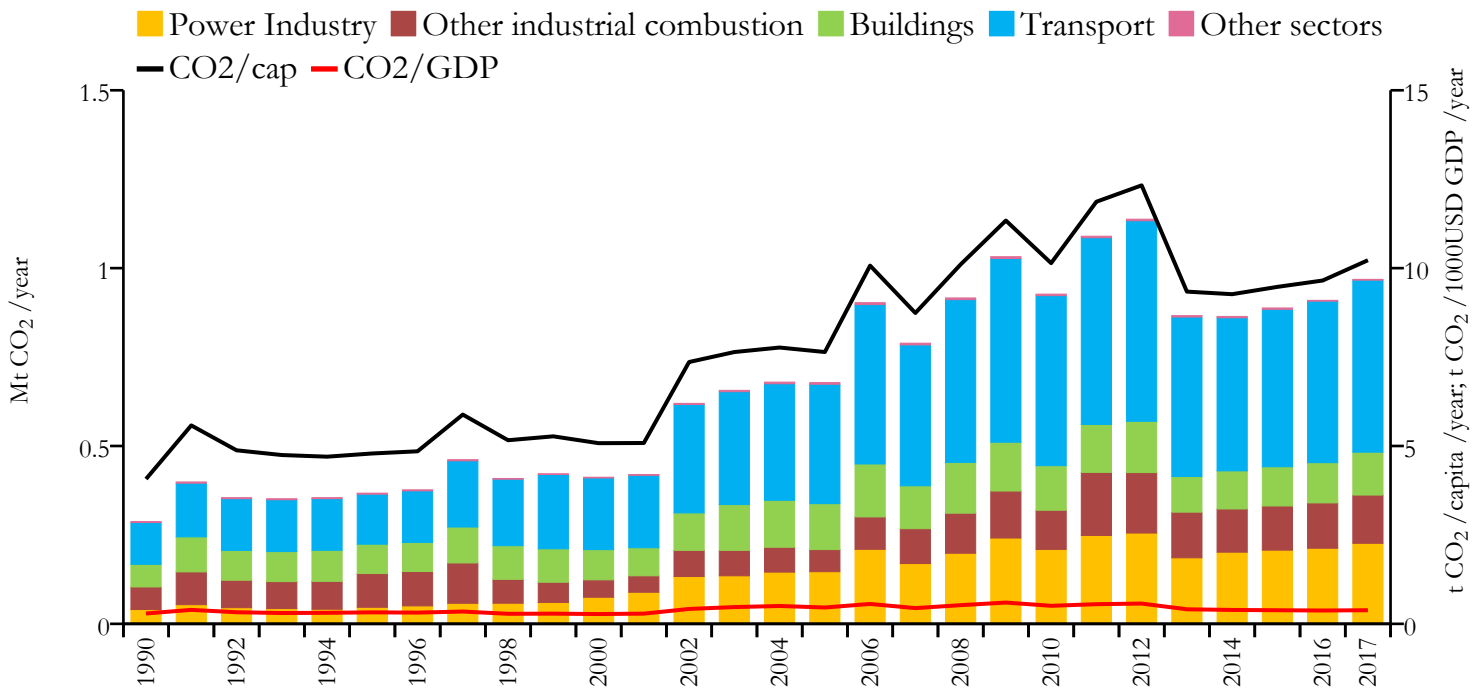
### 2017 vs 2005



# Seychelles



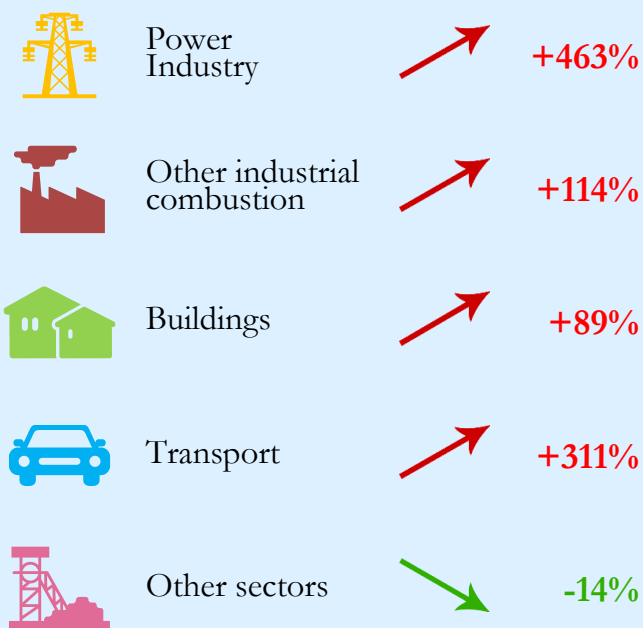
## Fossil CO<sub>2</sub> emissions by sector



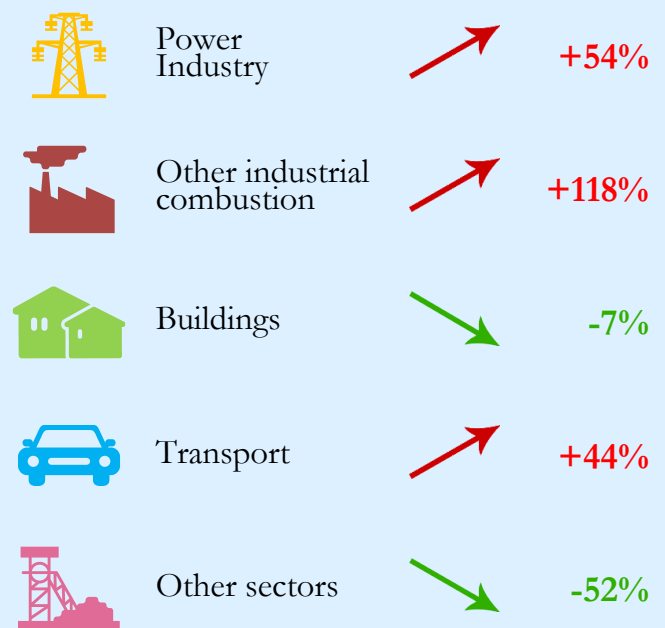
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.968	10.222	0.383	94737
2005	0.678	7.642	0.459	88744
1990	0.288	4.072	0.291	70624



### 2017 vs 1990

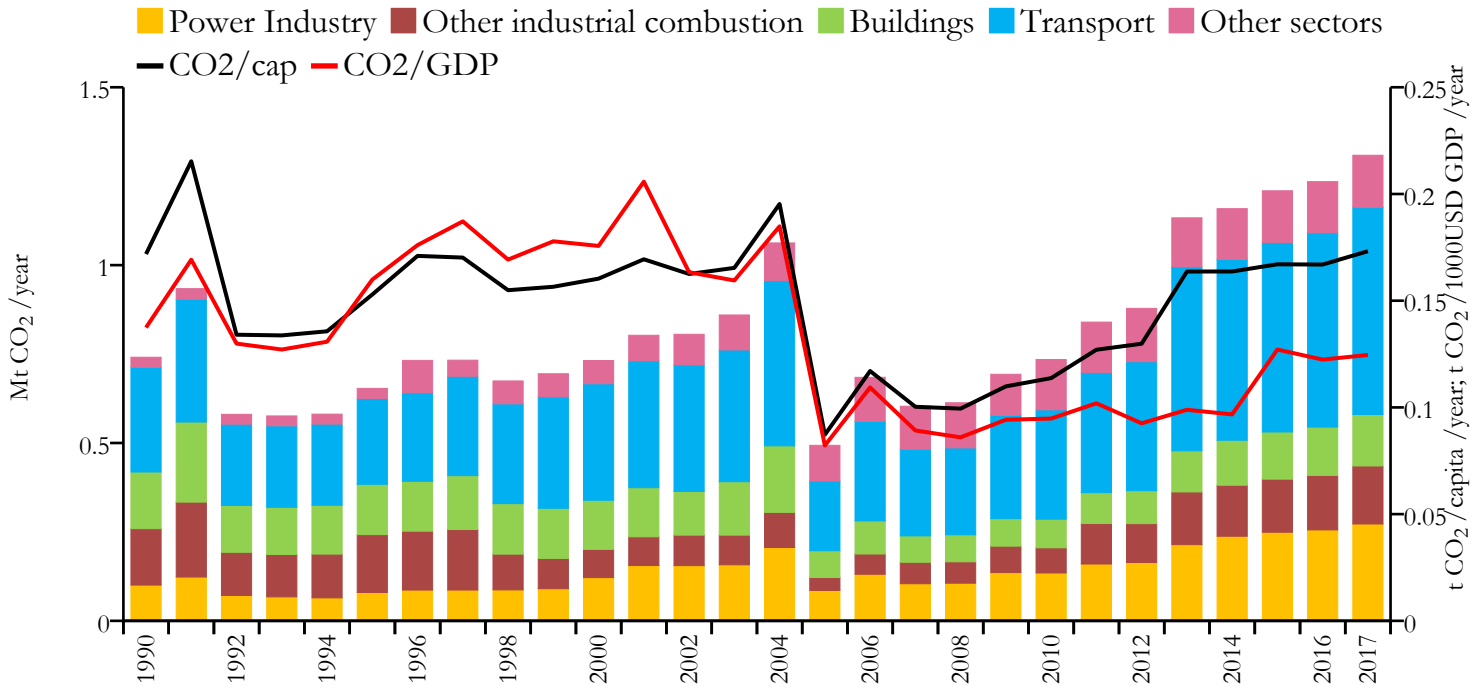


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



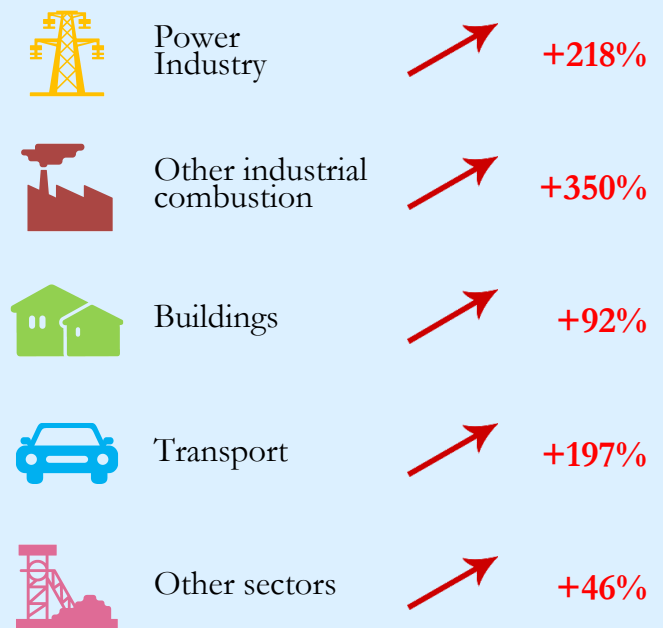
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.309	0.173	0.125	7557212
2005	0.493	0.087	0.082	5658379
1990	0.741	0.172	0.137	4312246



### 2017 vs 1990

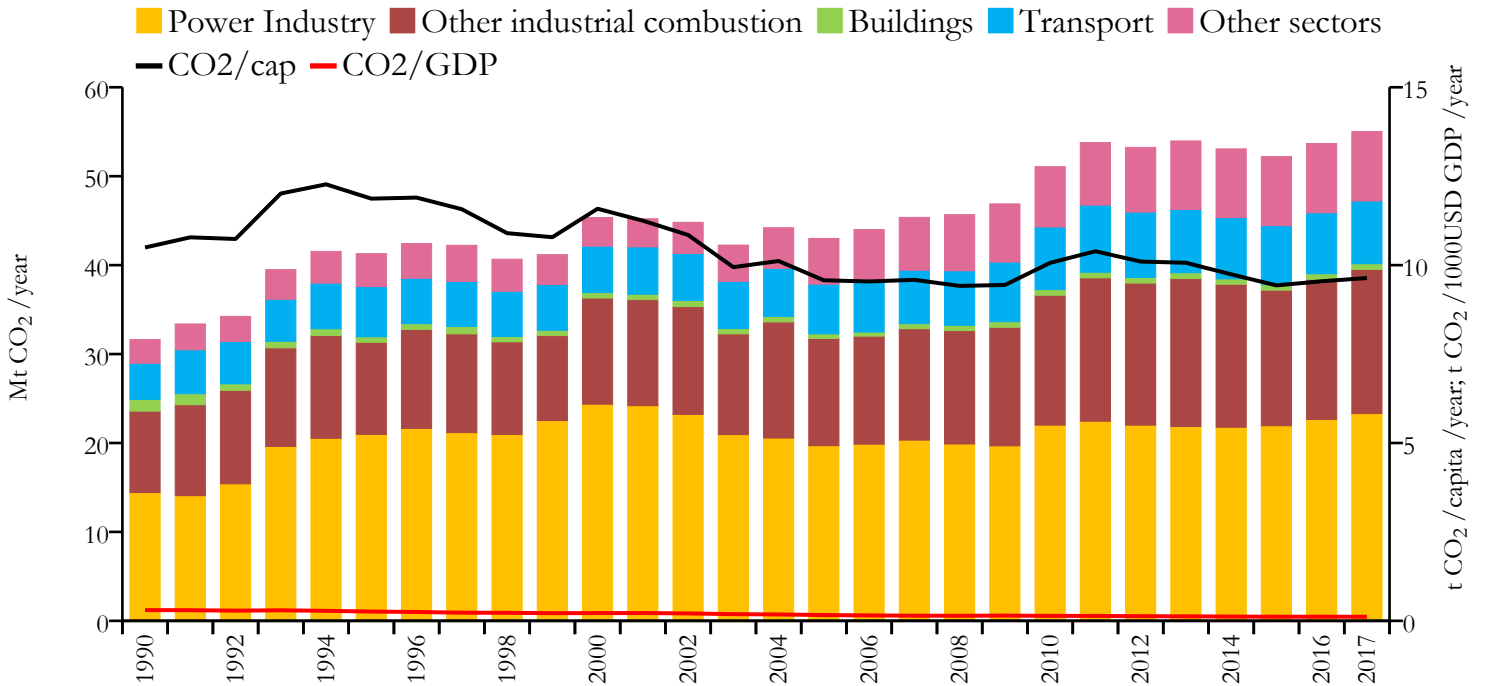


### 2017 vs 2005





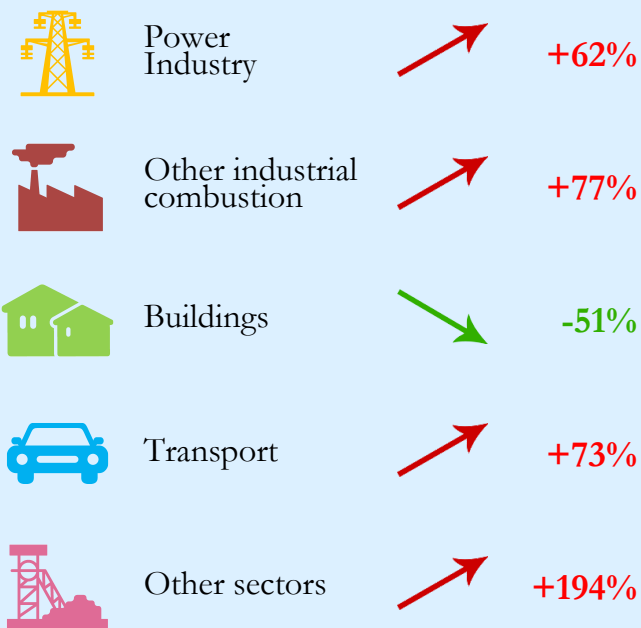
## Fossil CO<sub>2</sub> emissions by sector



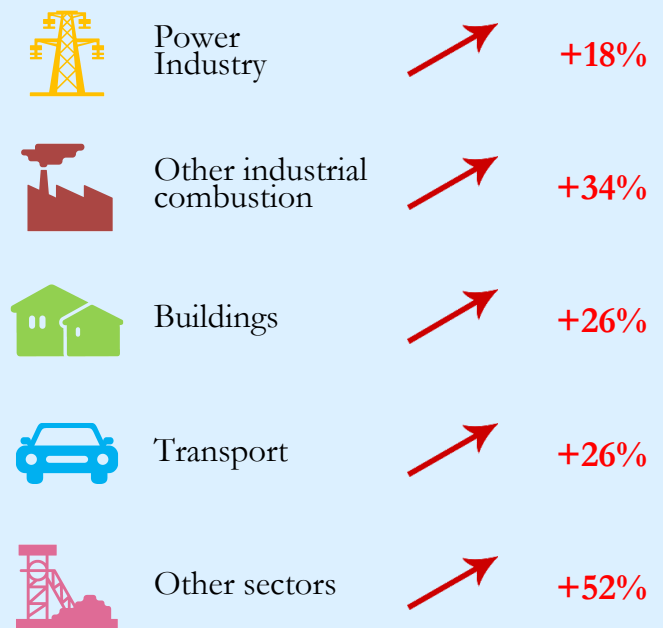
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	55.018	9.637	0.115	5708844
2005	42.998	9.574	0.163	4491042
1990	31.623	10.496	0.302	3012953



### 2017 vs 1990



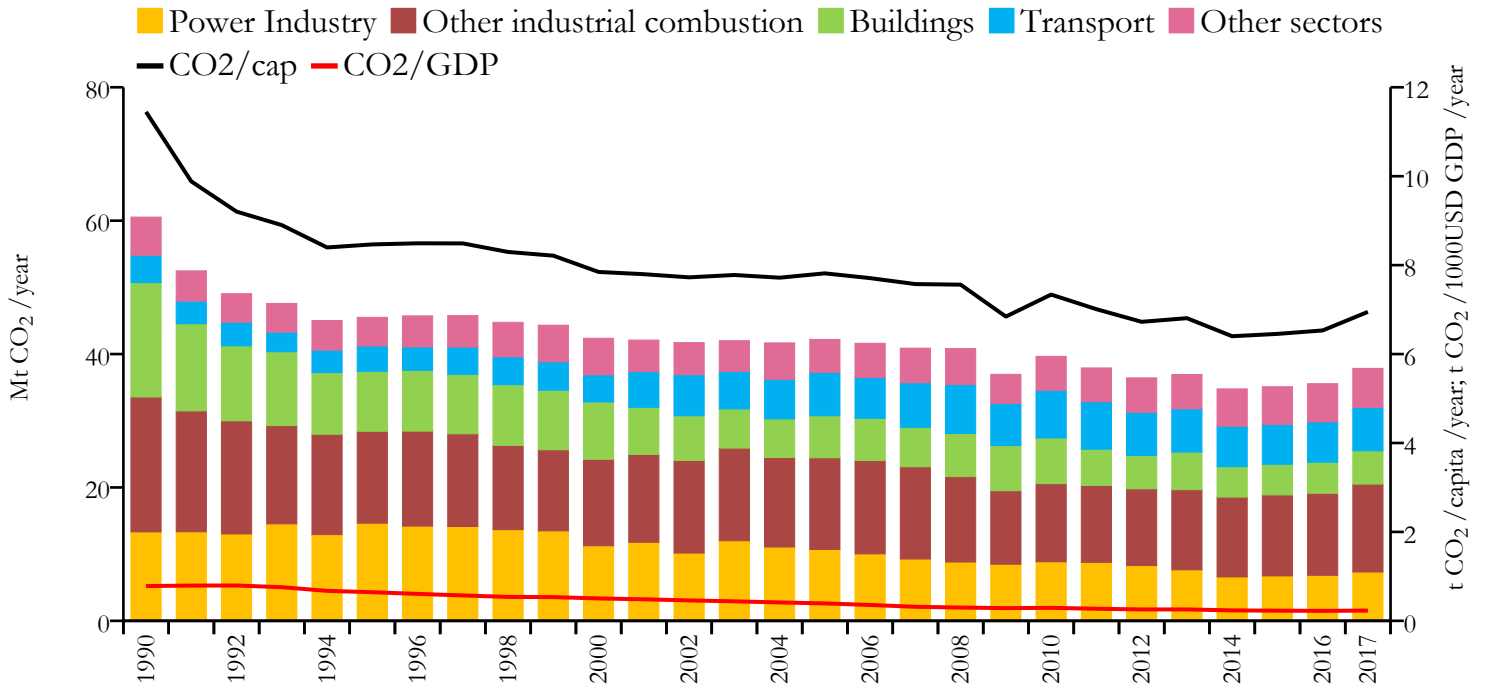
### 2017 vs 2005



# Slovakia



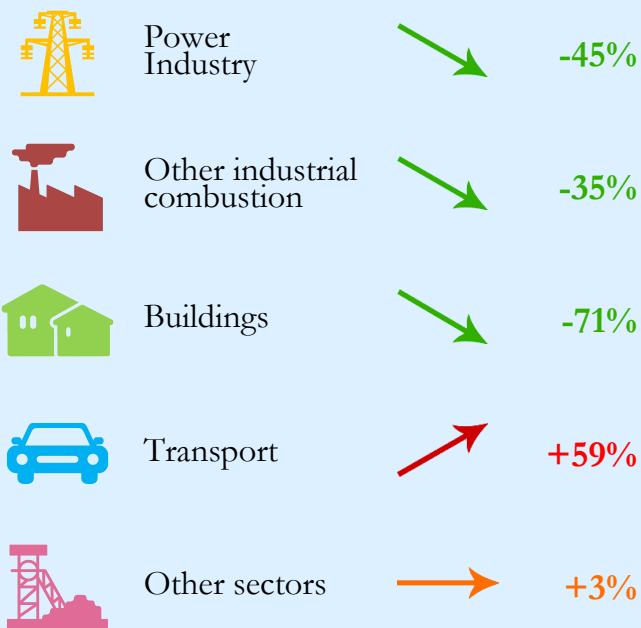
## Fossil CO<sub>2</sub> emissions by sector



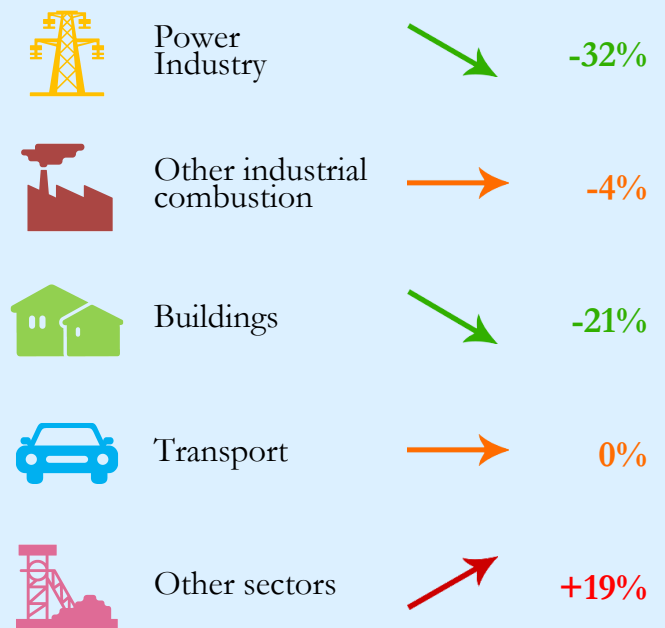
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	37.855	6.949	0.231	5447662
2005	42.194	7.815	0.392	5398963
1990	60.537	11.447	0.782	5288454



### 2017 vs 1990

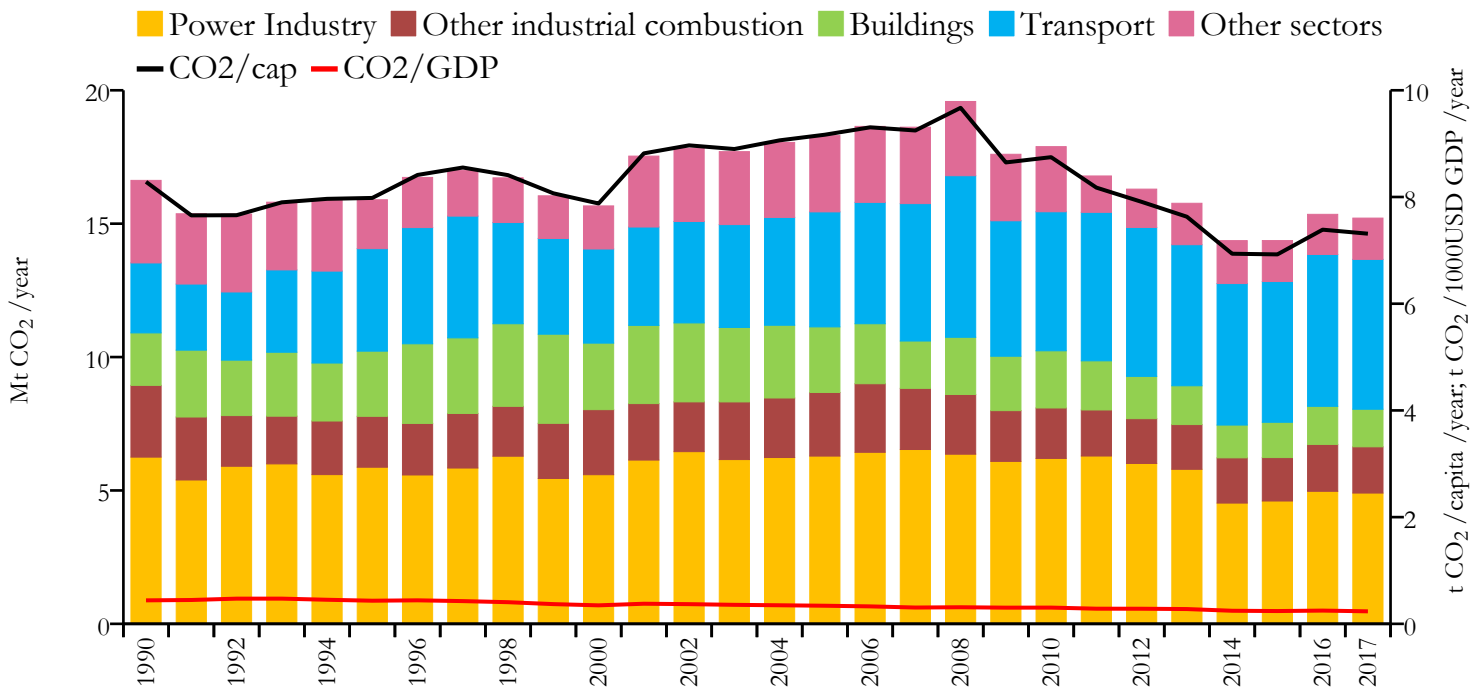


### 2017 vs 2005





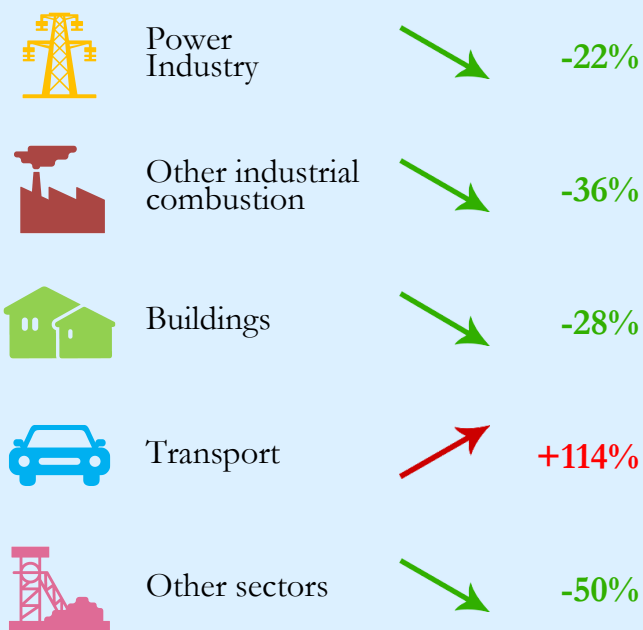
## Fossil CO<sub>2</sub> emissions by sector



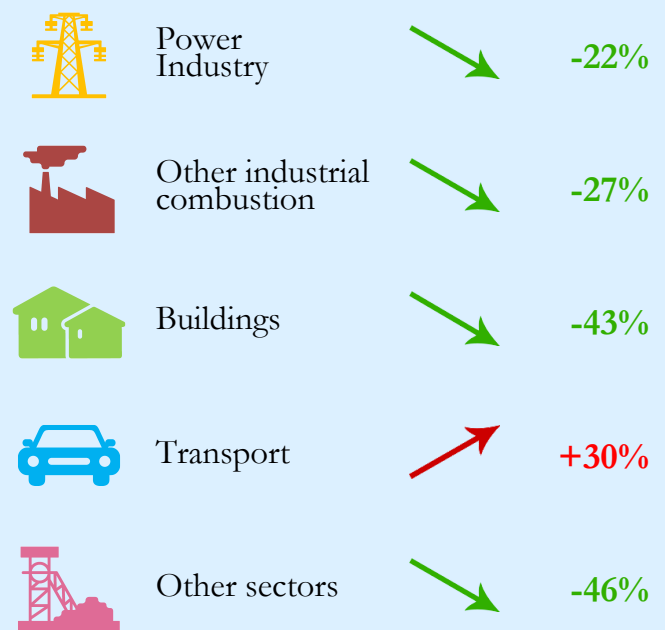
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	15.209	7.312	0.234	2079976
2005	18.300	9.167	0.339	1996281
1990	16.623	8.285	0.440	2006479



### 2017 vs 1990



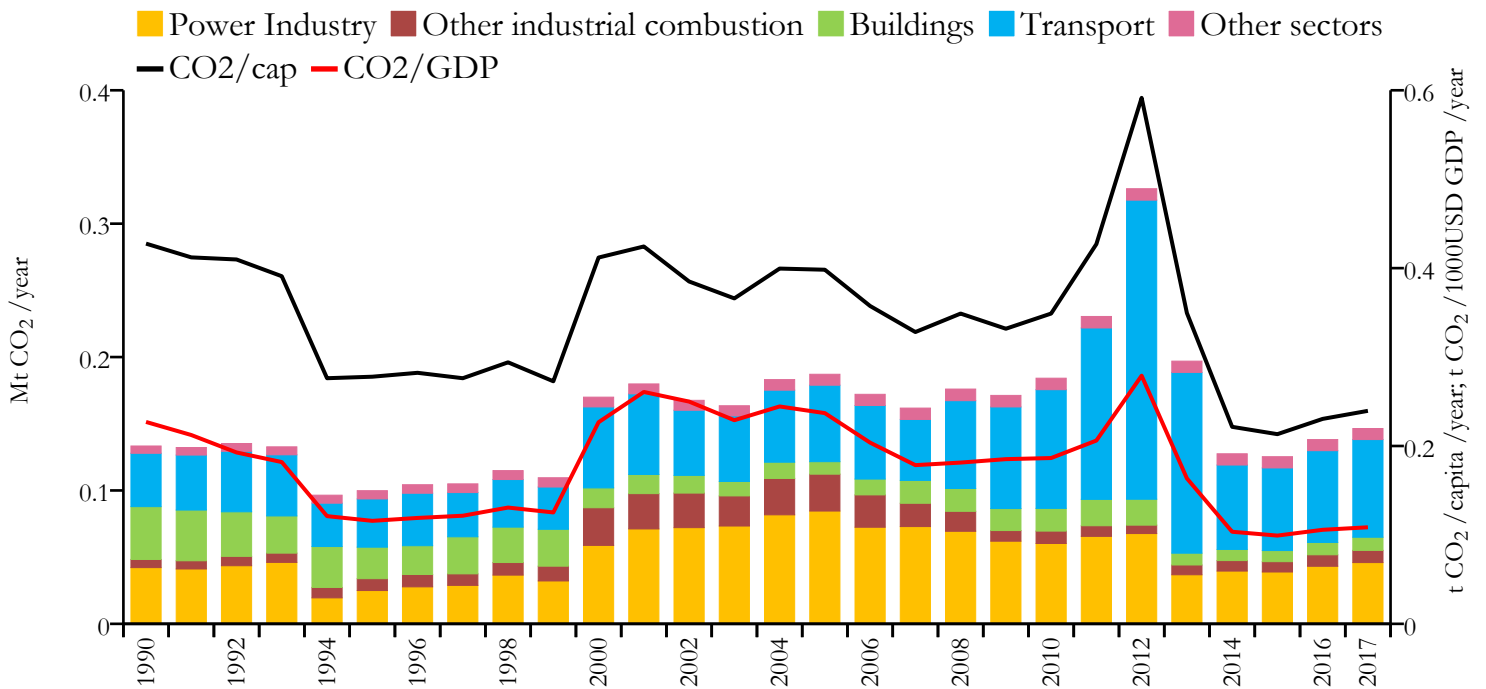
### 2017 vs 2005



# Solomon Islands



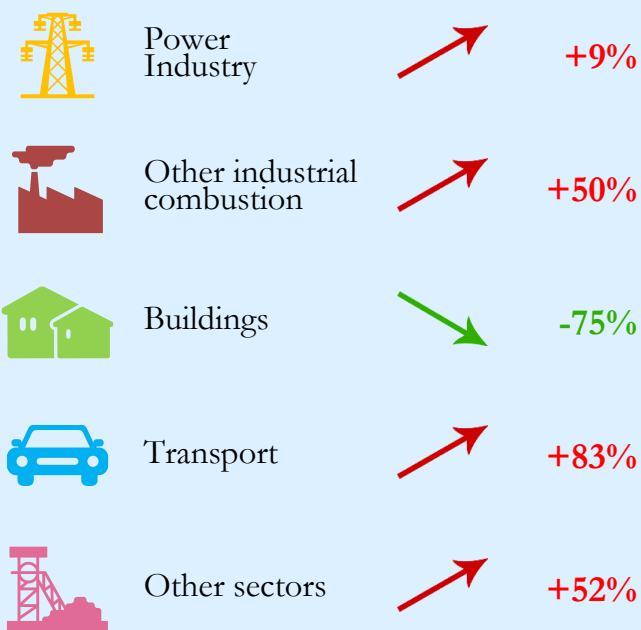
## Fossil CO<sub>2</sub> emissions by sector



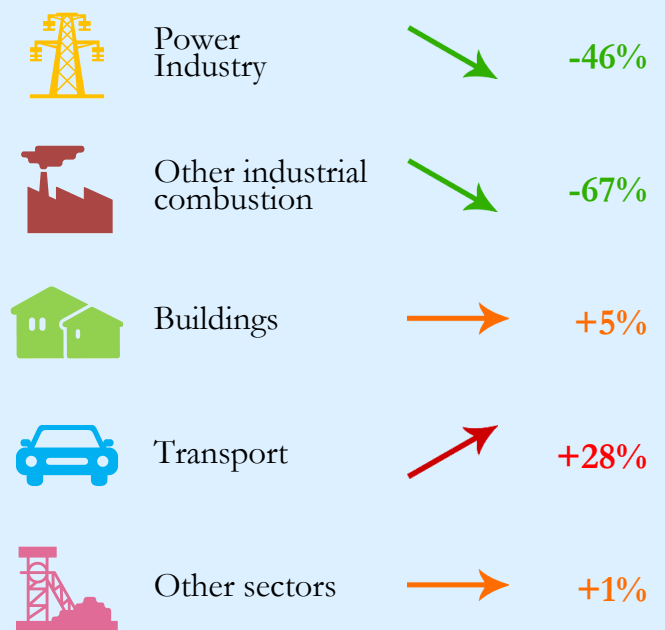
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.146	0.240	0.109	611343
2005	0.187	0.398	0.237	469885
1990	0.133	0.428	0.227	311840



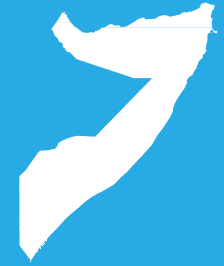
### 2017 vs 1990



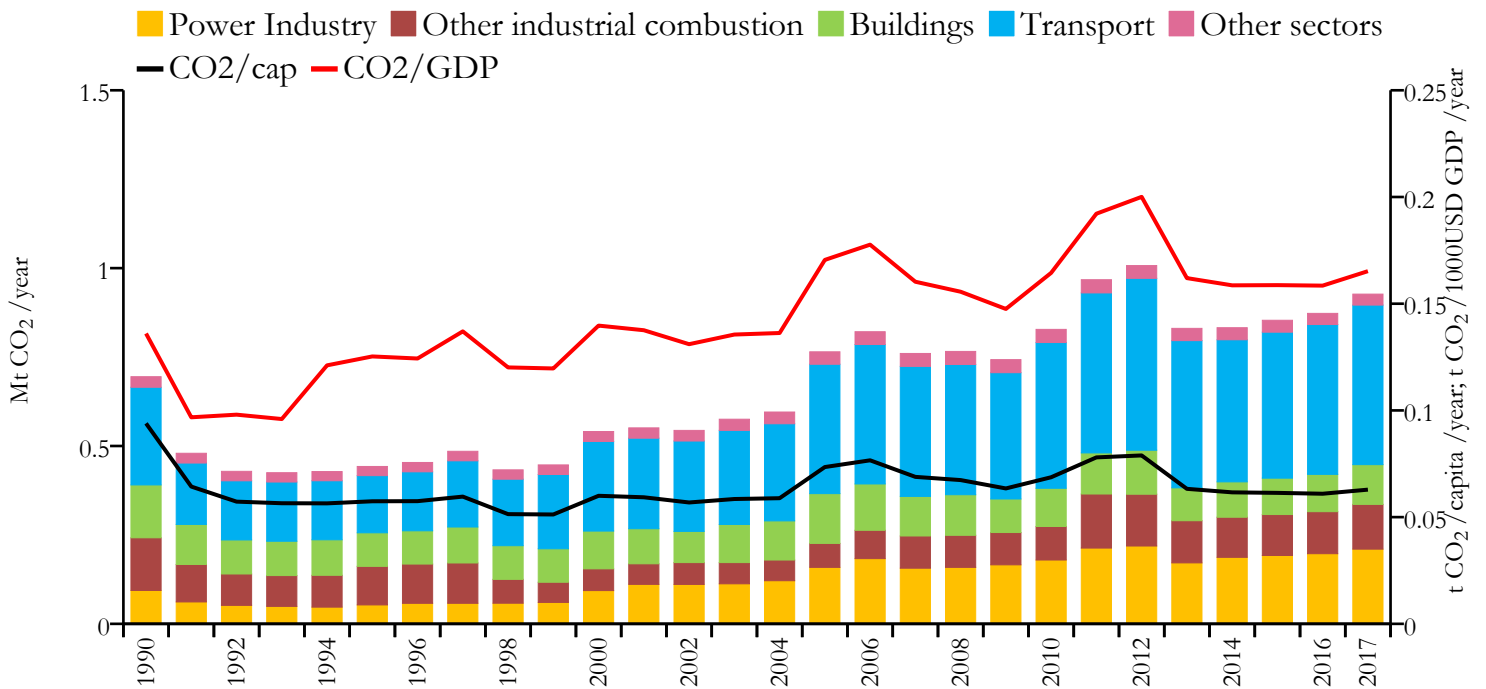
### 2017 vs 2005







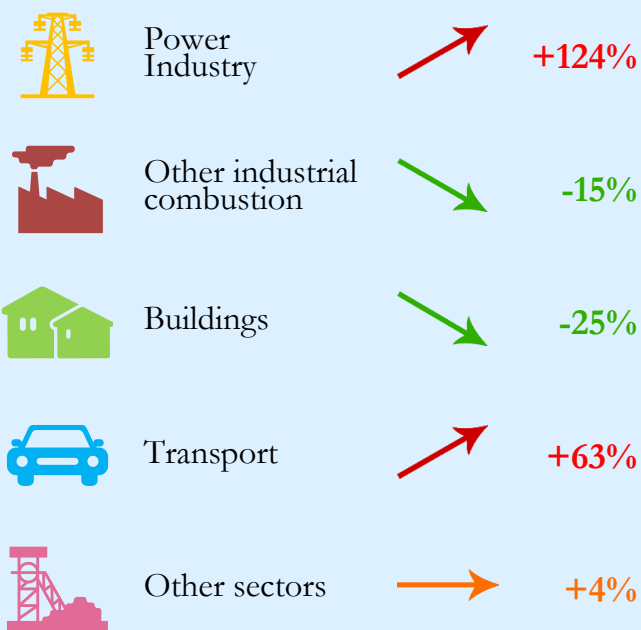
## Fossil CO<sub>2</sub> emissions by sector



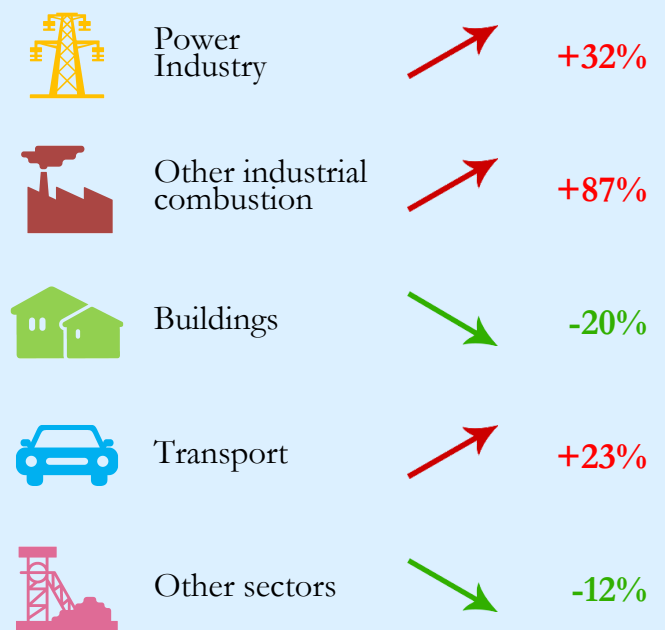
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.927	0.063	0.165	14742523
2005	0.765	0.073	0.171	10409925
1990	0.695	0.094	0.136	7397347



### 2017 vs 1990



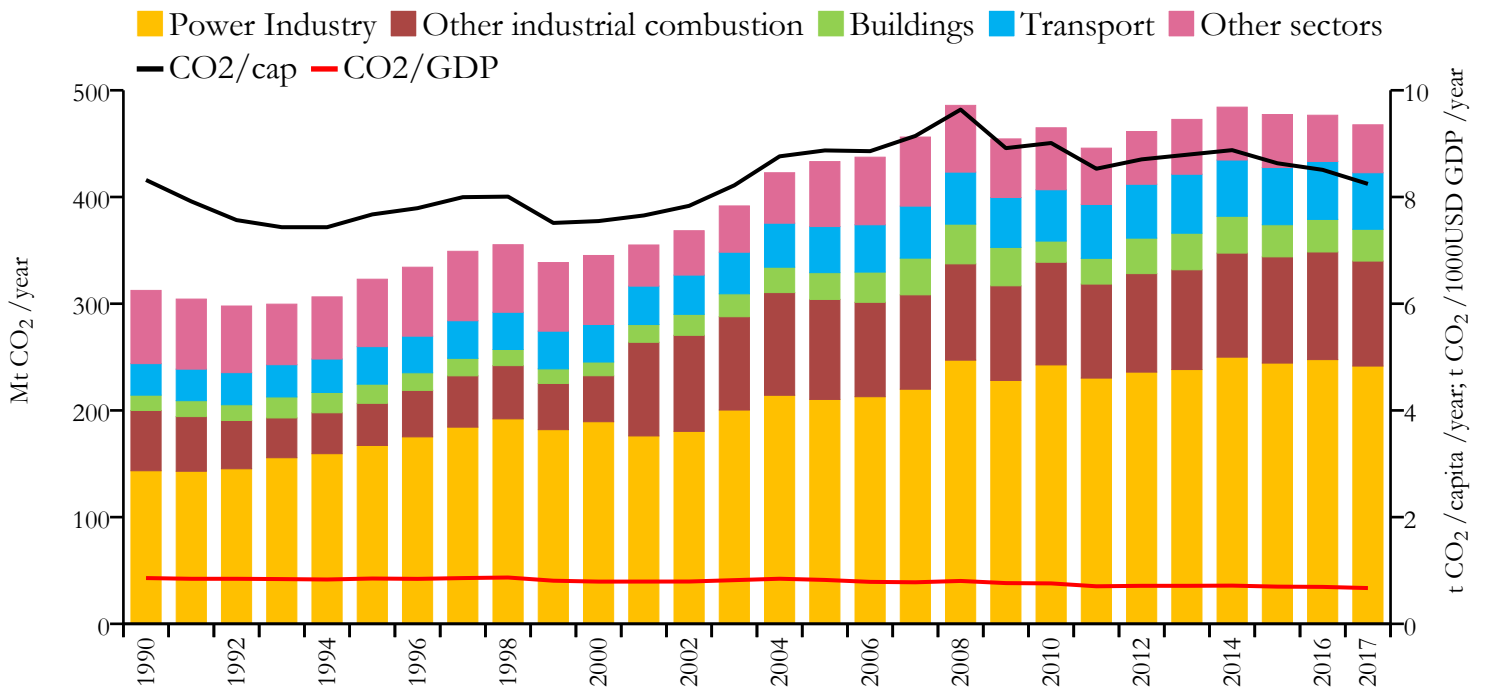
### 2017 vs 2005



# South Africa



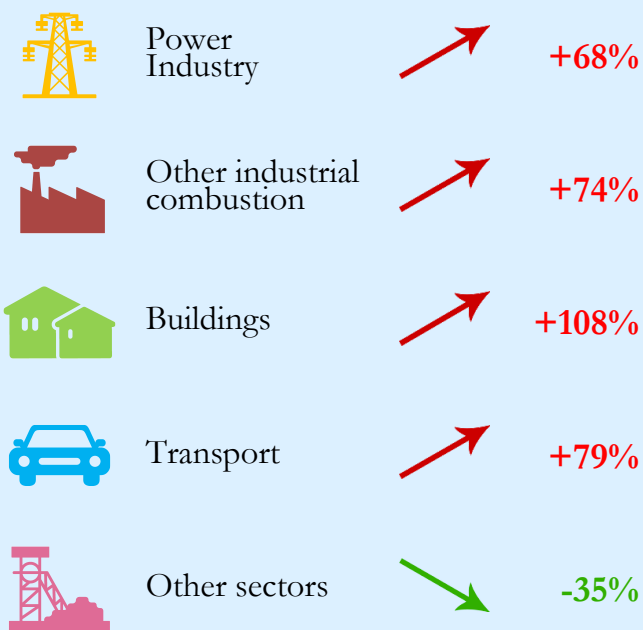
## Fossil CO<sub>2</sub> emissions by sector



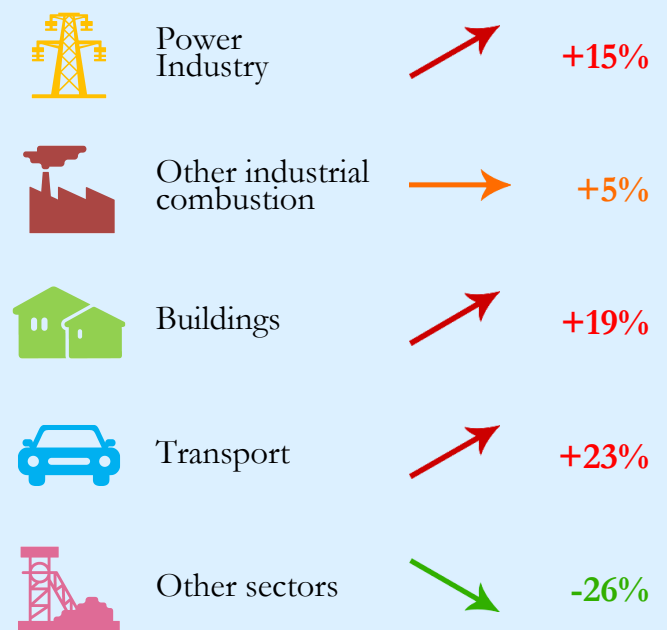
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	467.654	8.245	0.671	56717156
2005	433.170	8.873	0.823	48820586
1990	312.463	8.319	0.858	37560525



### 2017 vs 1990



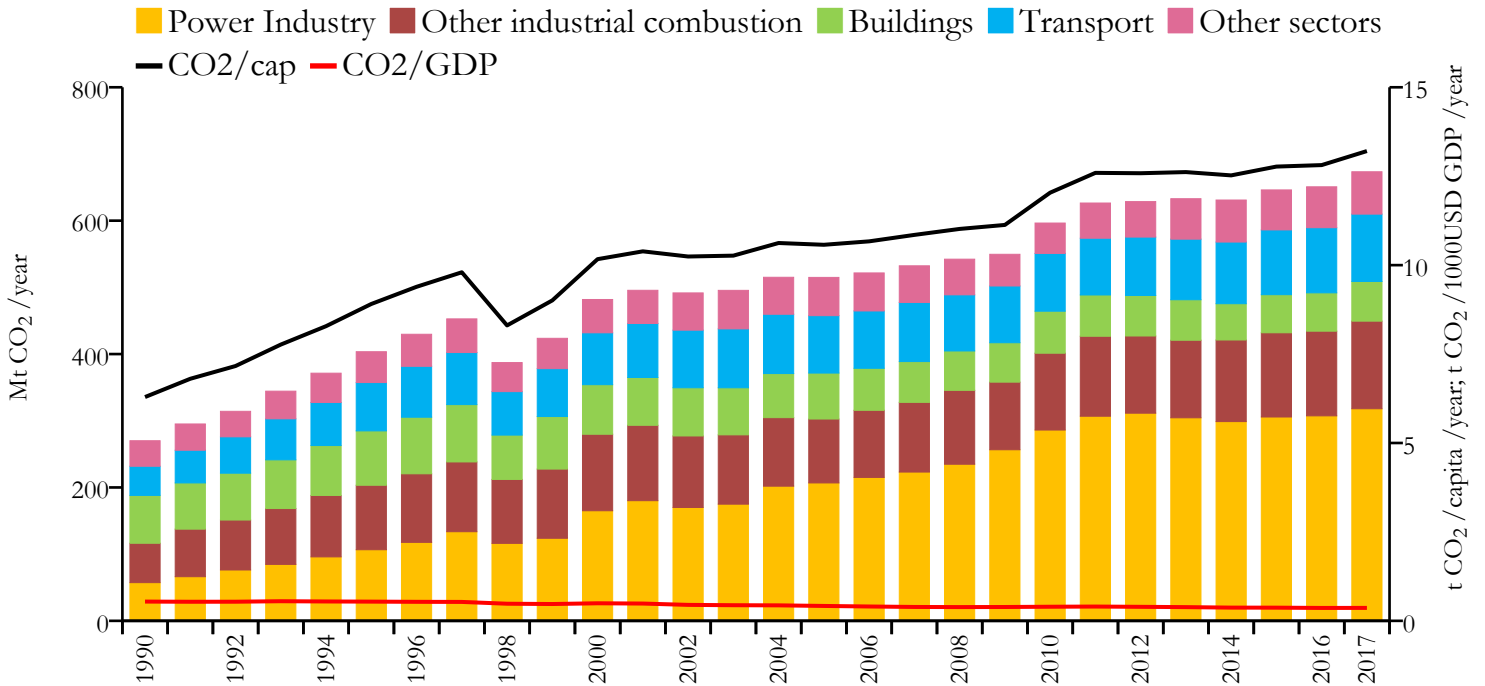
### 2017 vs 2005



# South Korea



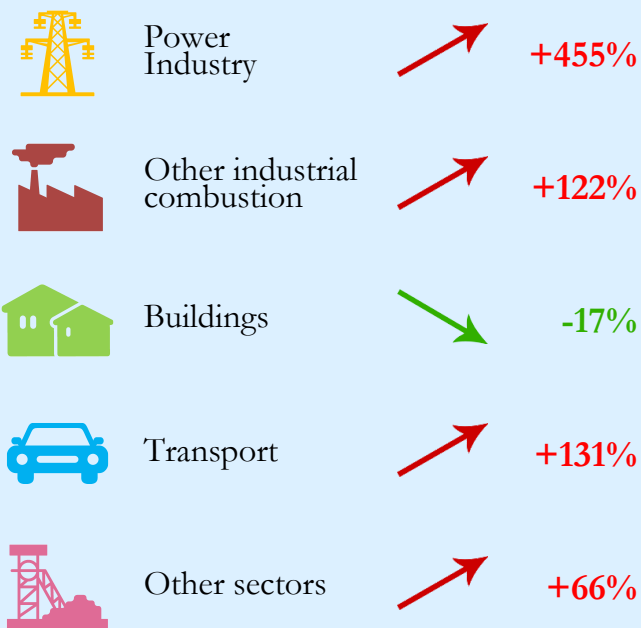
## Fossil CO<sub>2</sub> emissions by sector



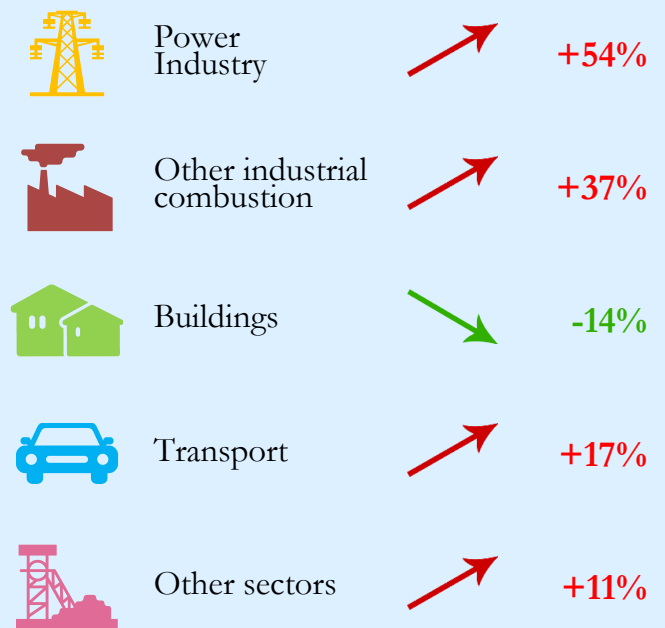
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	673.324	13.207	0.364	50982212
2005	514.946	10.572	0.419	48708497
1990	270.056	6.292	0.542	42923131



### 2017 vs 1990



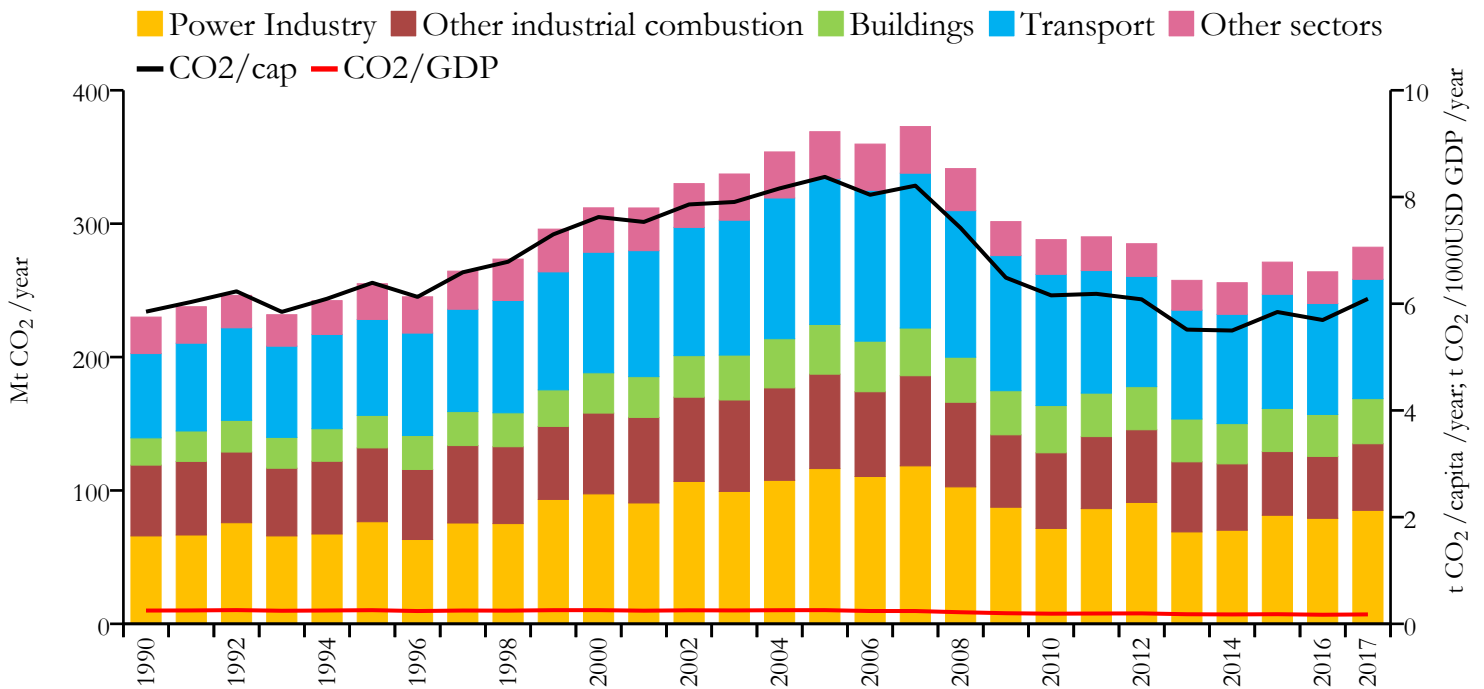
### 2017 vs 2005



# Spain and Andorra



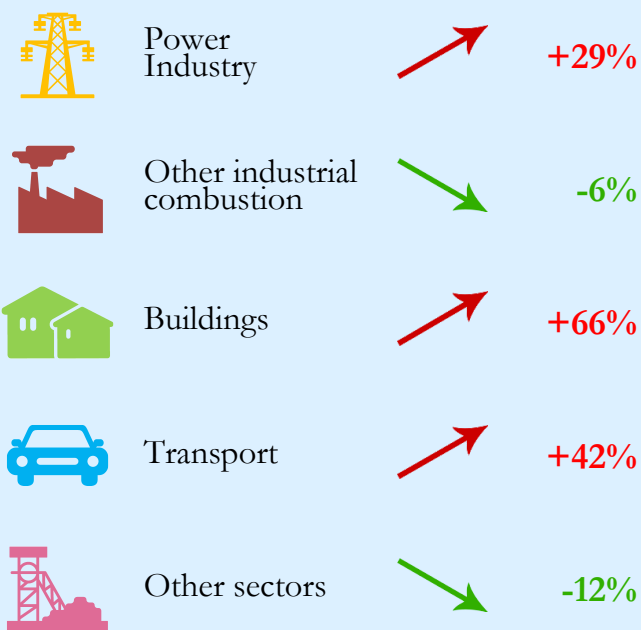
## Fossil CO<sub>2</sub> emissions by sector



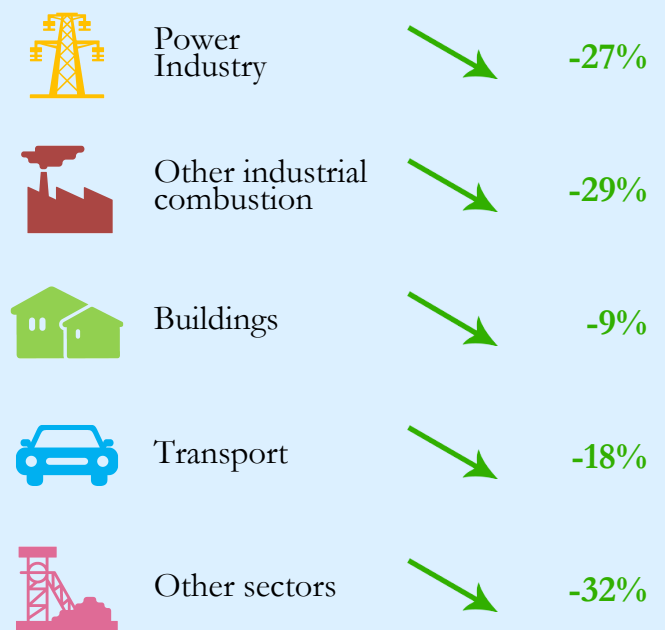
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	282.364	6.091	0.177	46354321
2005	368.948	8.377	0.257	44042632
1990	229.966	5.851	0.249	39306102



### 2017 vs 1990

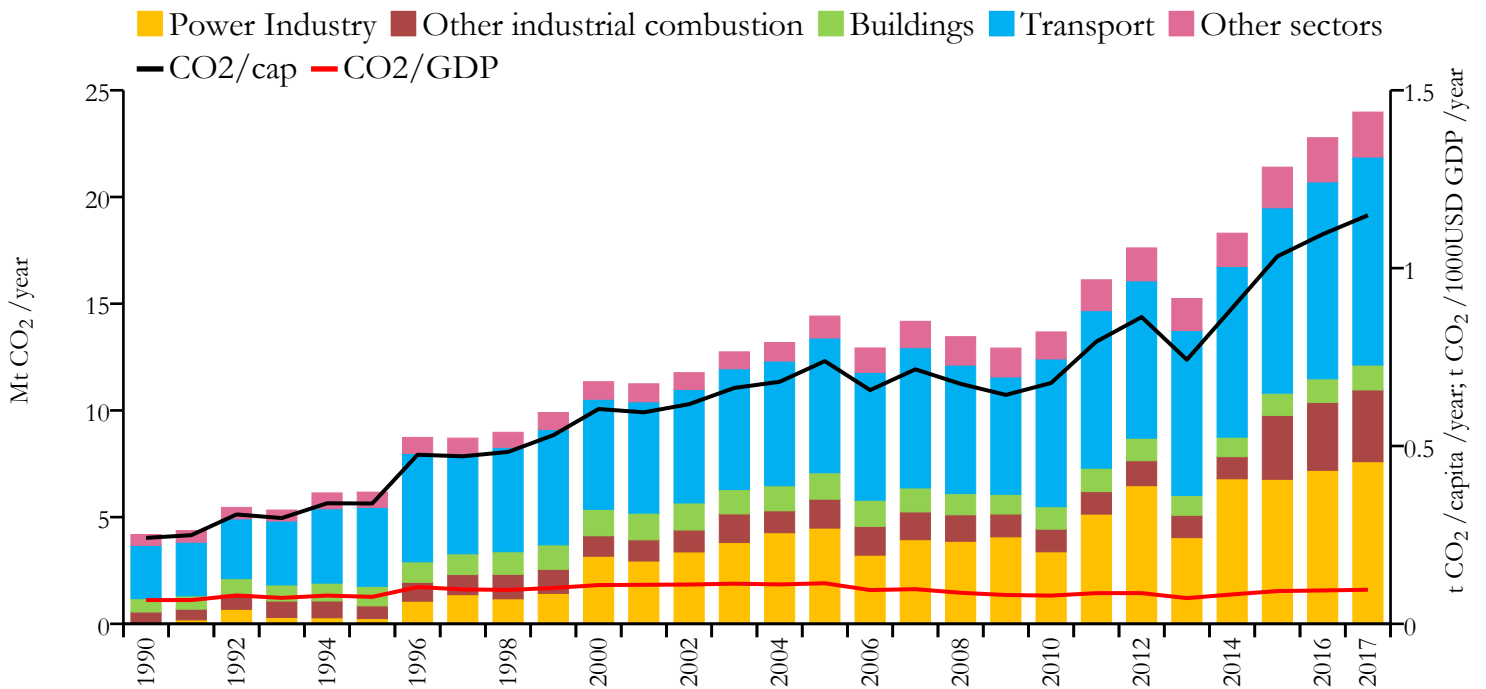


### 2017 vs 2005





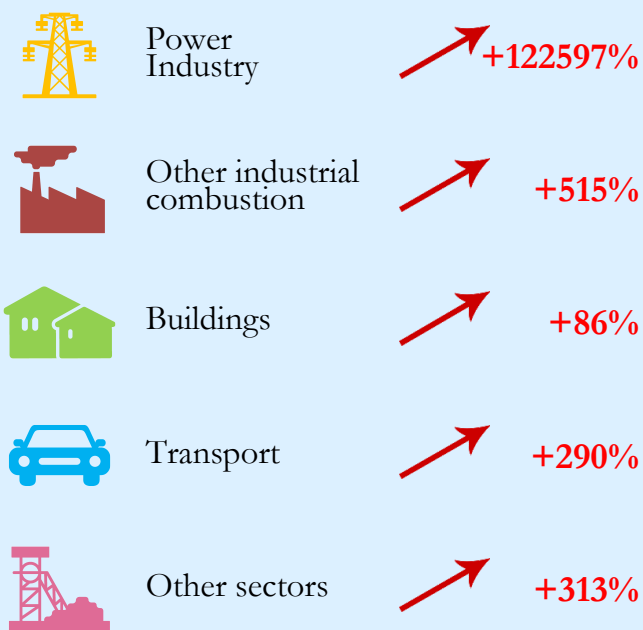
## Fossil CO<sub>2</sub> emissions by sector



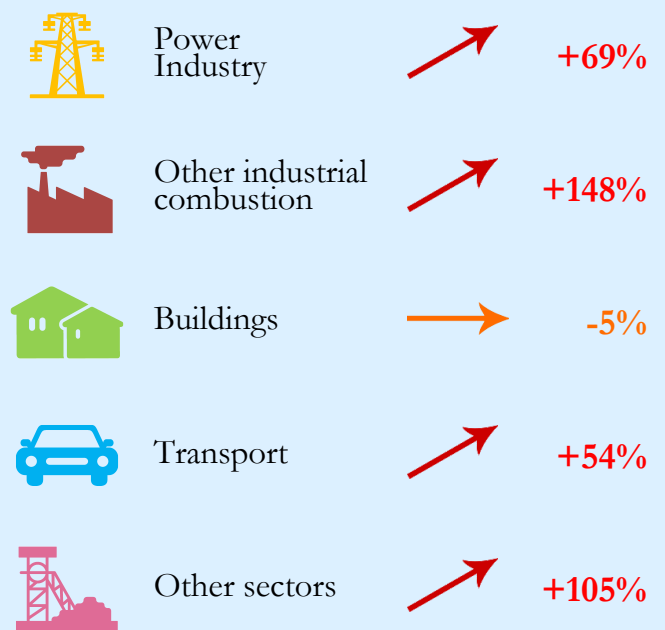
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	23.978	1.149	0.096	20876917
2005	14.421	0.739	0.114	19524558
1990	4.187	0.242	0.067	17329713



### 2017 vs 1990



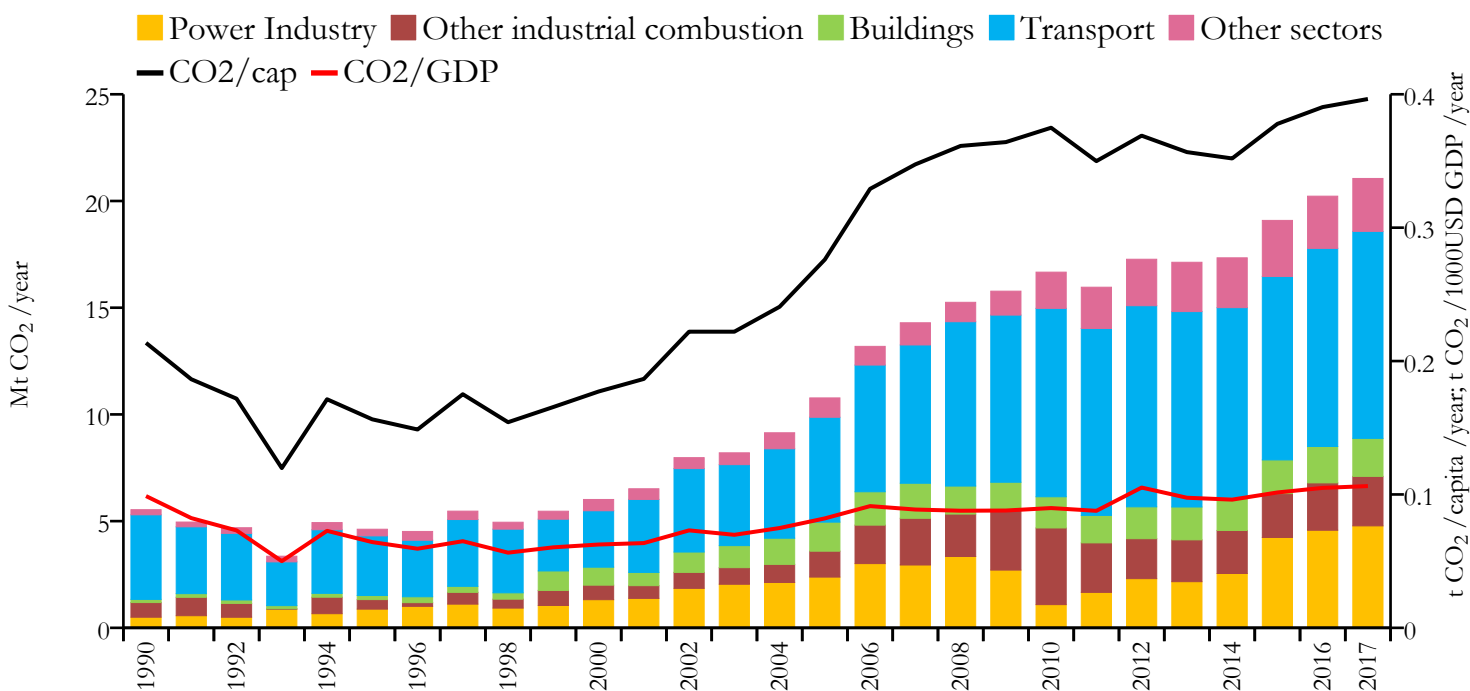
### 2017 vs 2005



# Sudan and South Sudan



## Fossil CO<sub>2</sub> emissions by sector



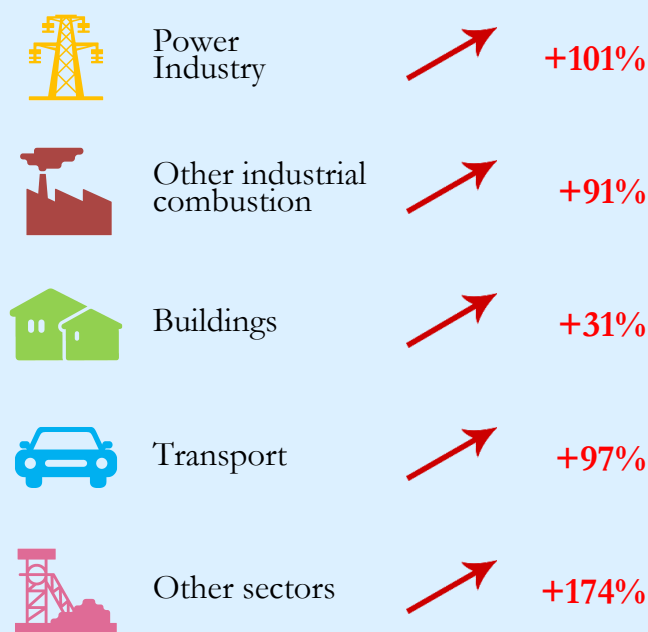
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	21.056	0.396	0.106	53109044
2005	10.773	0.276	0.082	39020791
1990	5.536	0.214	0.099	25916071



### 2017 vs 1990



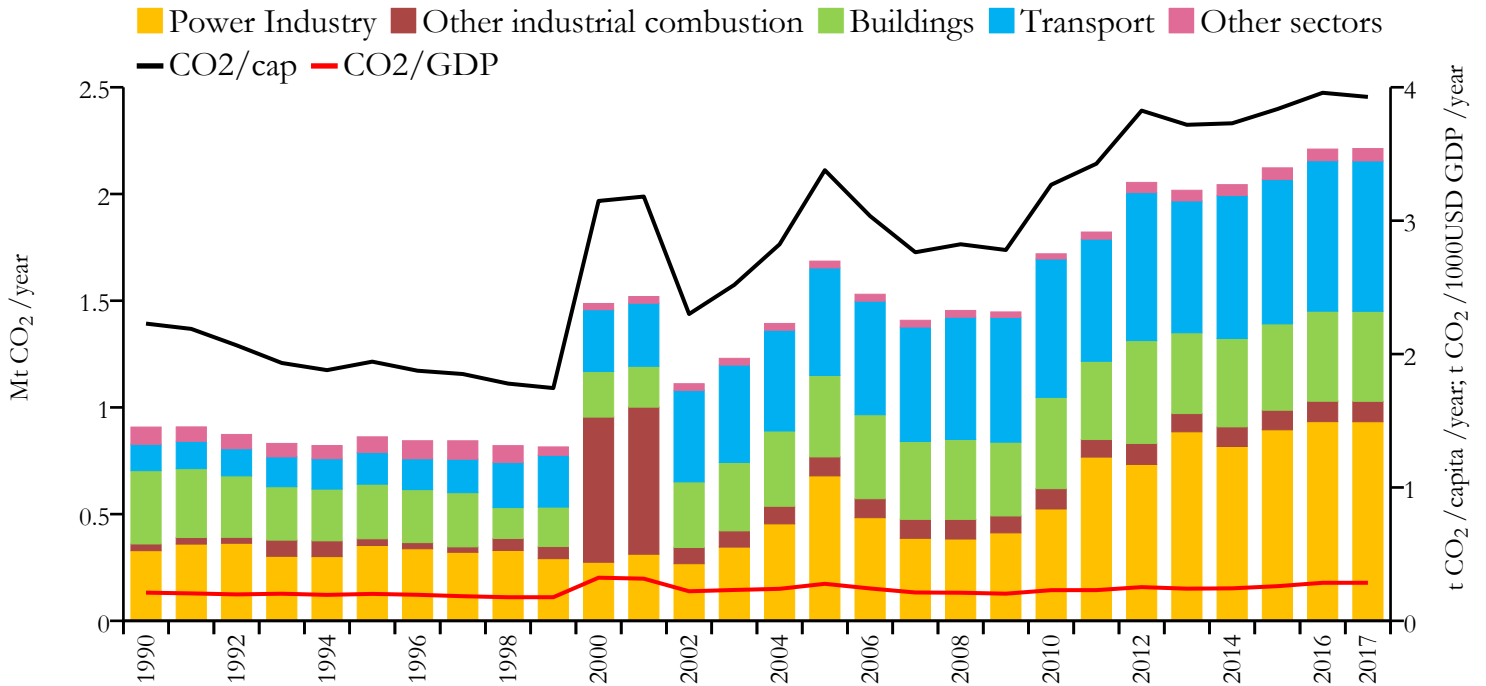
### 2017 vs 2005



# Suriname



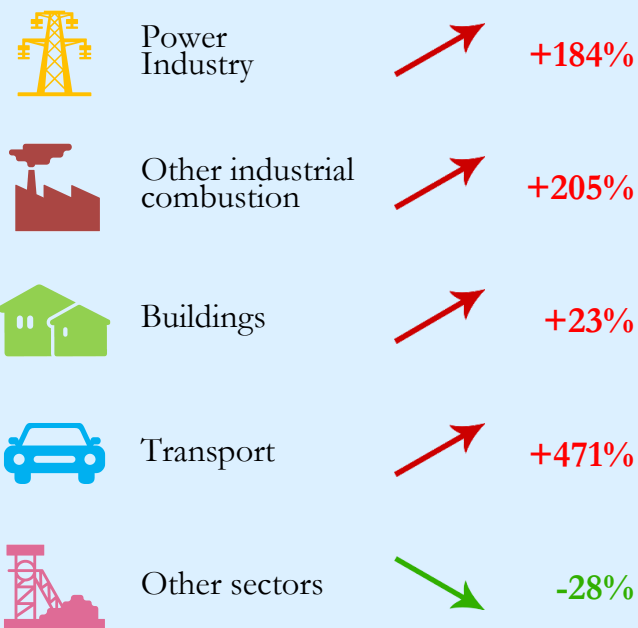
## Fossil CO<sub>2</sub> emissions by sector



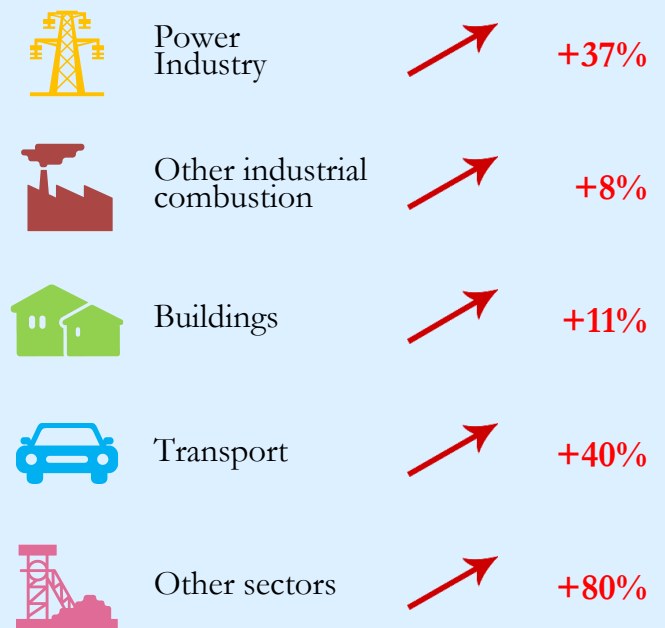
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.213	3.928	0.285	563402
2005	1.686	3.378	0.278	498946
1990	0.908	2.228	0.211	407472



### 2017 vs 1990

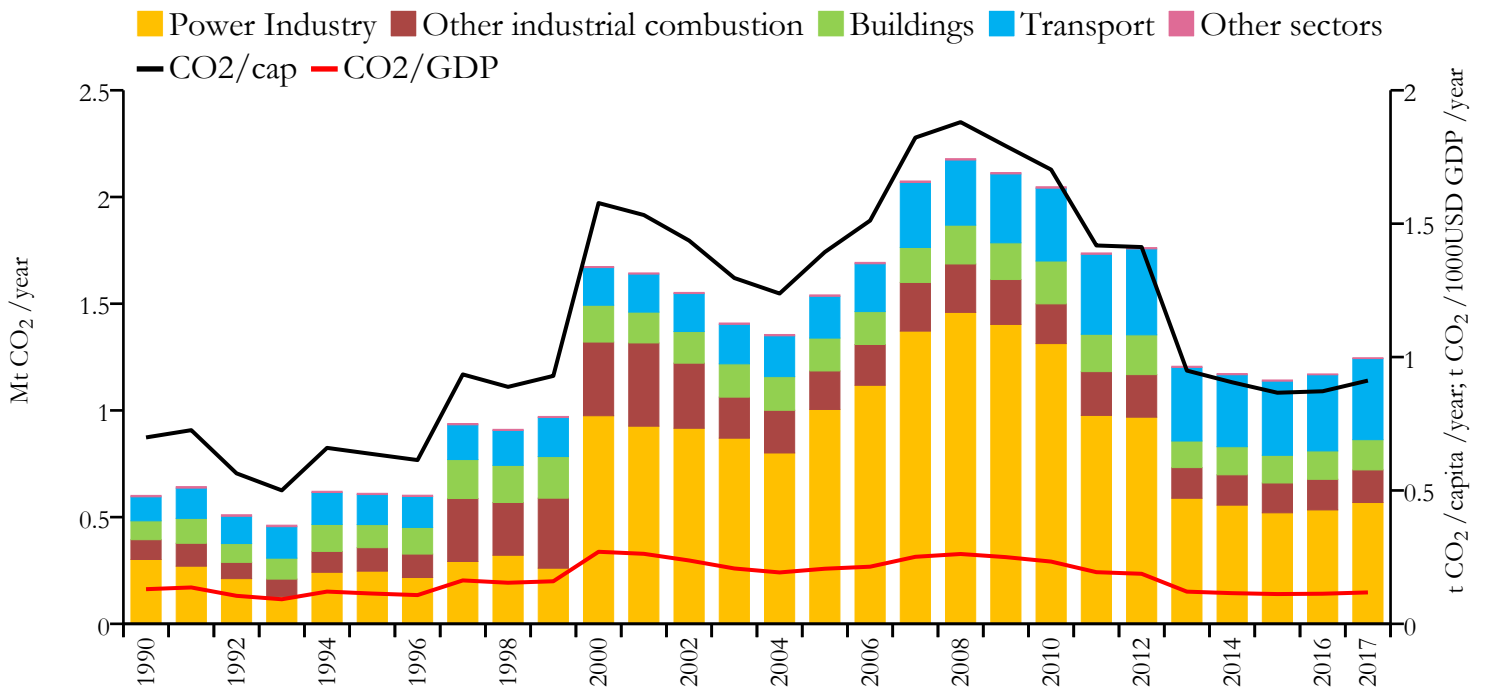


### 2017 vs 2005





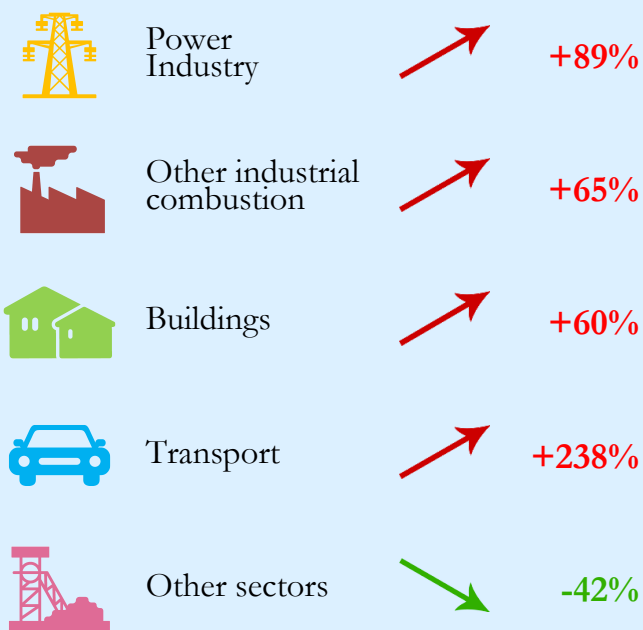
## Fossil CO<sub>2</sub> emissions by sector



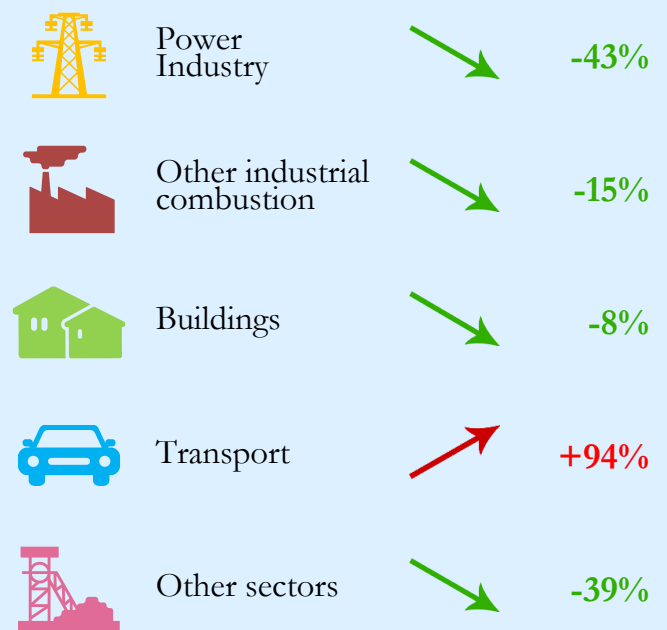
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	1.247	0.912	0.118	1367254
2005	1.541	1.394	0.207	1105873
1990	0.602	0.699	0.130	861373



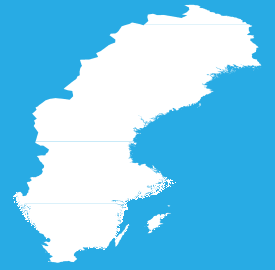
### 2017 vs 1990



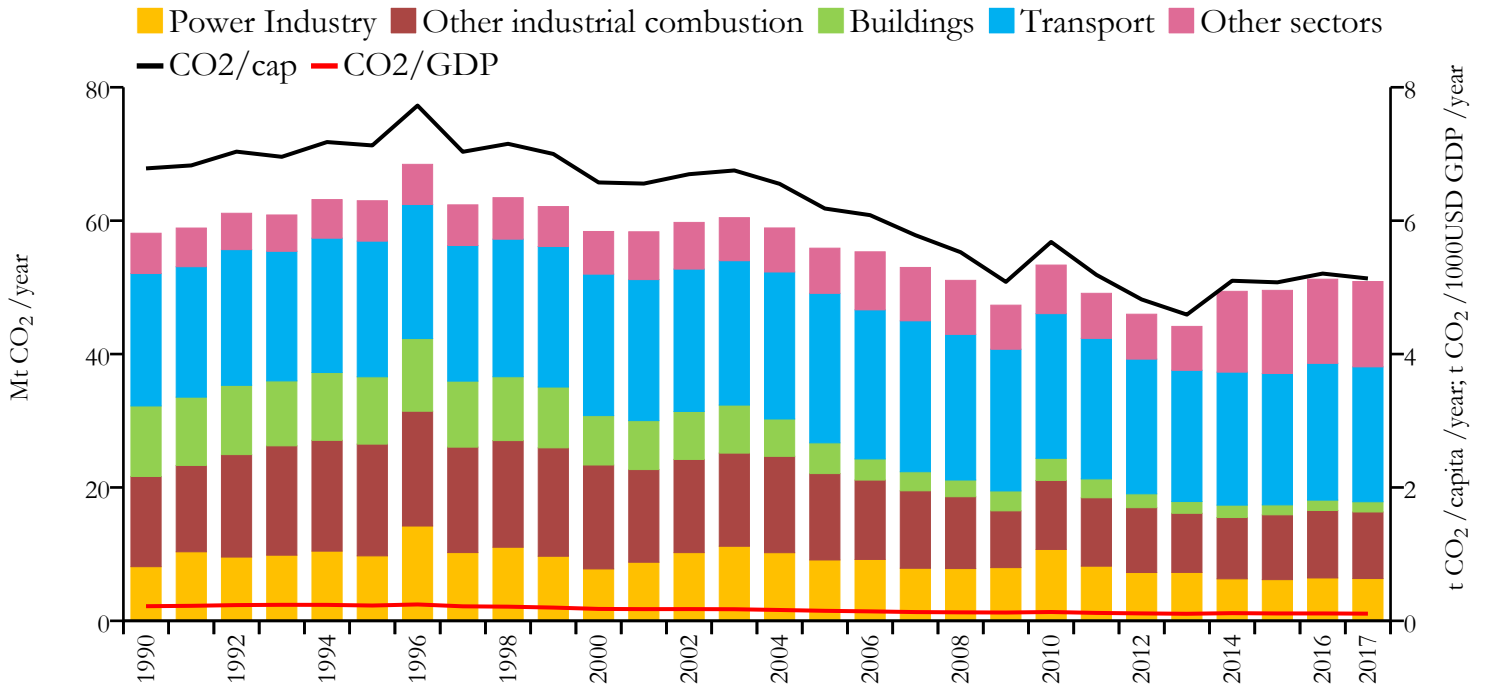
### 2017 vs 2005







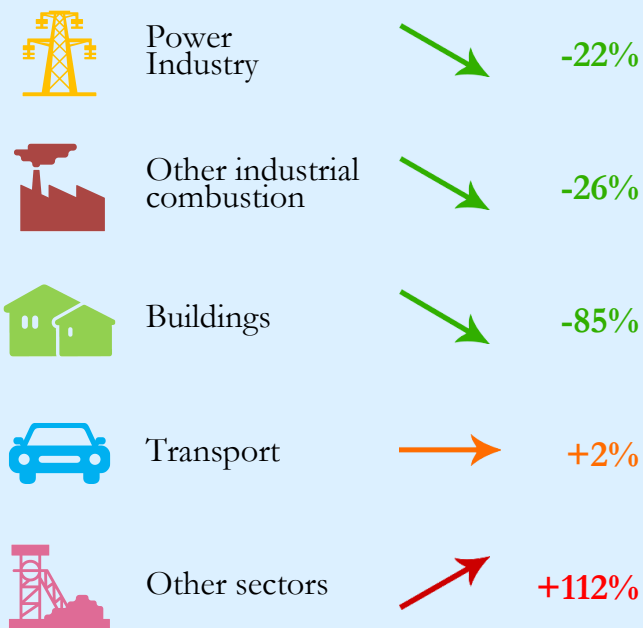
## Fossil CO<sub>2</sub> emissions by sector



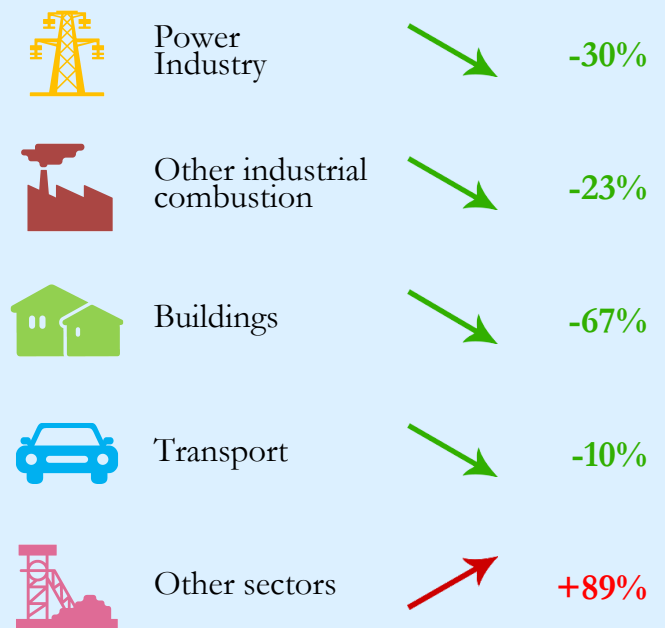
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	50.874	5.133	0.108	9910701
2005	55.877	6.182	0.150	9038623
1990	58.117	6.784	0.220	8567384



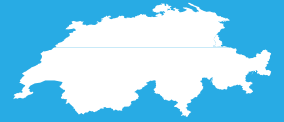
### 2017 vs 1990



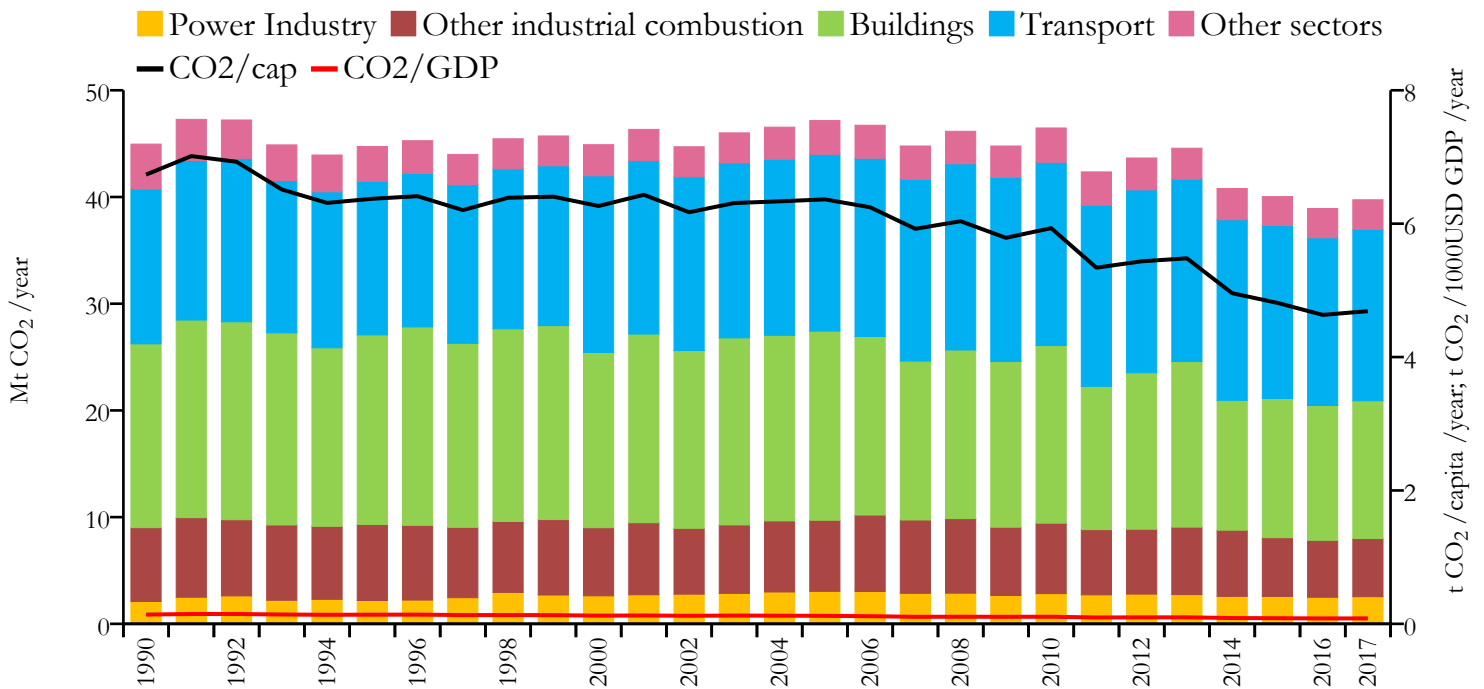
### 2017 vs 2005



# Switzerland and Liechtenstein



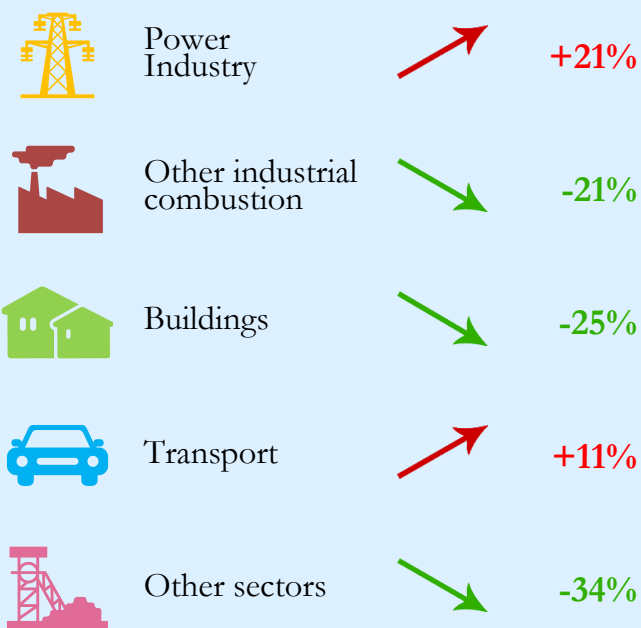
## Fossil CO<sub>2</sub> emissions by sector



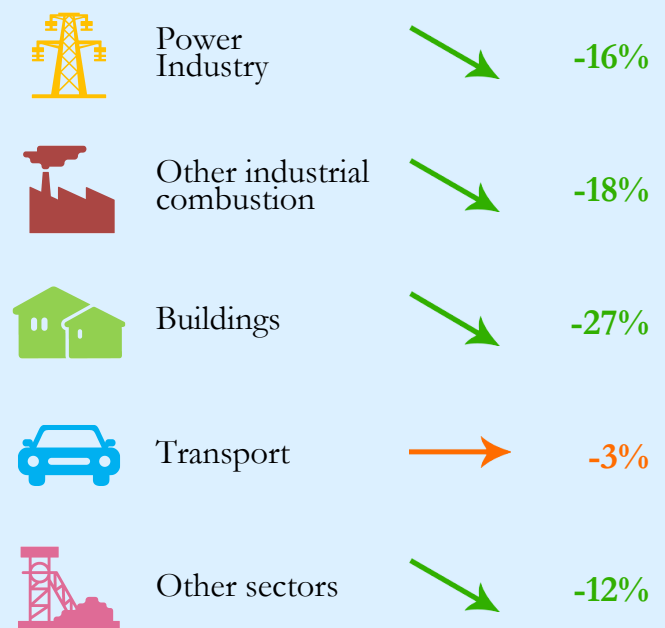
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	39.738	4.688	0.082	8476005
2005	47.161	6.364	0.120	7410308
1990	44.955	6.735	0.139	6674890



### 2017 vs 1990

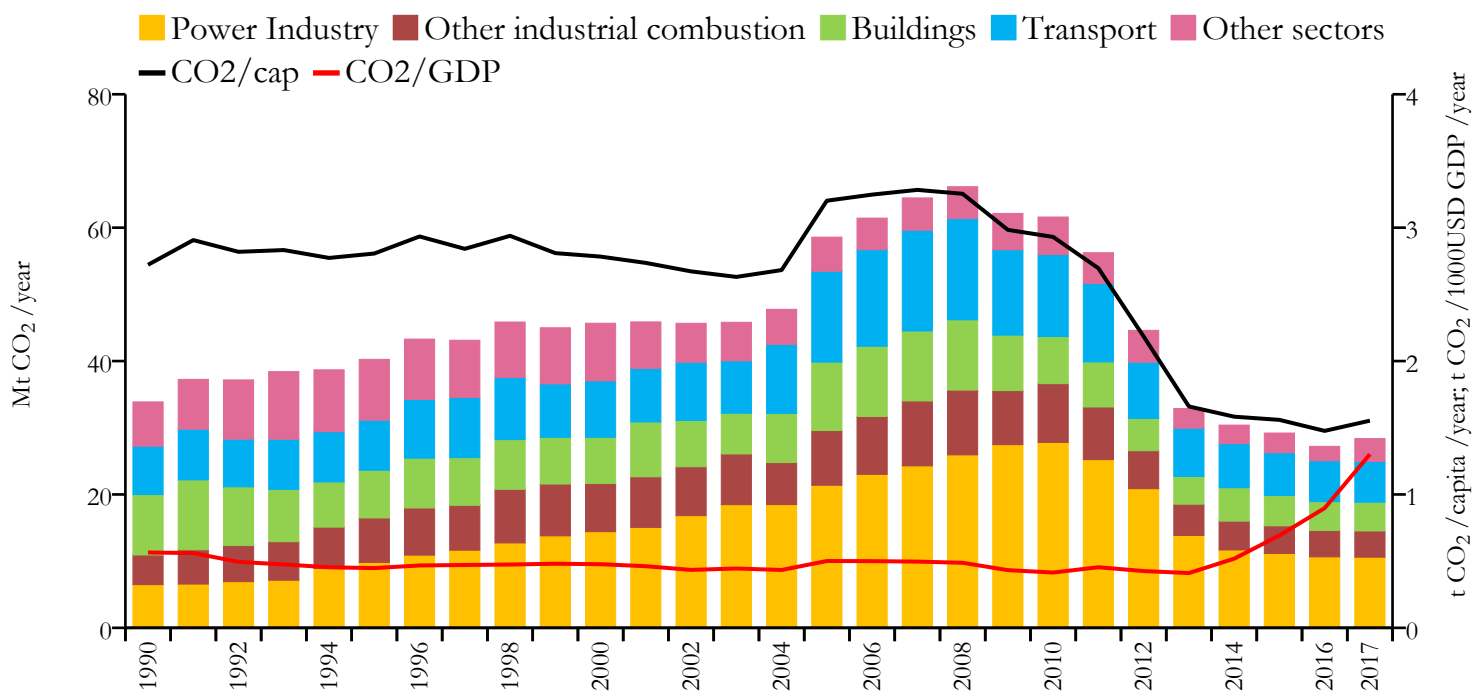


### 2017 vs 2005





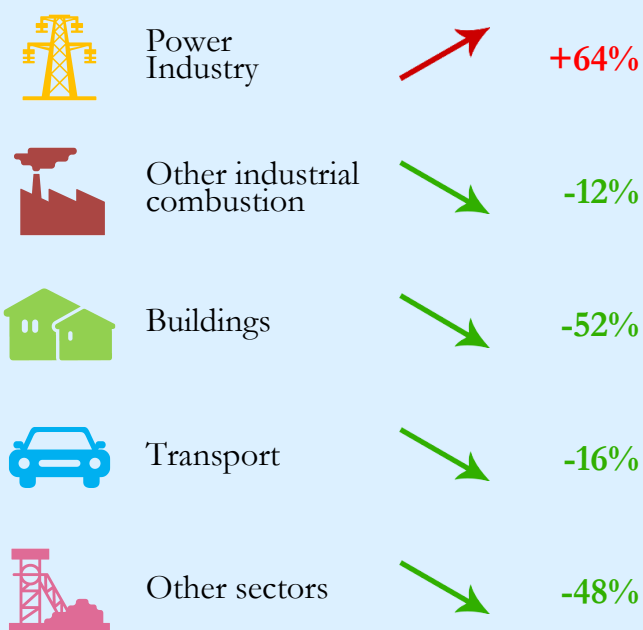
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	28.377	1.553	1.302	18269868
2005	58.582	3.202	0.501	18294611
1990	33.876	2.722	0.565	12446171



### 2017 vs 1990

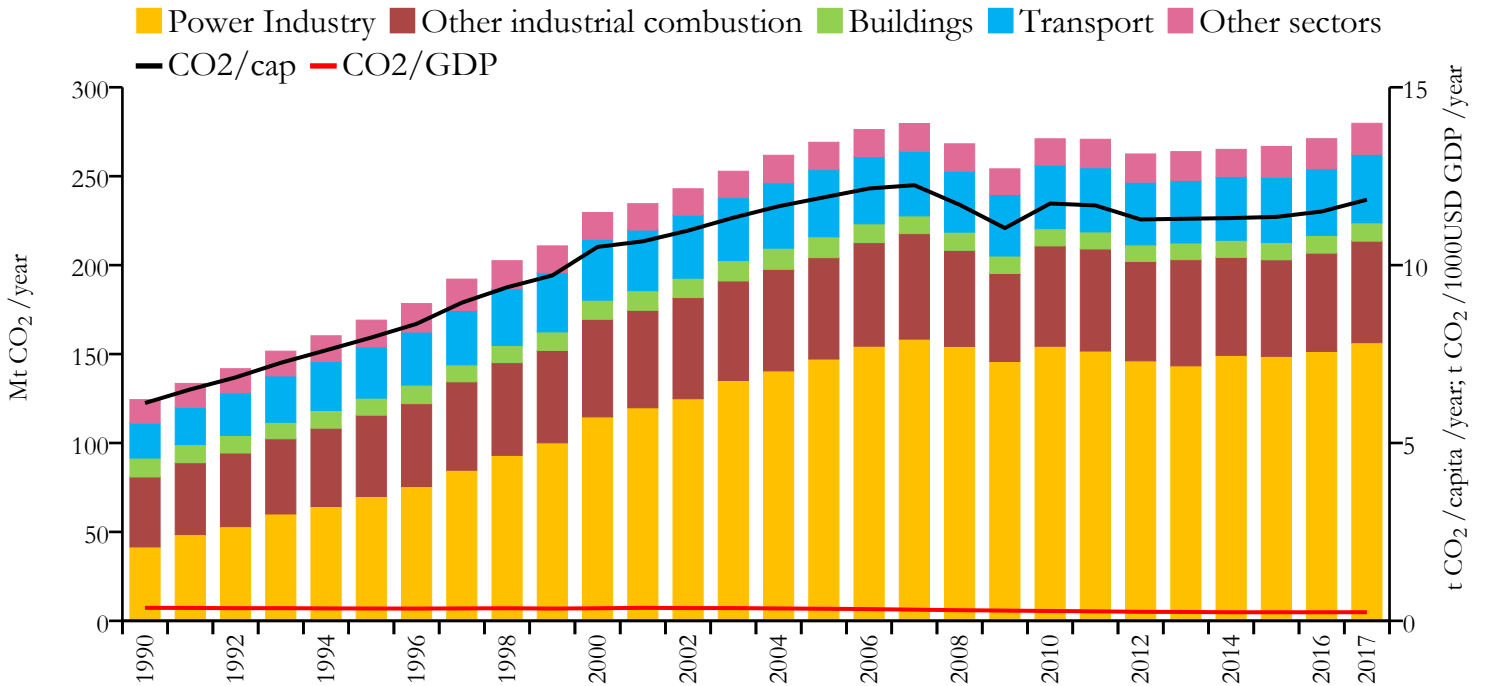


### 2017 vs 2005





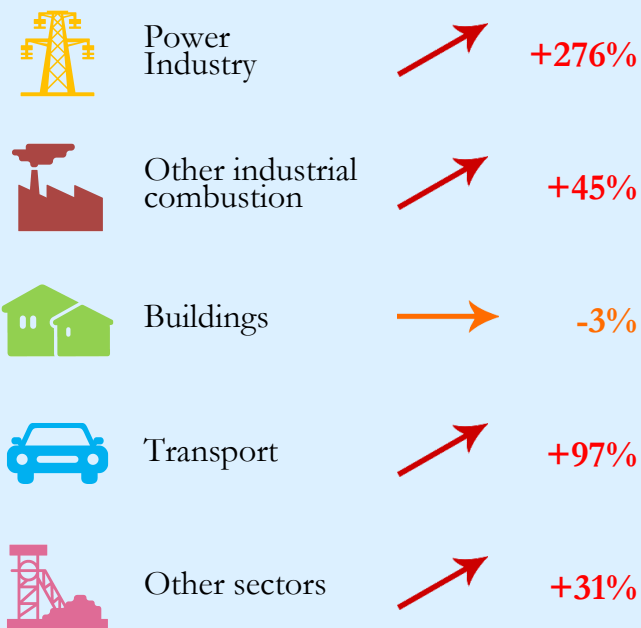
## Fossil CO<sub>2</sub> emissions by sector



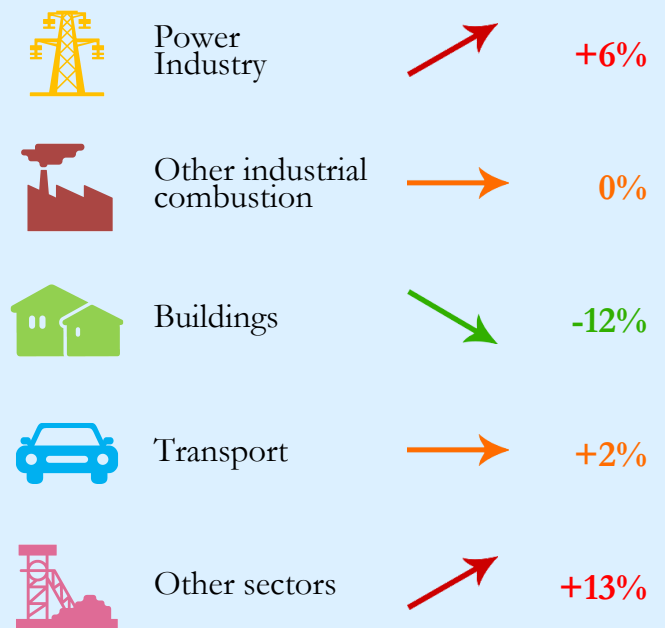
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	279.740	11.840	0.242	23626456
2005	269.099	11.905	0.340	22602886
1990	124.383	6.124	0.366	20311698



### 2017 vs 1990



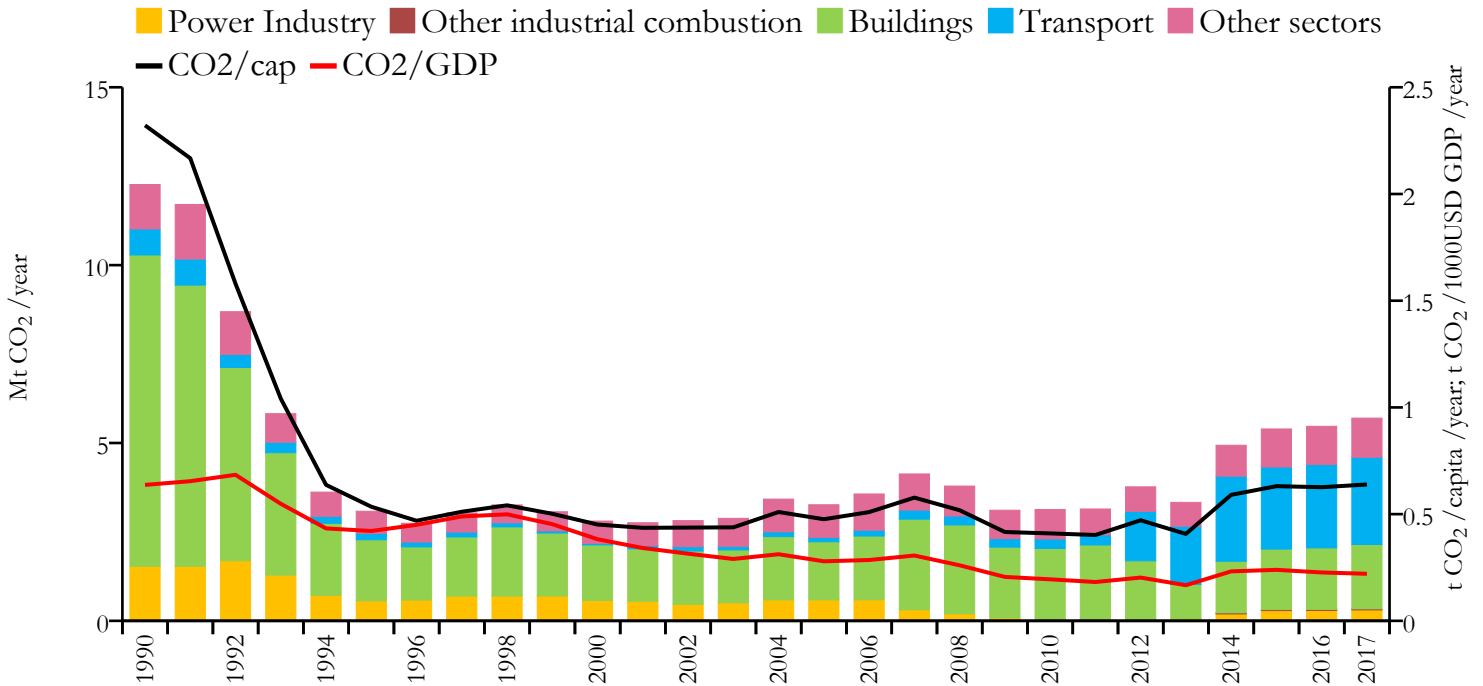
### 2017 vs 2005



# Tajikistan



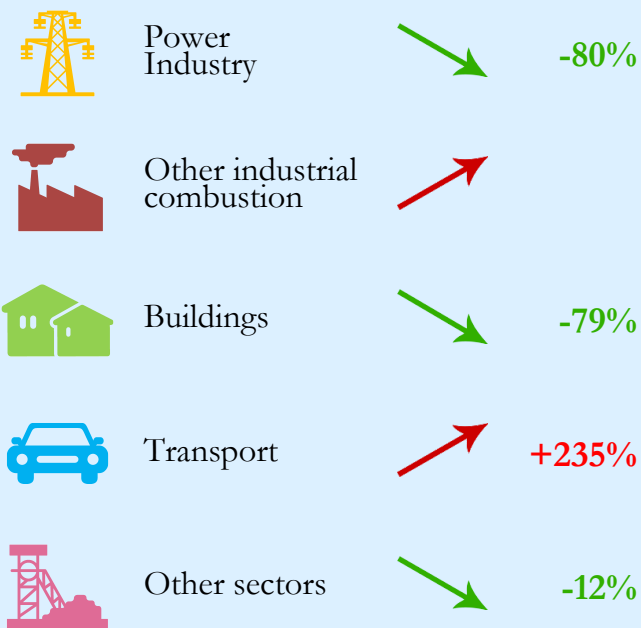
## Fossil CO<sub>2</sub> emissions by sector



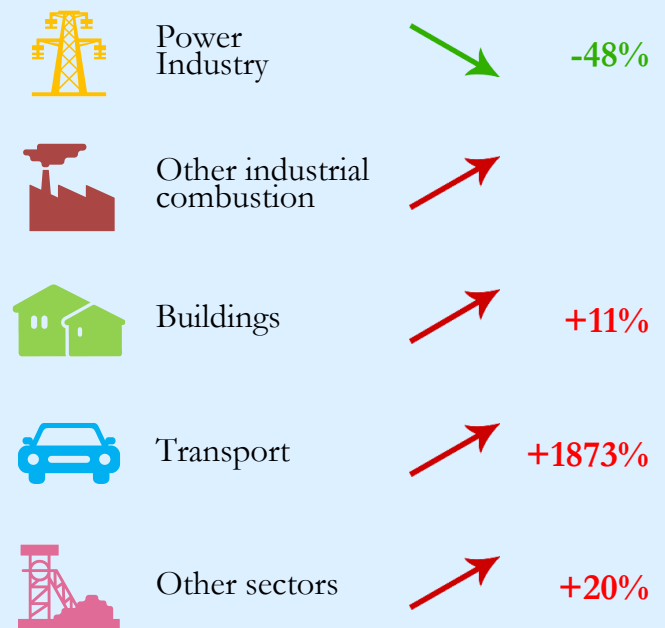
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.699	0.639	0.221	8921343
2005	3.263	0.476	0.279	6854176
1990	12.267	2.322	0.637	5283728



### 2017 vs 1990



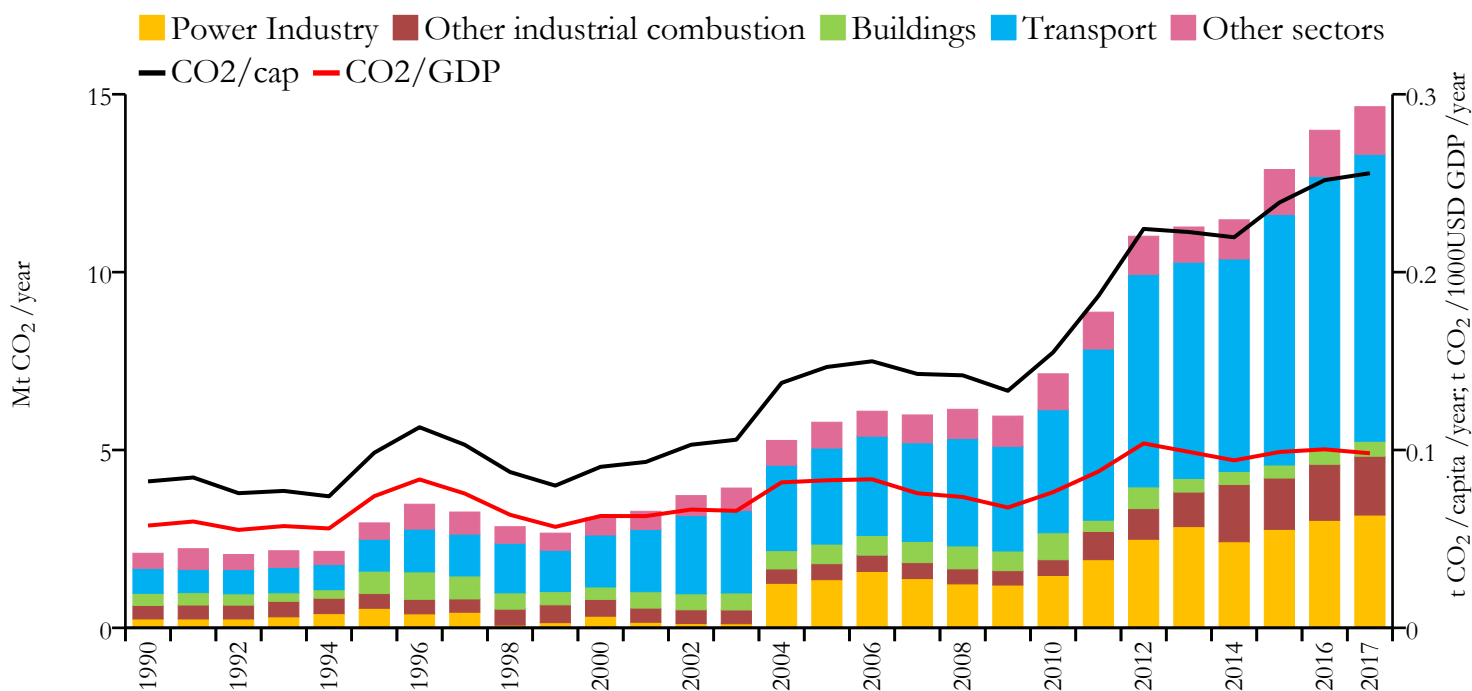
### 2017 vs 2005



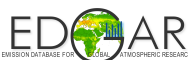
# Tanzania



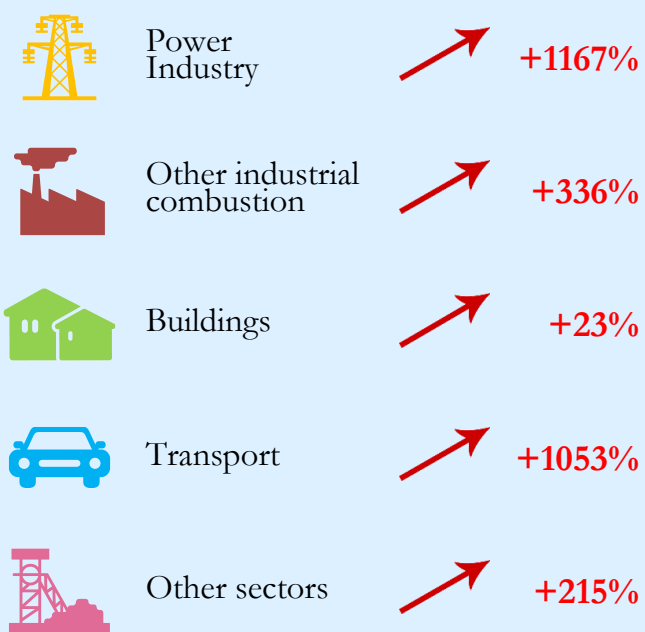
## Fossil CO<sub>2</sub> emissions by sector



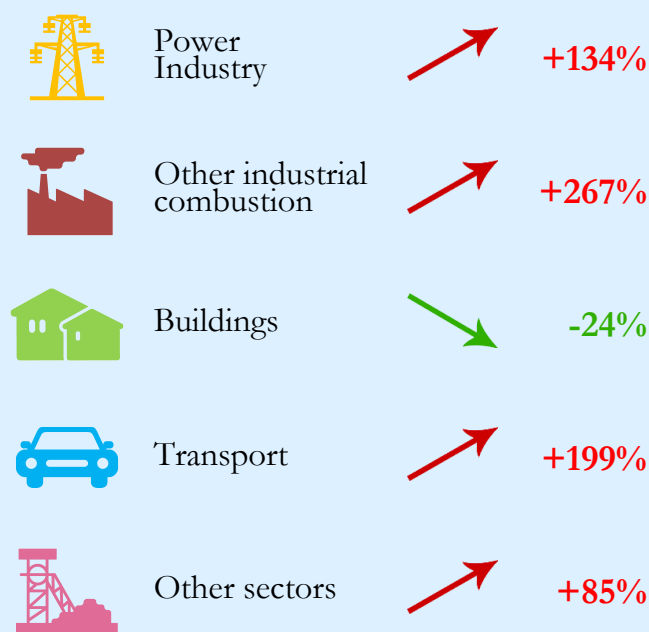
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	14.650	0.256	0.098	57310019
2005	5.780	0.147	0.083	39410545
1990	2.096	0.082	0.058	25459604



### 2017 vs 1990



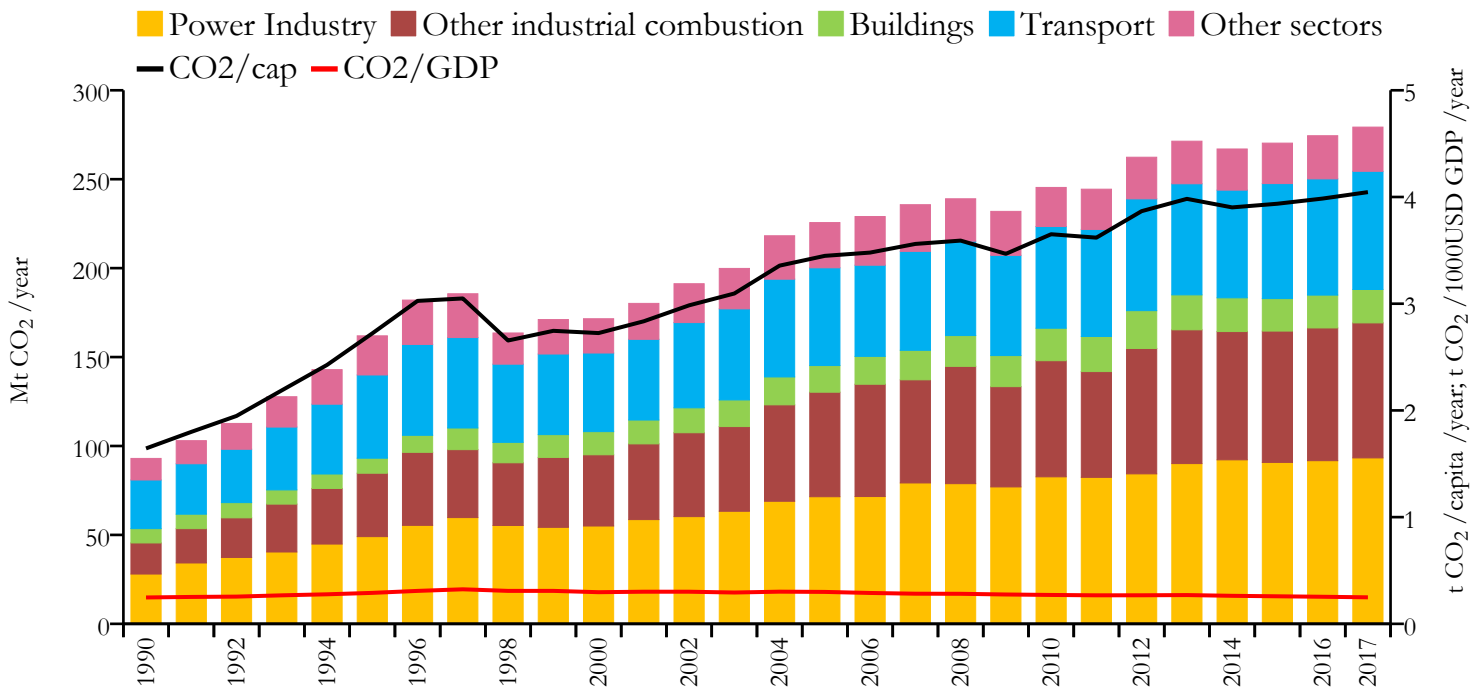
### 2017 vs 2005



# Thailand



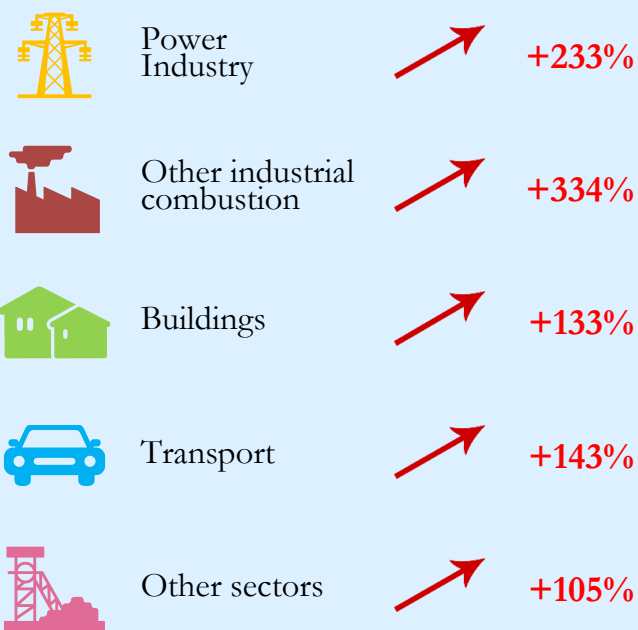
## Fossil CO<sub>2</sub> emissions by sector



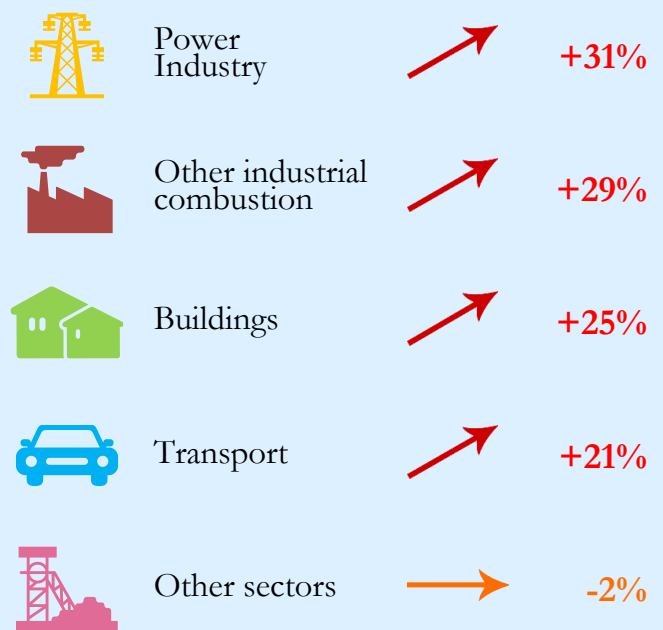
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	279.296	4.046	0.249	69037513
2005	225.613	3.448	0.299	65425470
1990	93.009	1.644	0.247	56582821



### 2017 vs 1990



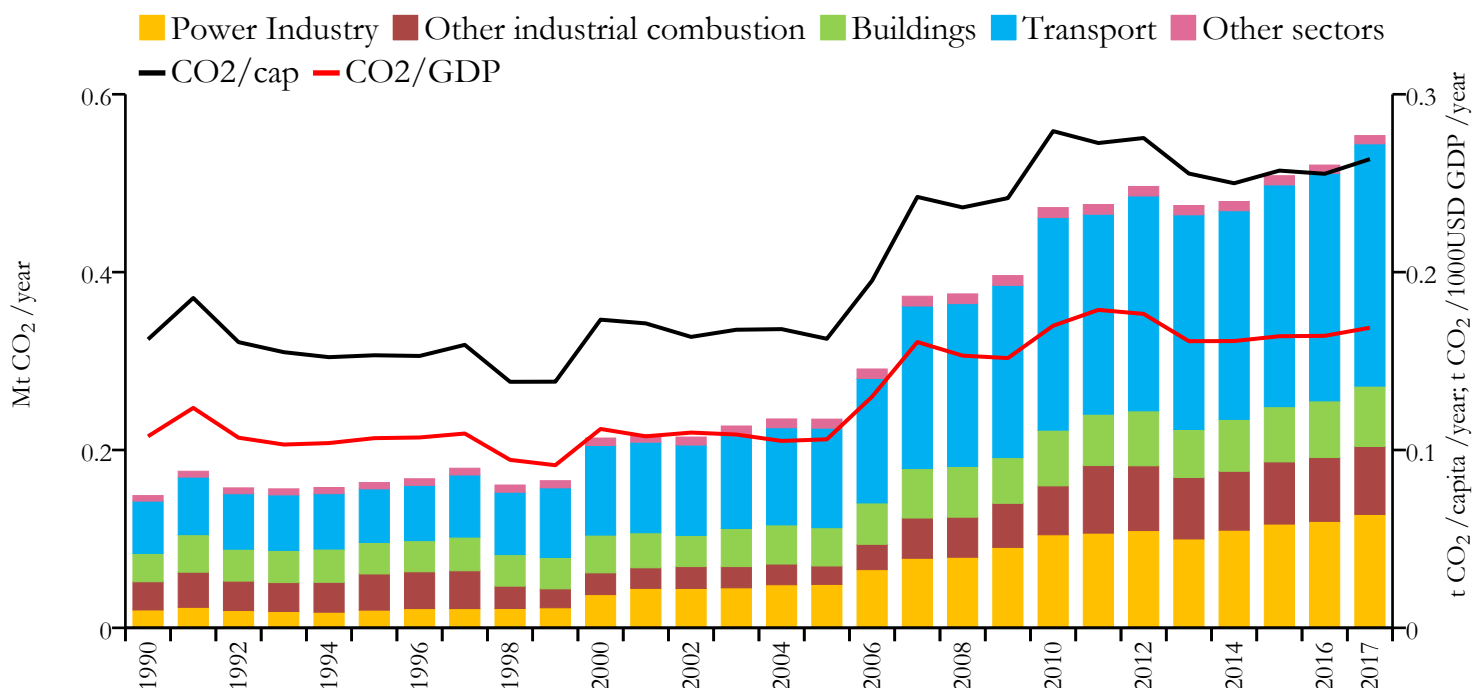
### 2017 vs 2005



# The Gambia



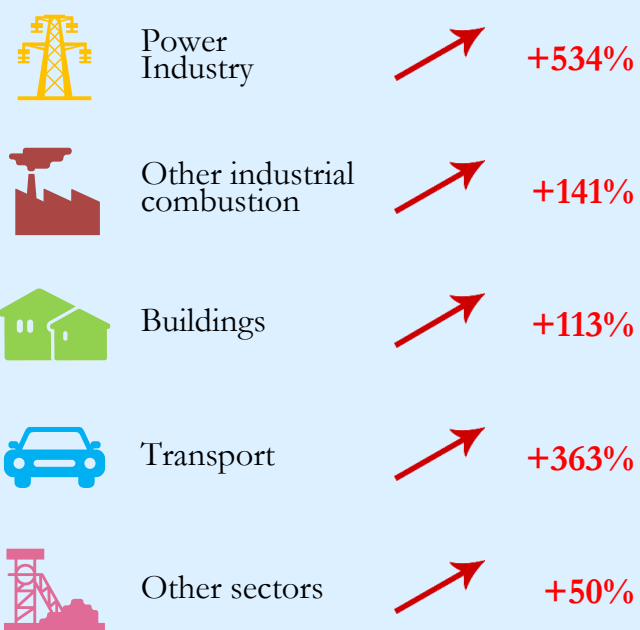
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.554	0.264	0.169	2100568
2005	0.235	0.163	0.106	1444204
1990	0.149	0.162	0.108	916808



### 2017 vs 1990



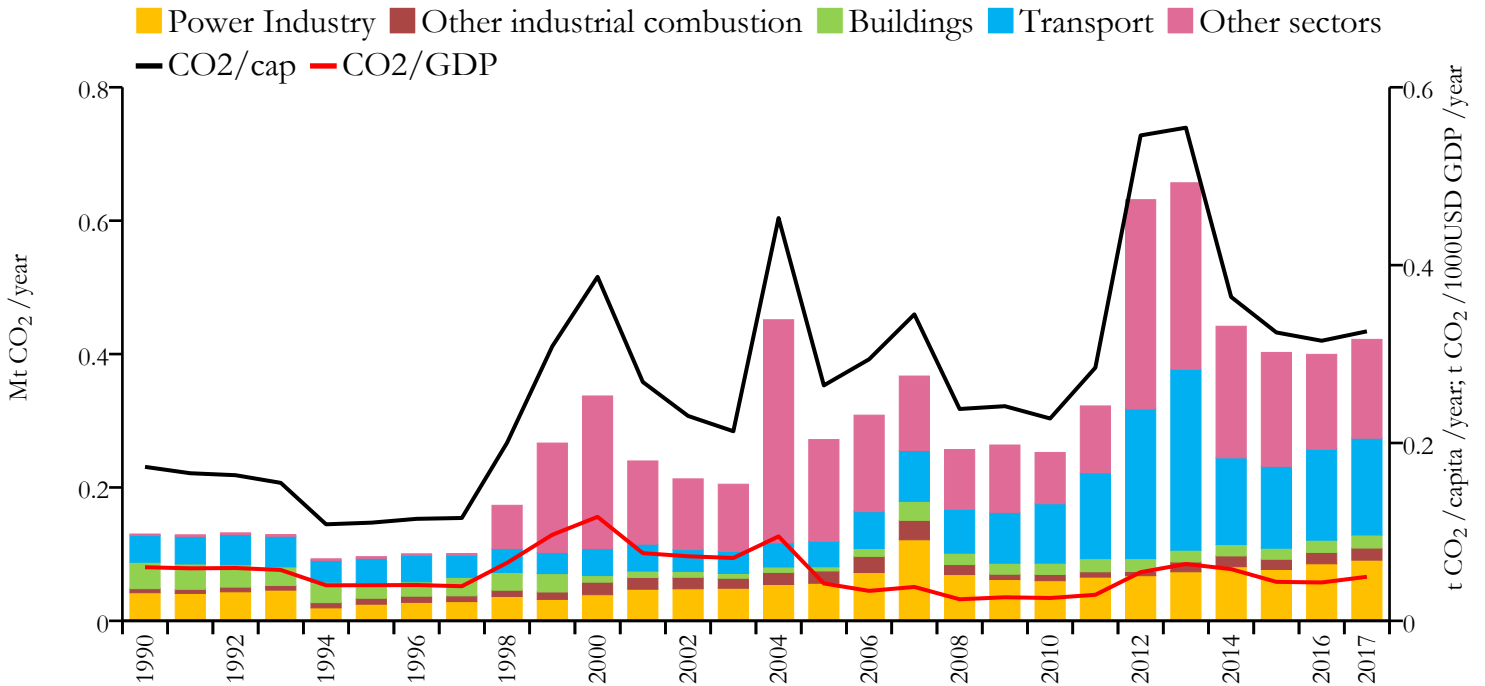
### 2017 vs 2005







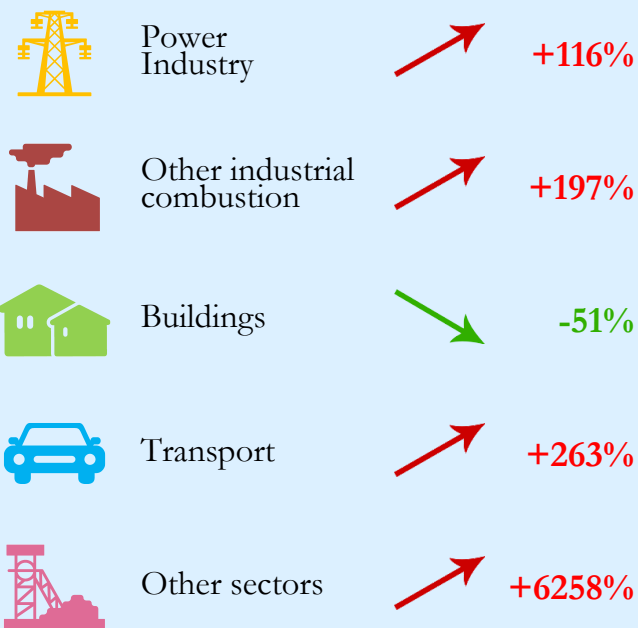
## Fossil CO<sub>2</sub> emissions by sector



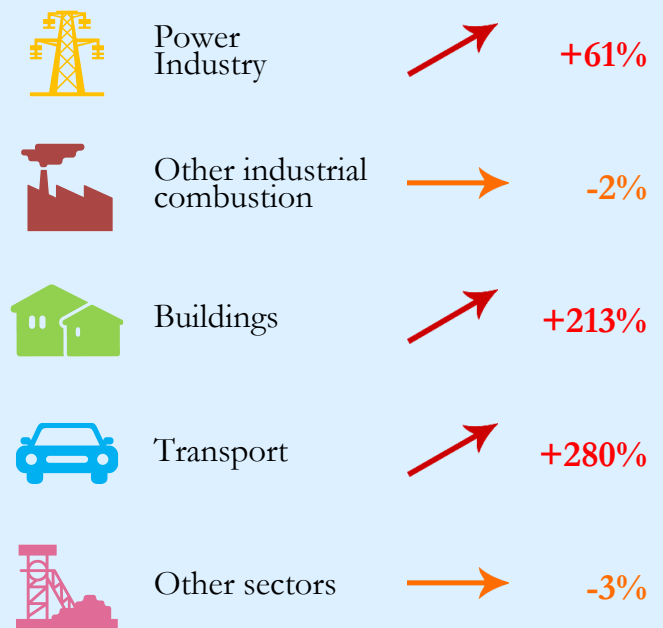
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.422	0.326	0.050	1296311
2005	0.272	0.265	0.042	1026484
1990	0.130	0.173	0.060	751933



### 2017 vs 1990

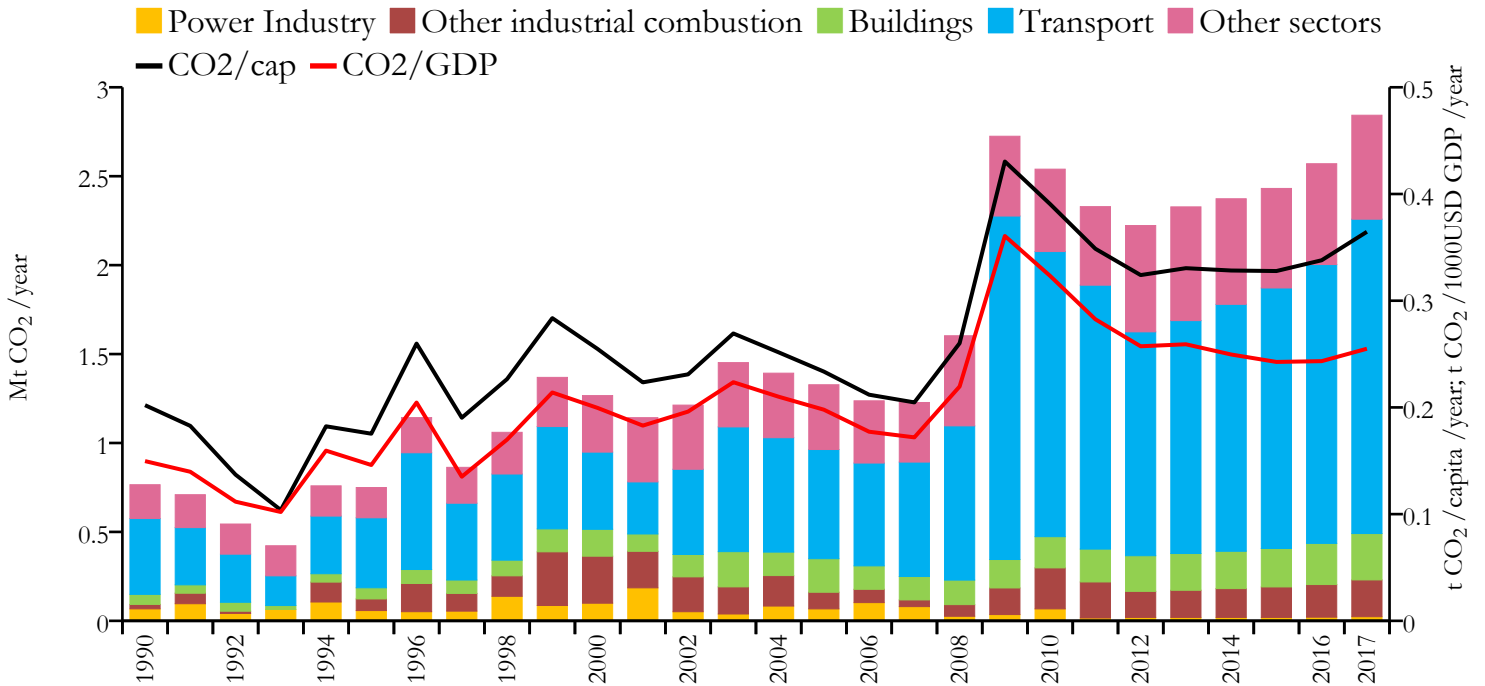


### 2017 vs 2005





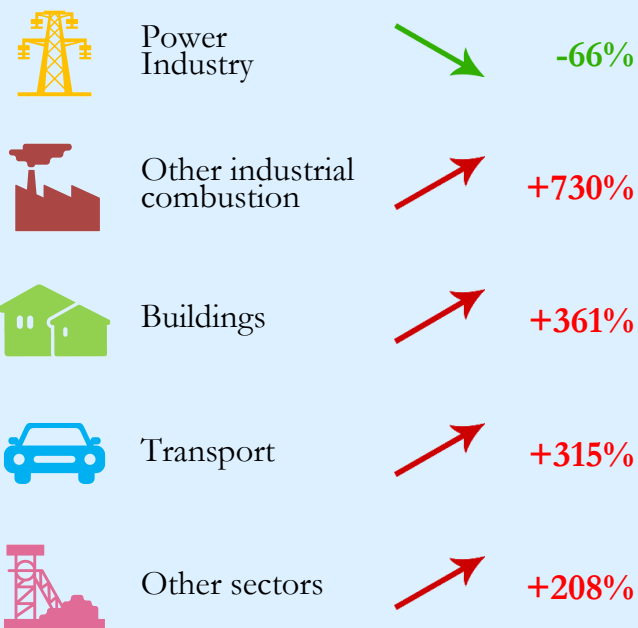
## Fossil CO<sub>2</sub> emissions by sector



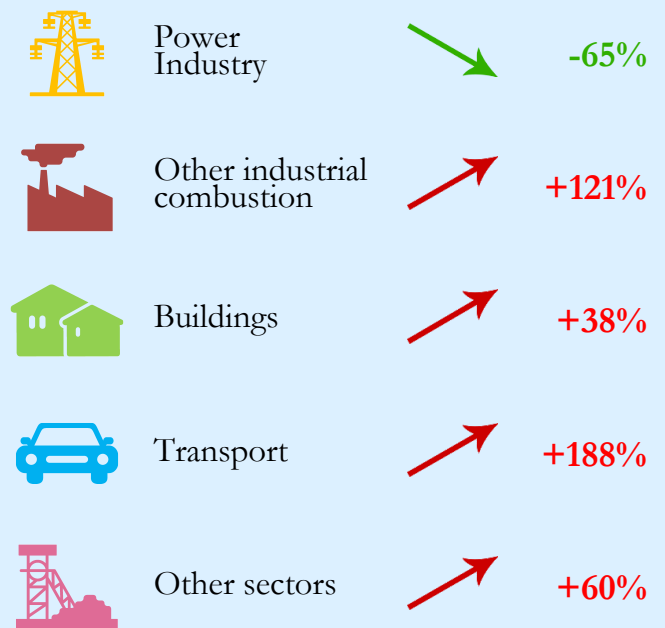
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	2.843	0.365	0.255	7797694
2005	1.327	0.234	0.198	5683268
1990	0.765	0.202	0.150	3786940



### 2017 vs 1990



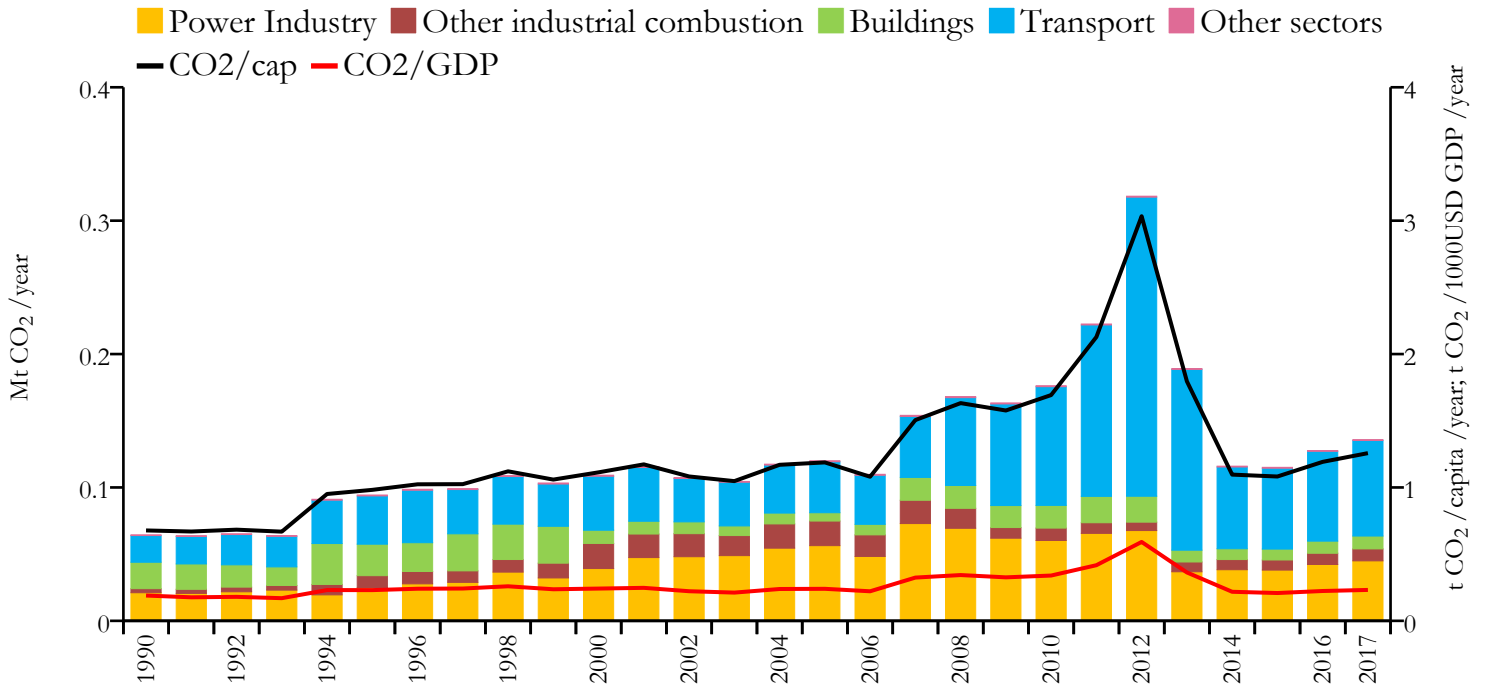
### 2017 vs 2005



# Tonga



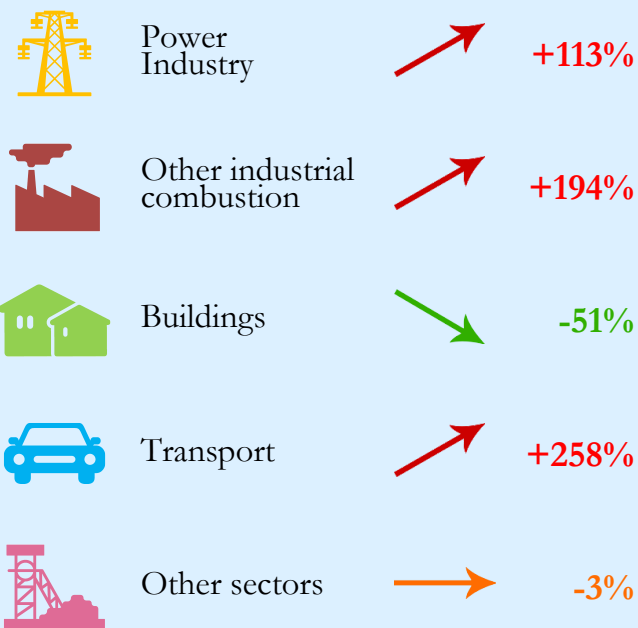
## Fossil CO<sub>2</sub> emissions by sector



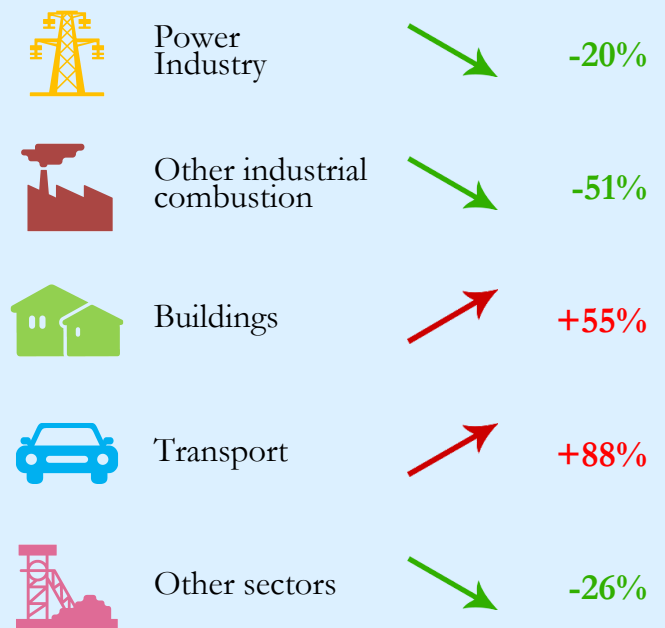
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.136	1.257	0.232	108020
2005	0.120	1.188	0.240	101041
1990	0.064	0.678	0.190	95153



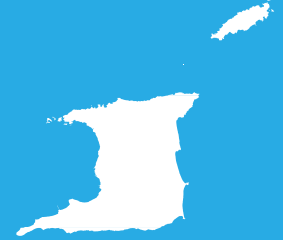
### 2017 vs 1990



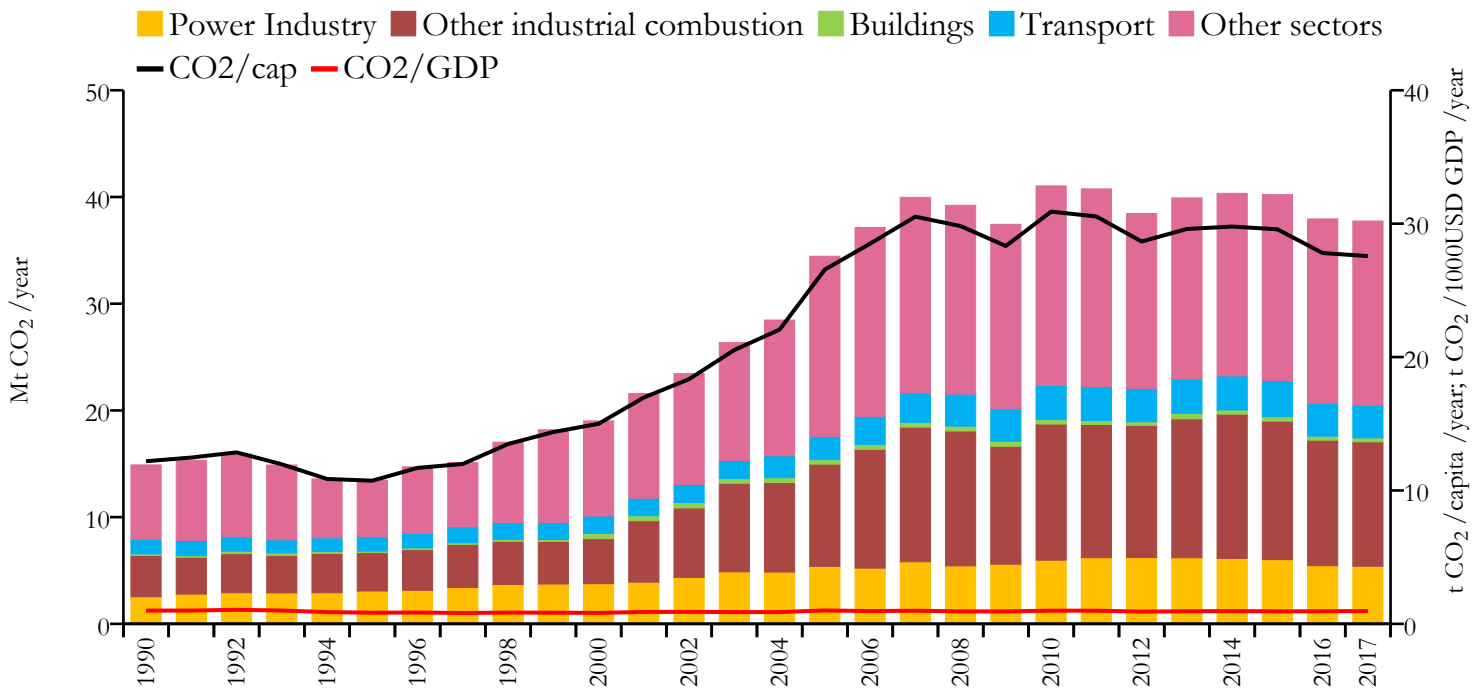
### 2017 vs 2005



# Trinidad and Tobago



## Fossil CO<sub>2</sub> emissions by sector



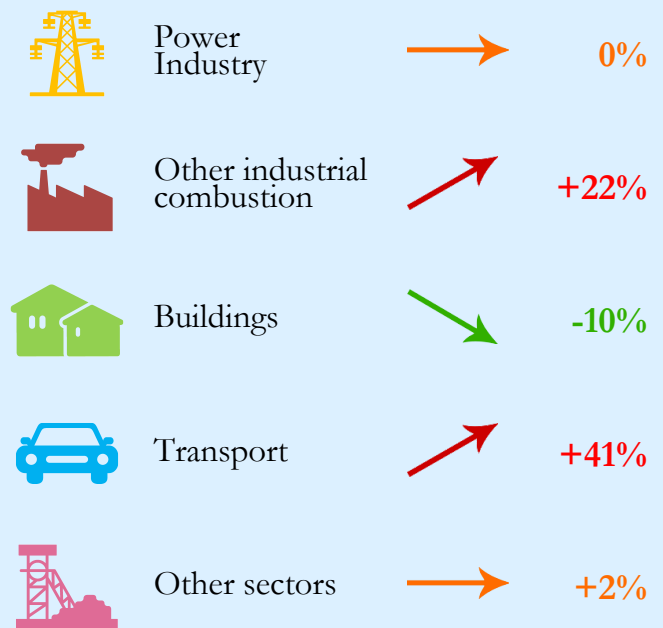
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	37.745	27.569	0.958	1369125
2005	34.450	26.562	1.005	1296934
1990	14.895	12.190	0.995	1221900



### 2017 vs 1990

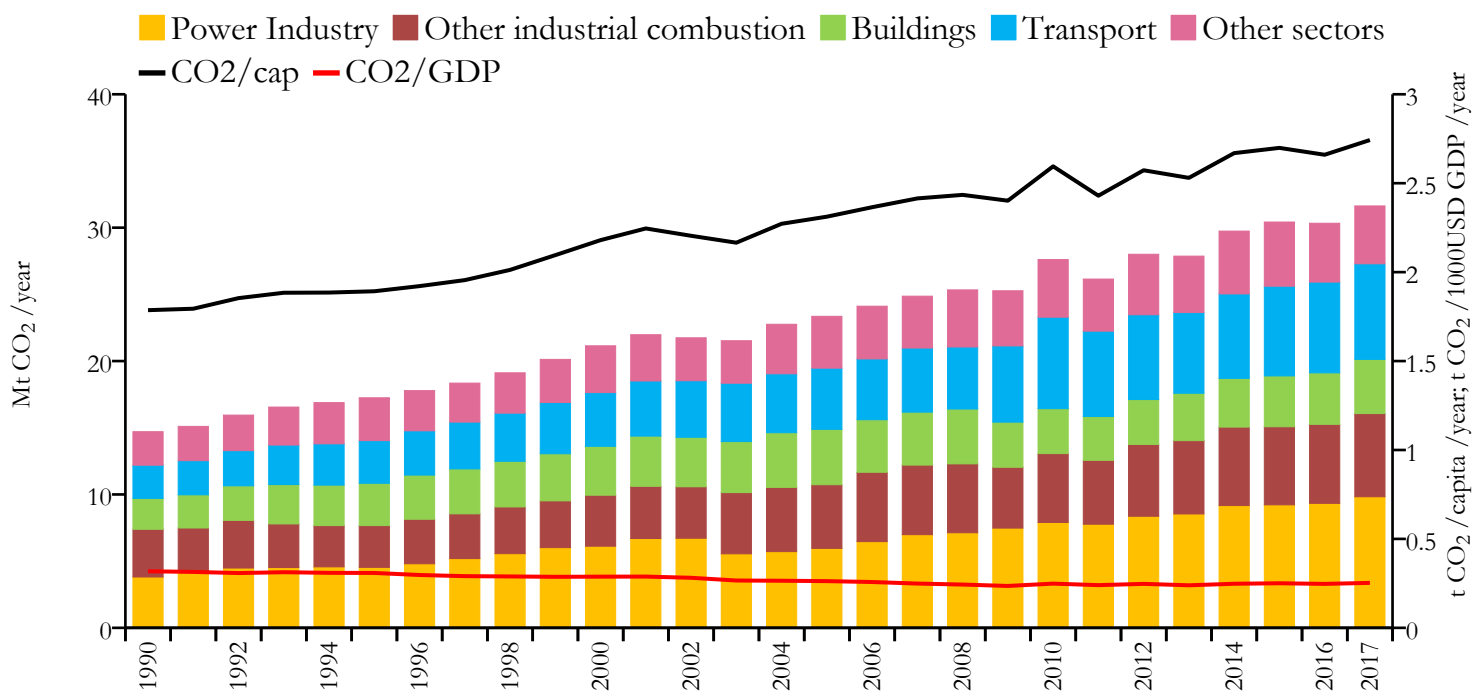


### 2017 vs 2005

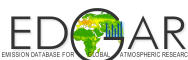




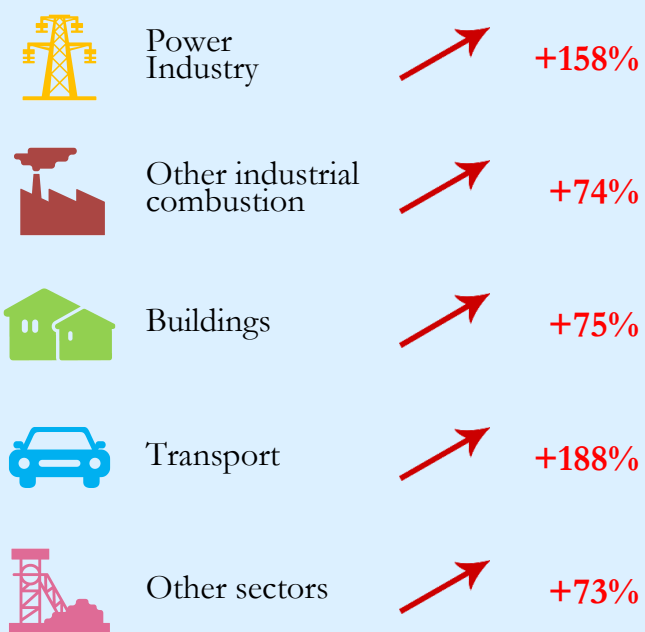
## Fossil CO<sub>2</sub> emissions by sector



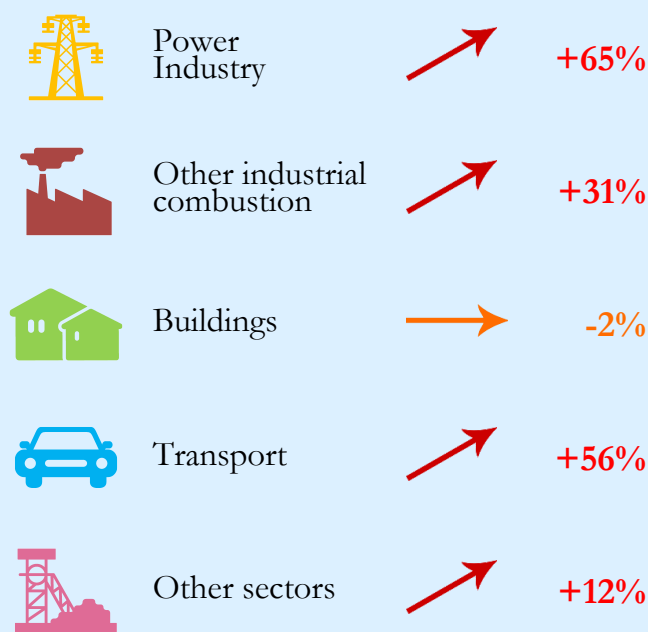
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	31.630	2.743	0.253	11532127
2005	23.355	2.312	0.263	10102482
1990	14.705	1.786	0.318	8232797



### 2017 vs 1990

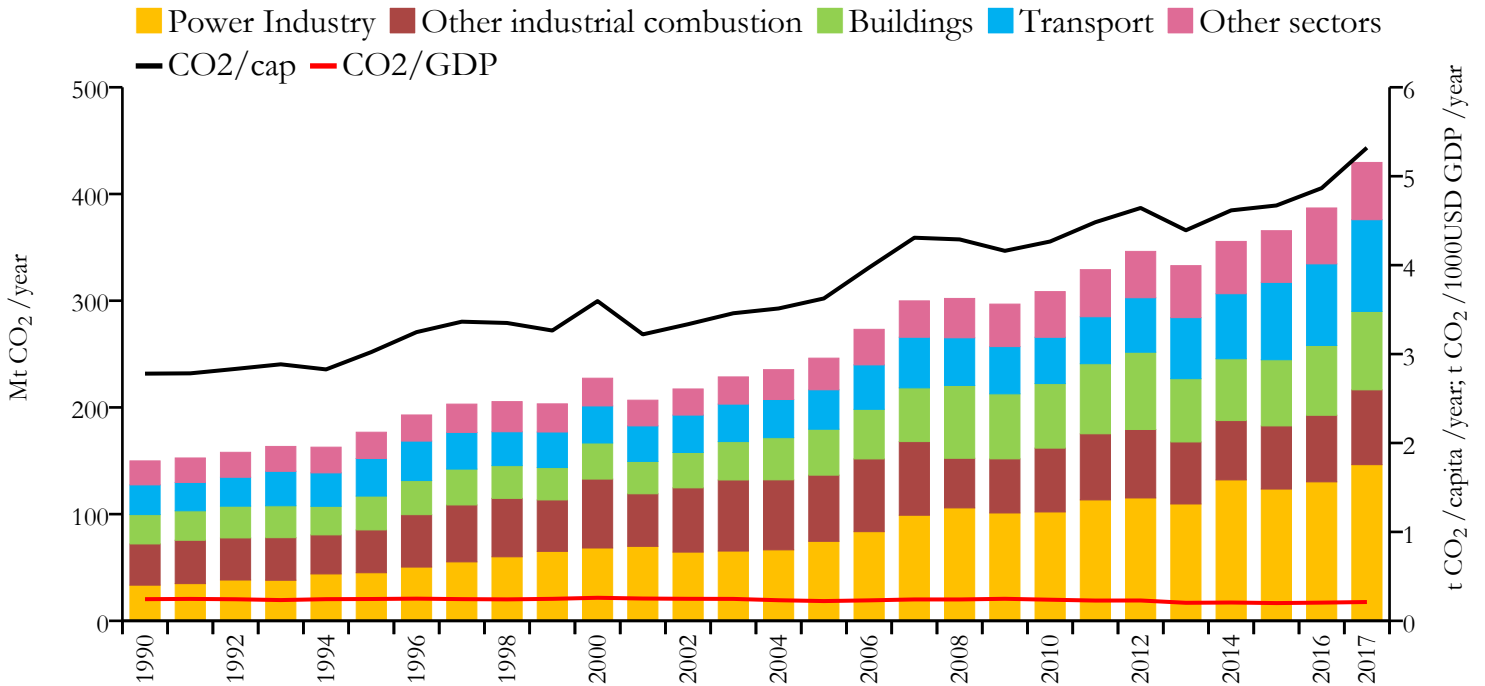


### 2017 vs 2005





## Fossil CO<sub>2</sub> emissions by sector



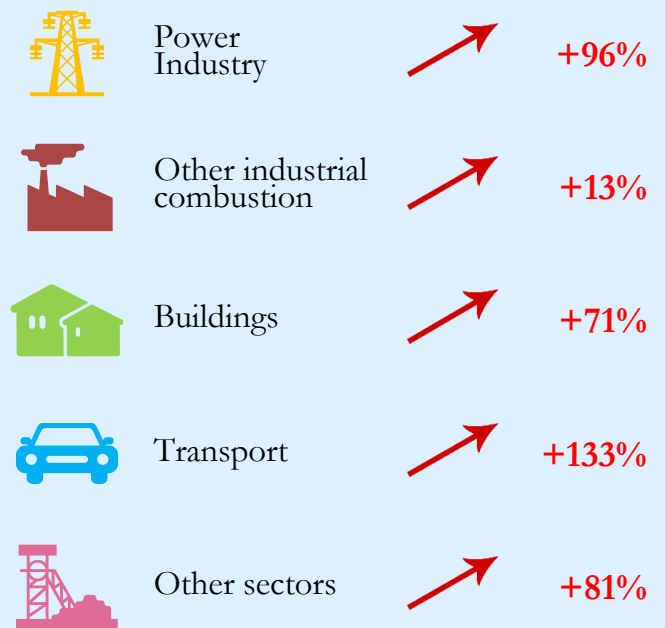
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	429.563	5.320	0.212	80745020
2005	246.169	3.625	0.222	67903406
1990	149.893	2.780	0.244	53921699



### 2017 vs 1990



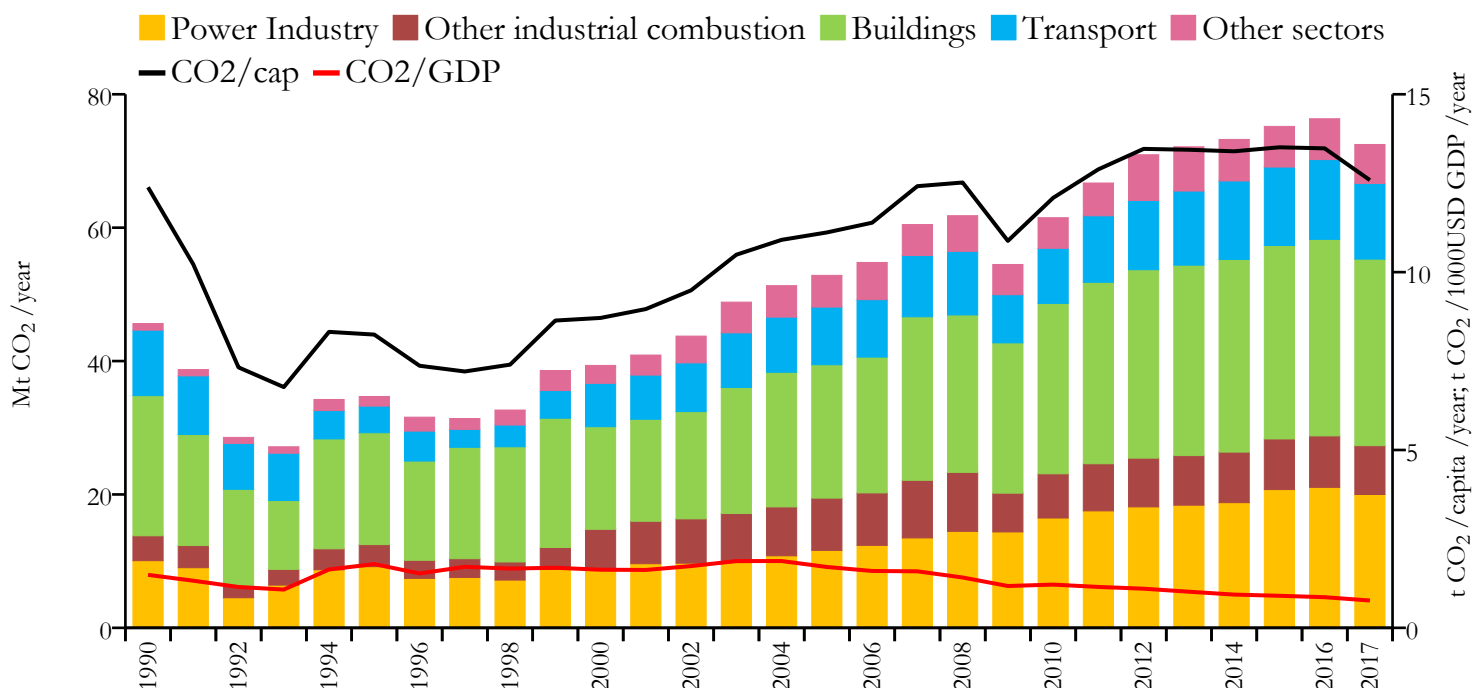
### 2017 vs 2005



# Turkmenistan



## Fossil CO<sub>2</sub> emissions by sector



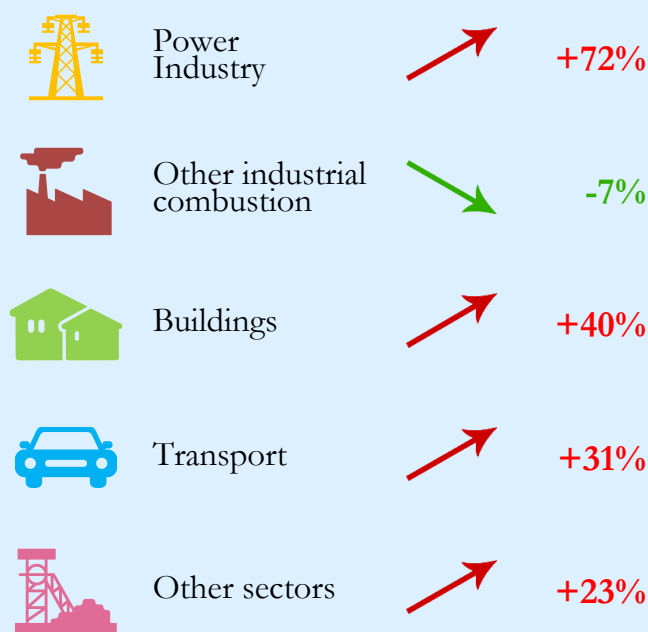
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	72.474	12.586	0.768	5758075
2005	52.851	11.116	1.711	4754641
1990	45.628	12.386	1.489	3683966



### 2017 vs 1990



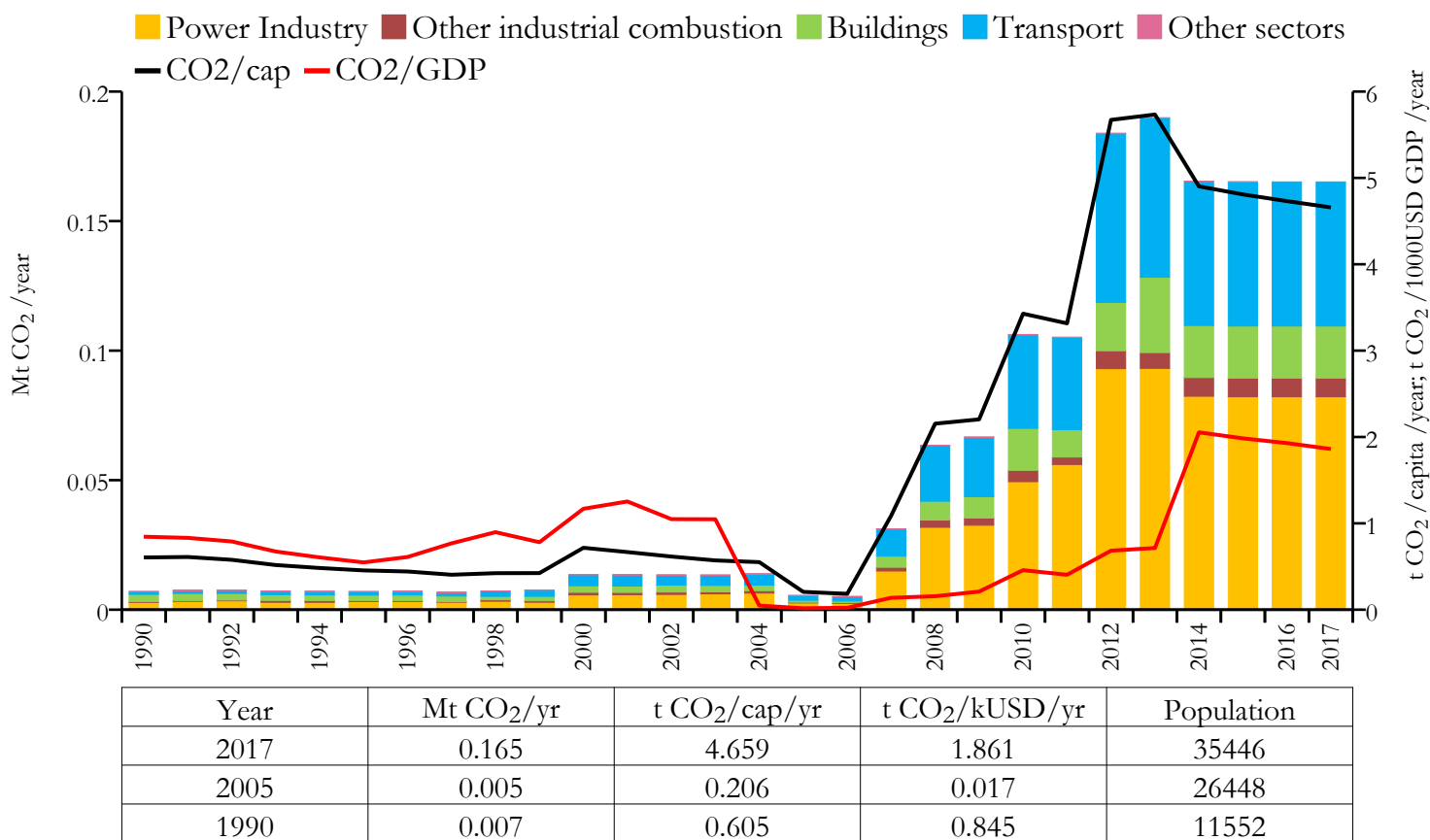
### 2017 vs 2005



# Turks and Caicos Islands



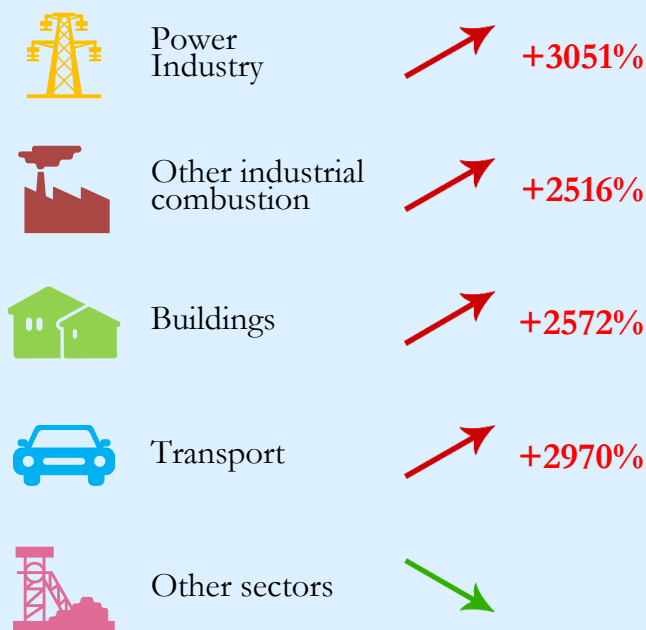
## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990



### 2017 vs 2005

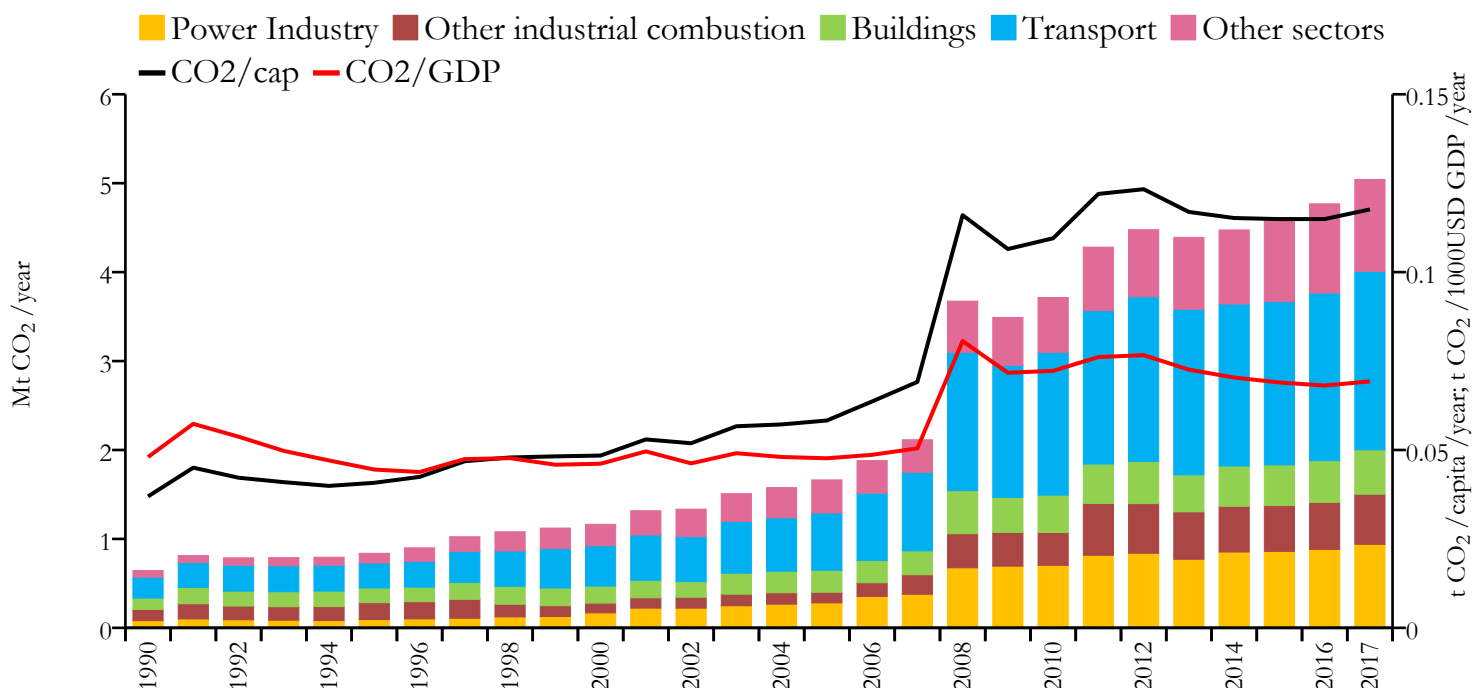




# Uganda



## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5.042	0.118	0.069	42862958
2005	1.664	0.058	0.048	28543940
1990	0.644	0.037	0.048	17438907



### 2017 vs 1990

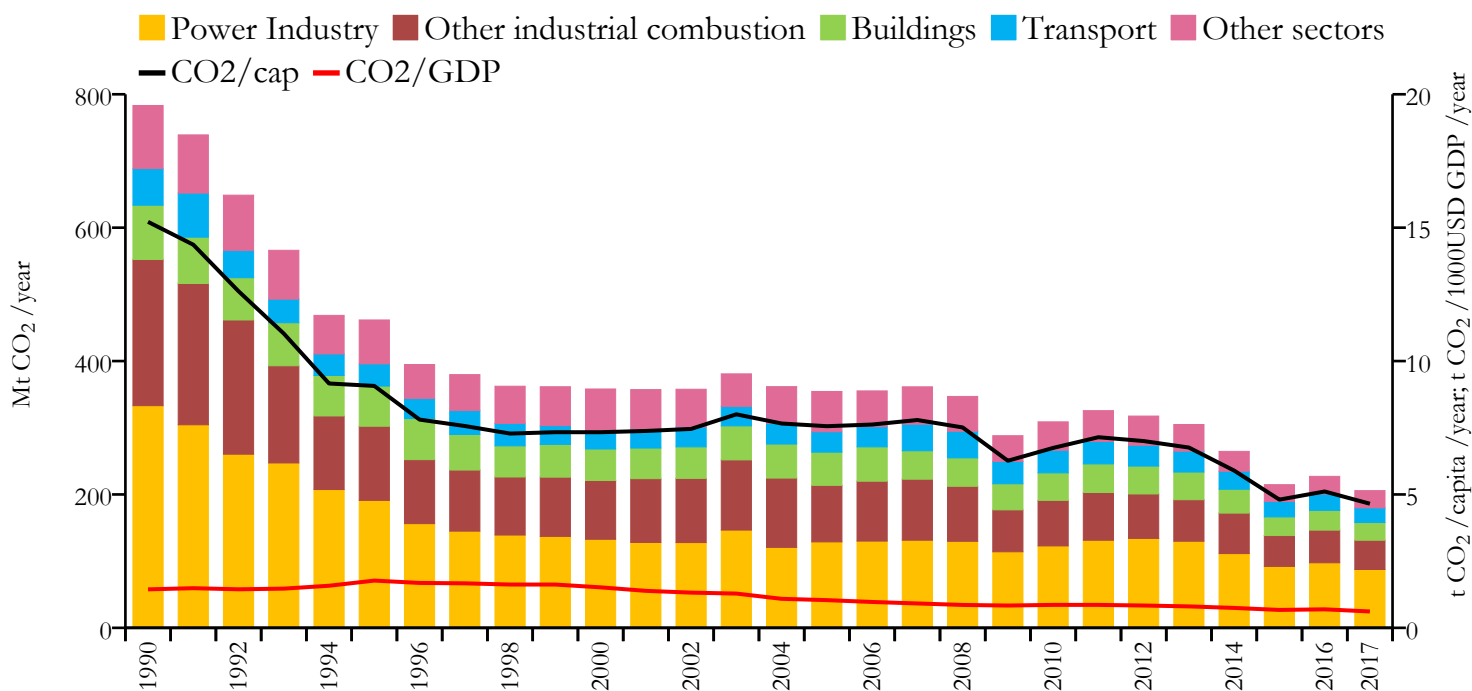


### 2017 vs 2005

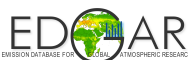




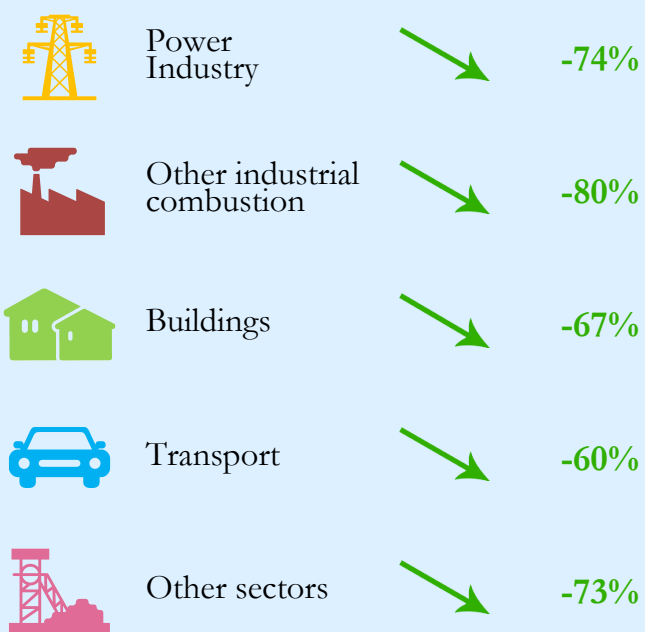
## Fossil CO<sub>2</sub> emissions by sector



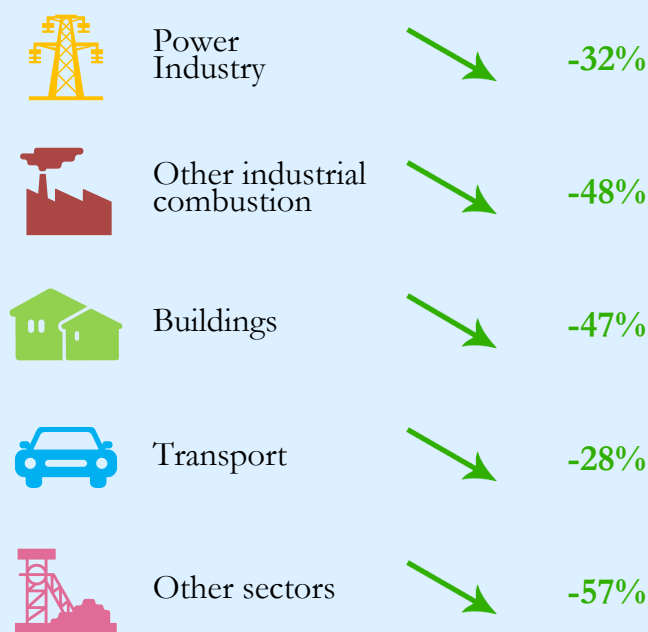
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	205.723	4.652	0.613	44222947
2005	354.429	7.558	1.038	46892163
1990	783.210	15.218	1.442	51464348



### 2017 vs 1990



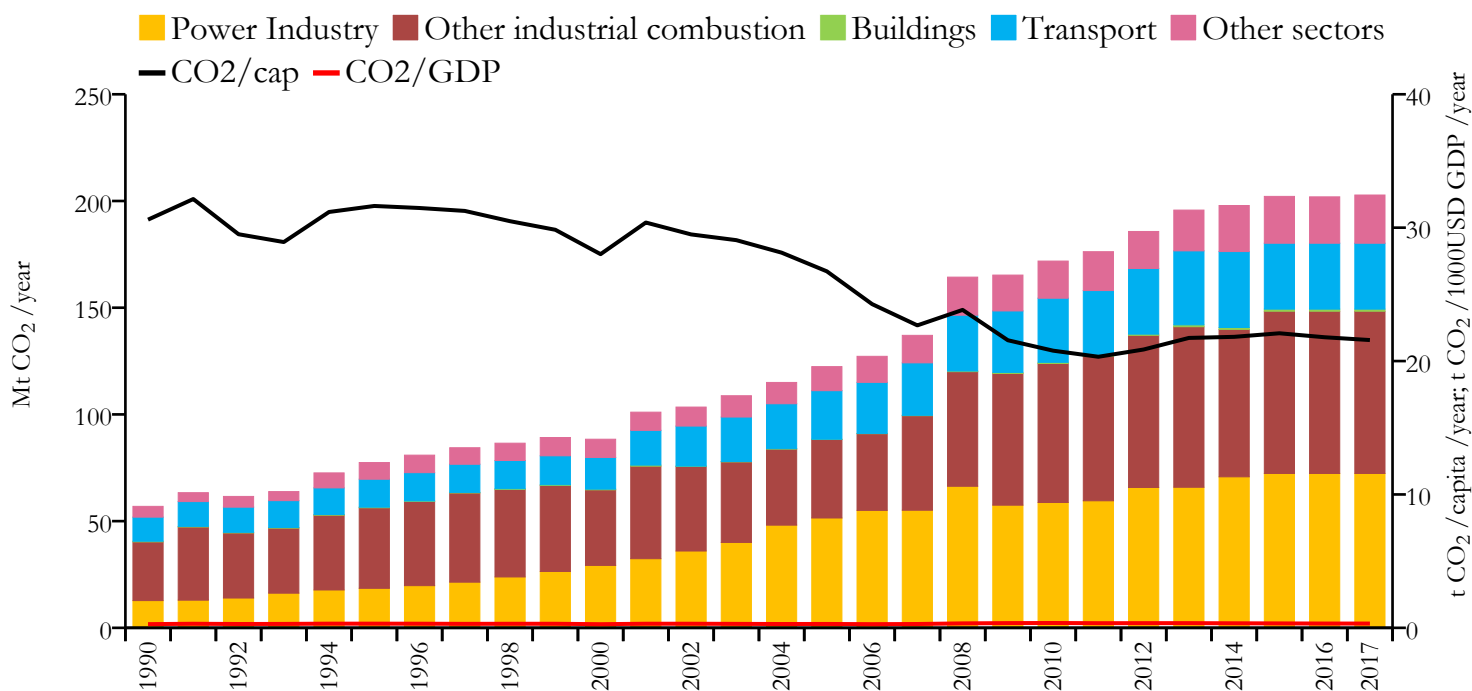
### 2017 vs 2005



# United Arab Emirates



## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	202.802	21.574	0.321	9400145
2005	122.395	26.726	0.291	4579562
1990	56.922	30.601	0.277	1860174



### 2017 vs 1990



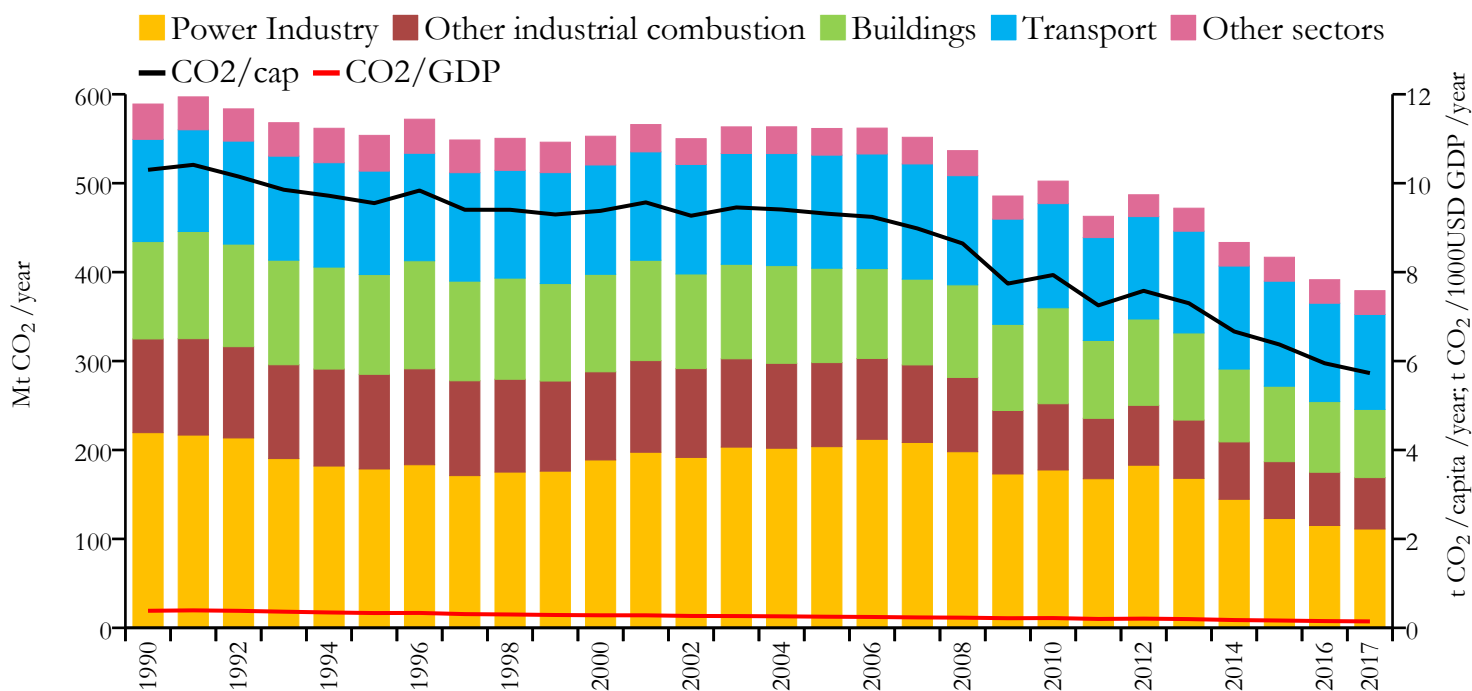
### 2017 vs 2005



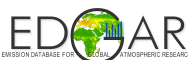
# United Kingdom



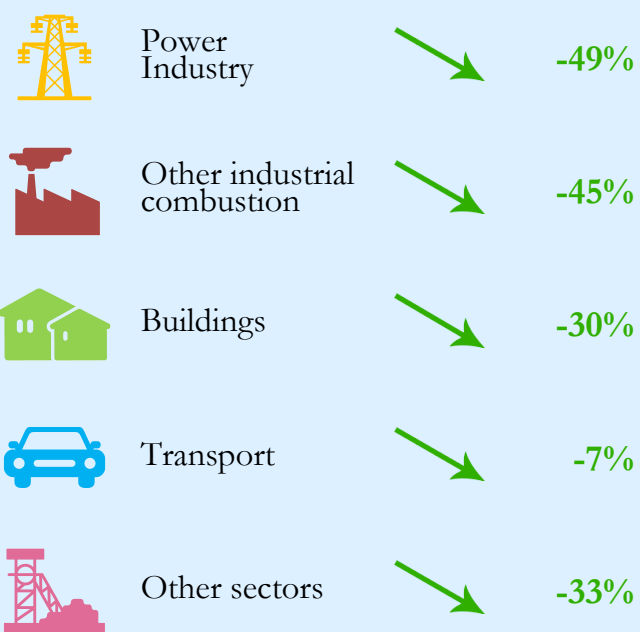
## Fossil CO<sub>2</sub> emissions by sector



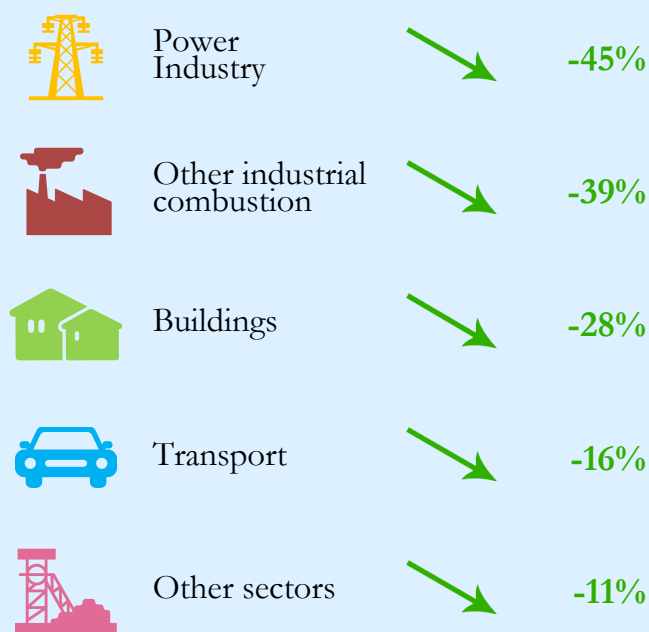
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	379.150	5.729	0.144	66181585
2005	561.543	9.315	0.250	60286754
1990	589.038	10.301	0.384	57183331



### 2017 vs 1990



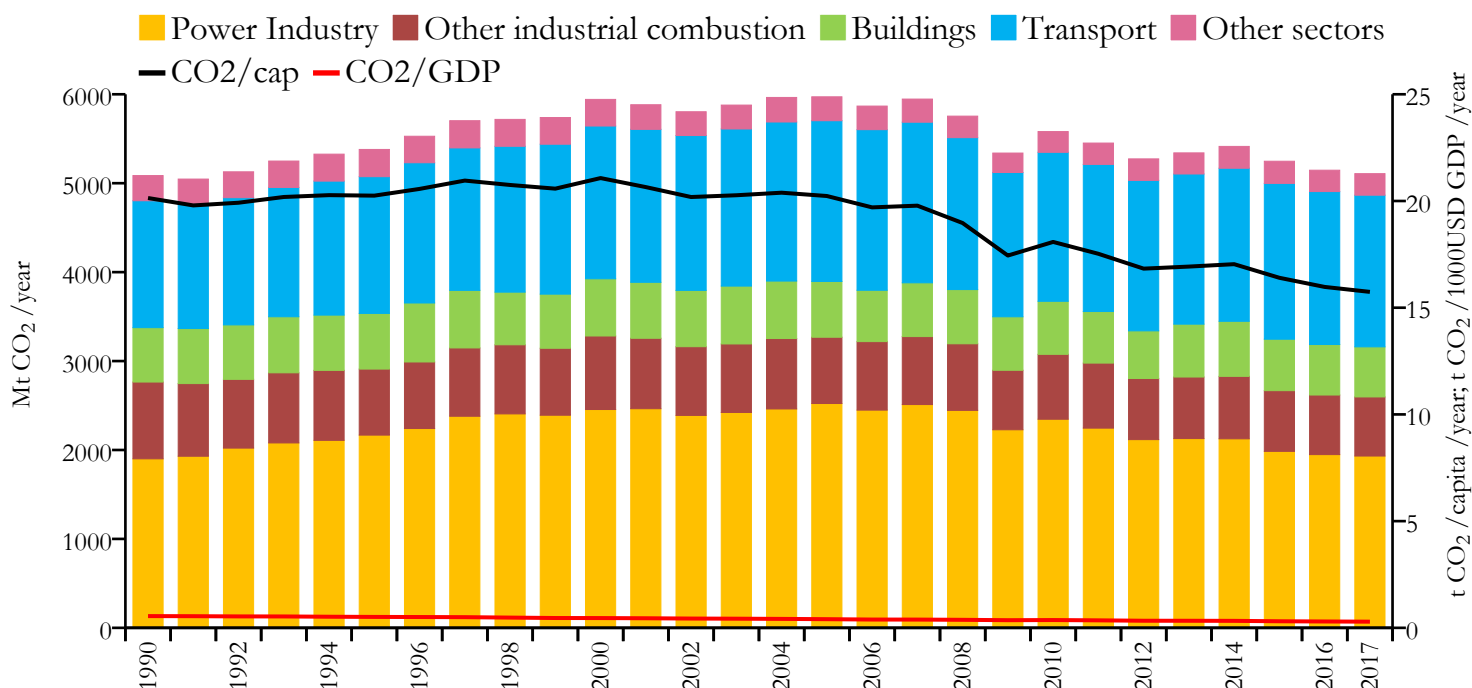
### 2017 vs 2005



# United States



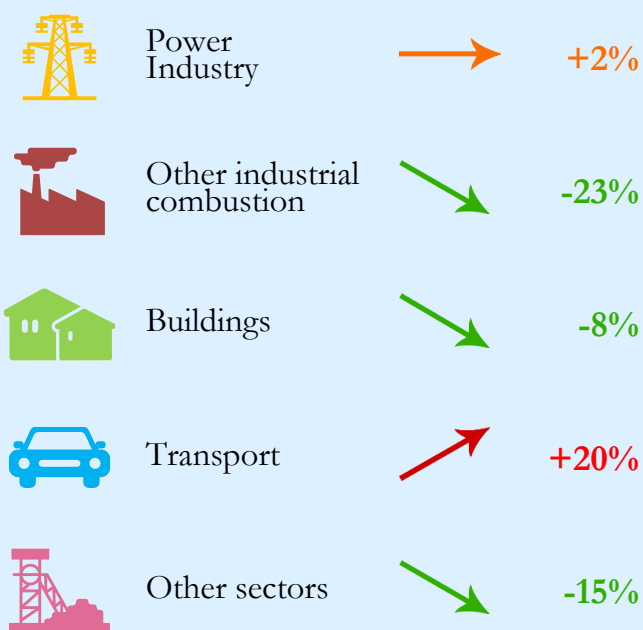
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	5107.393	15.741	0.289	324459463
2005	5971.571	20.234	0.406	295129501
1990	5085.897	20.140	0.550	252529950



### 2017 vs 1990

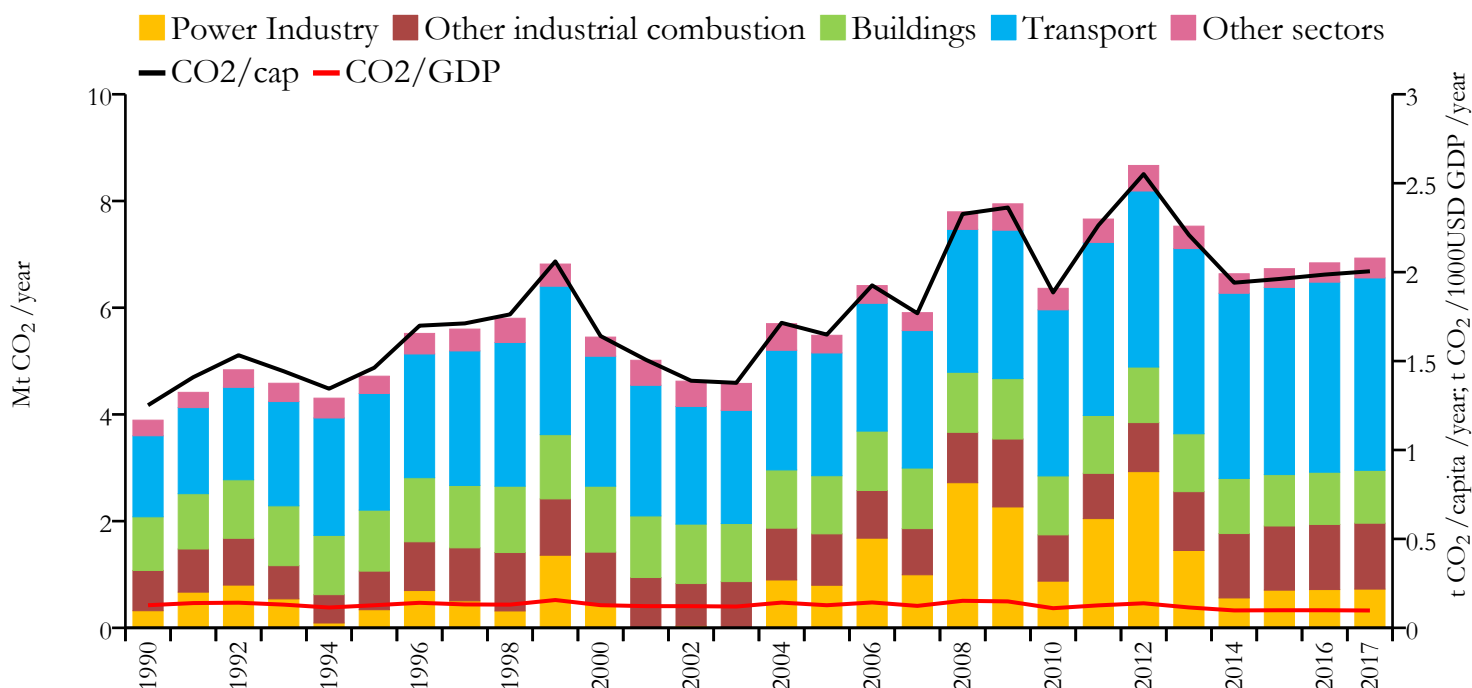


### 2017 vs 2005





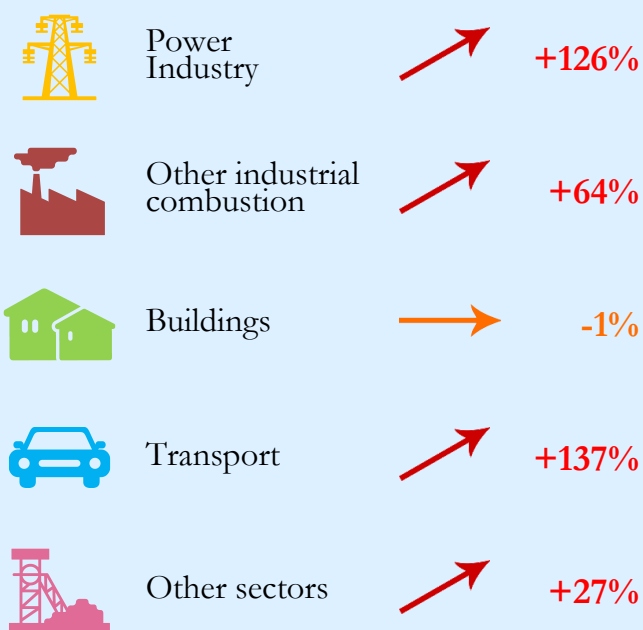
## Fossil CO<sub>2</sub> emissions by sector



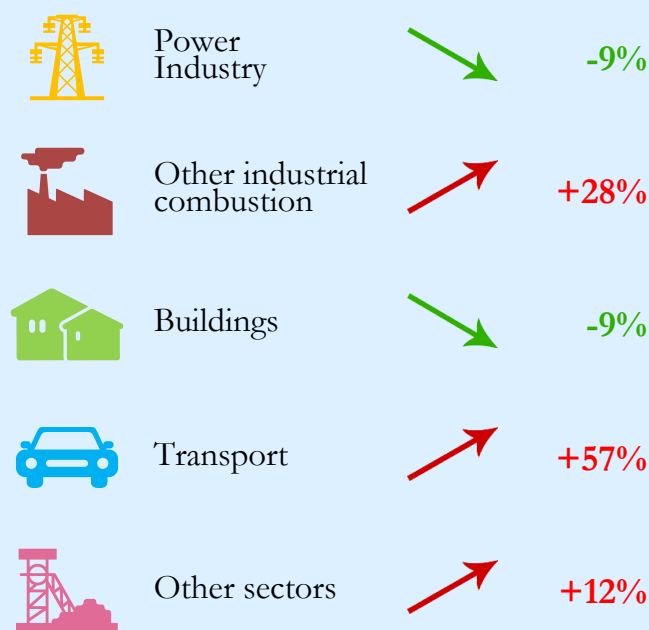
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	6.930	2.005	0.098	3456750
2005	5.483	1.649	0.127	3325612
1990	3.893	1.252	0.127	3109989



### 2017 vs 1990

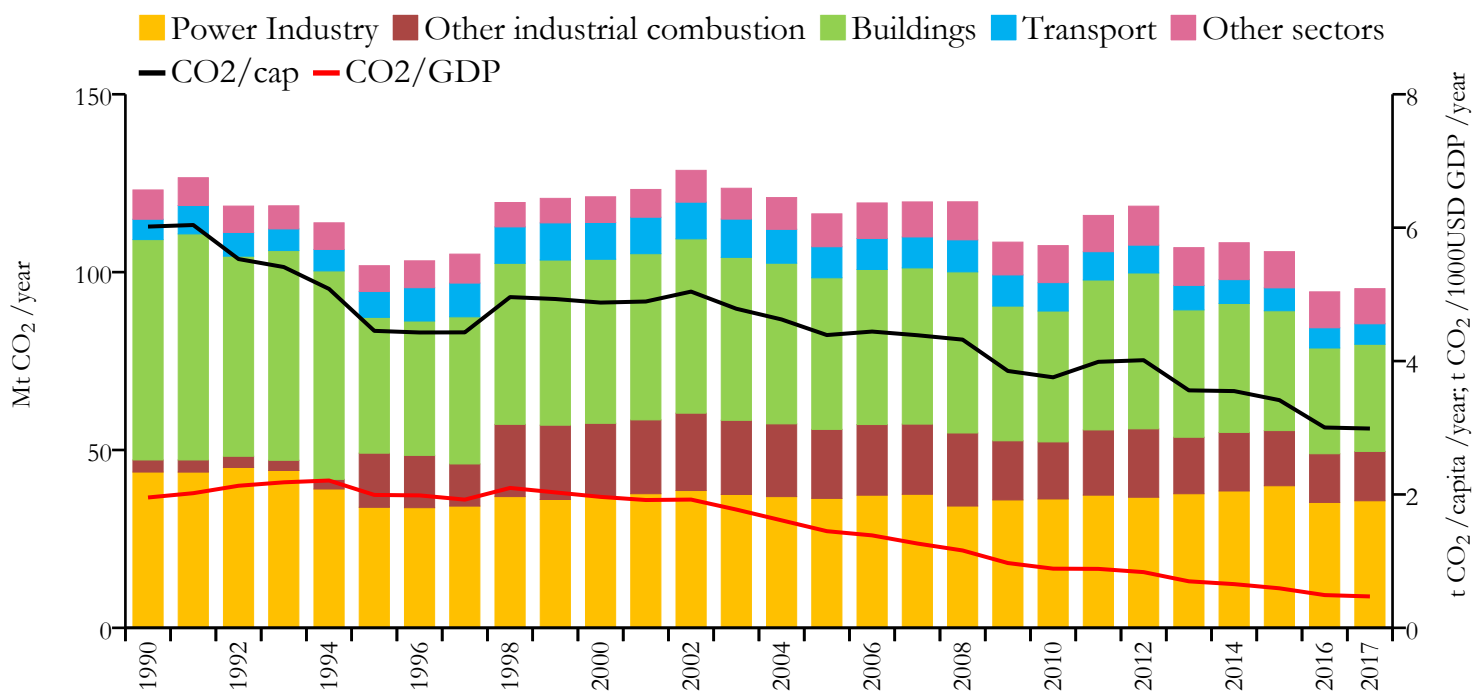


### 2017 vs 2005

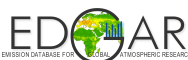




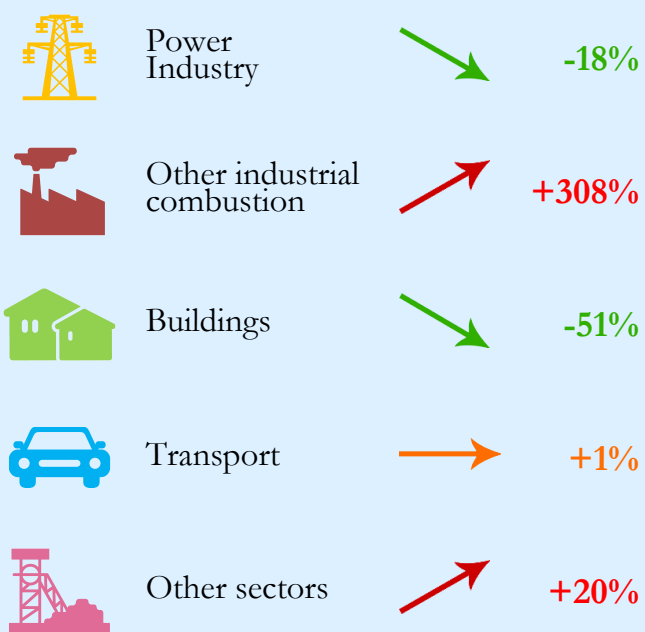
## Fossil CO<sub>2</sub> emissions by sector



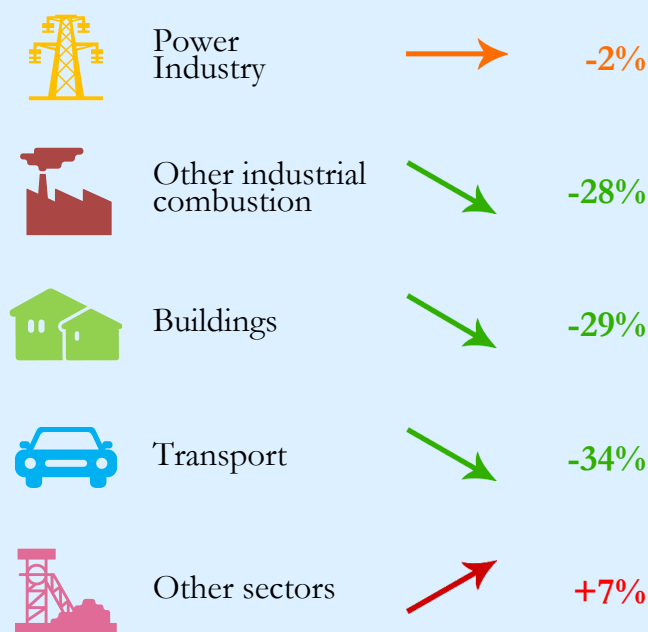
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	95.350	2.988	0.471	31910641
2005	116.386	4.390	1.449	26512184
1990	123.106	6.016	1.954	20462463



### 2017 vs 1990

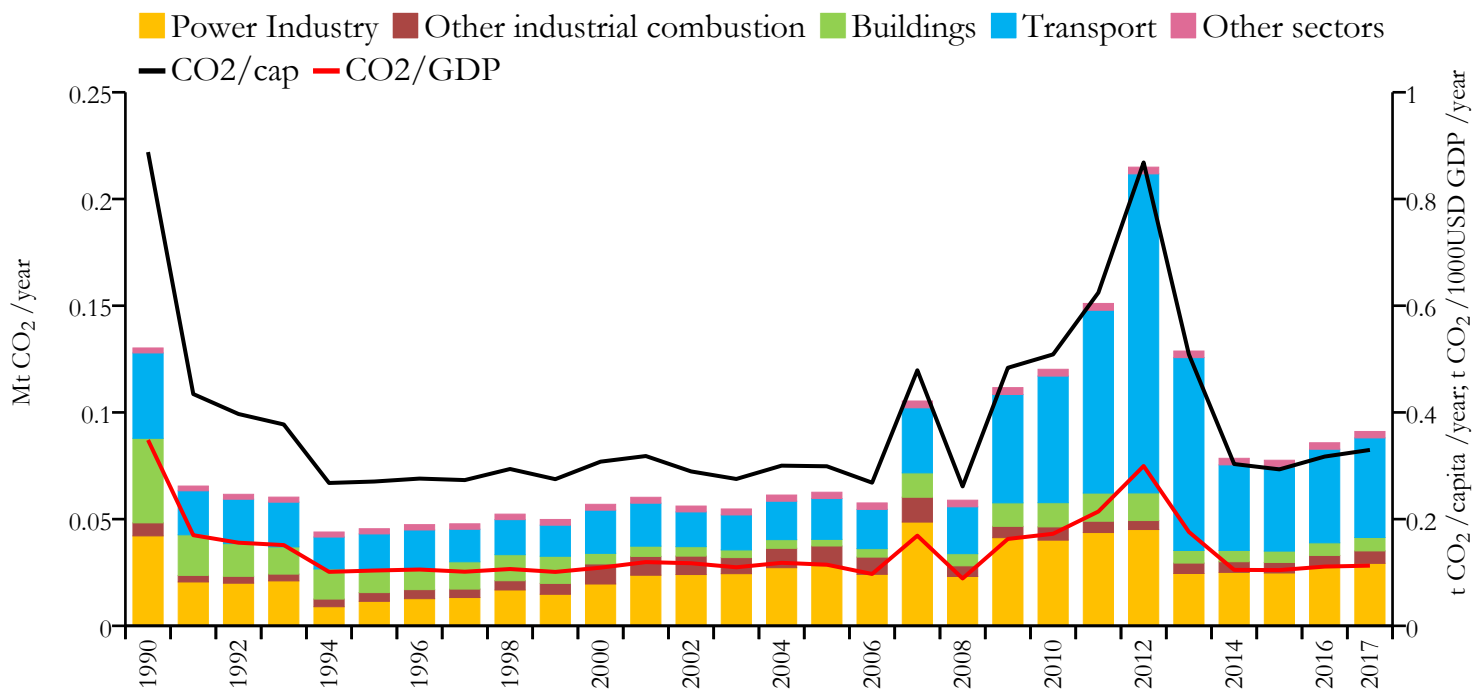


### 2017 vs 2005





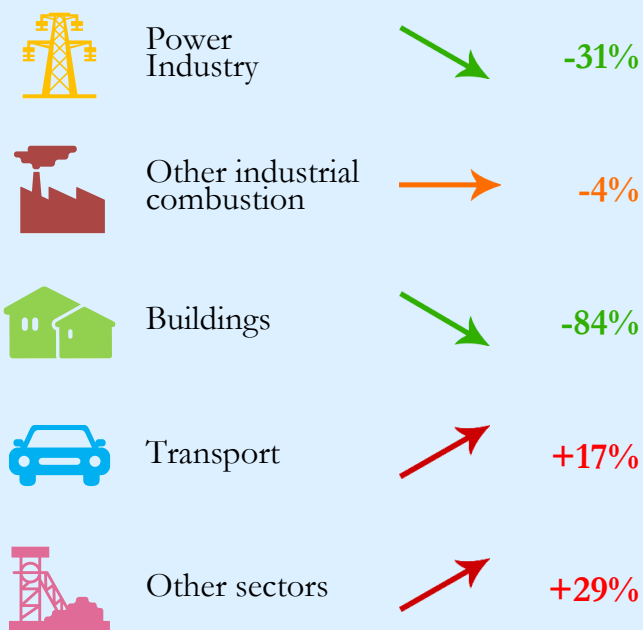
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.091	0.330	0.113	276244
2005	0.063	0.299	0.115	209370
1990	0.130	0.888	0.348	146634



### 2017 vs 1990



### 2017 vs 2005

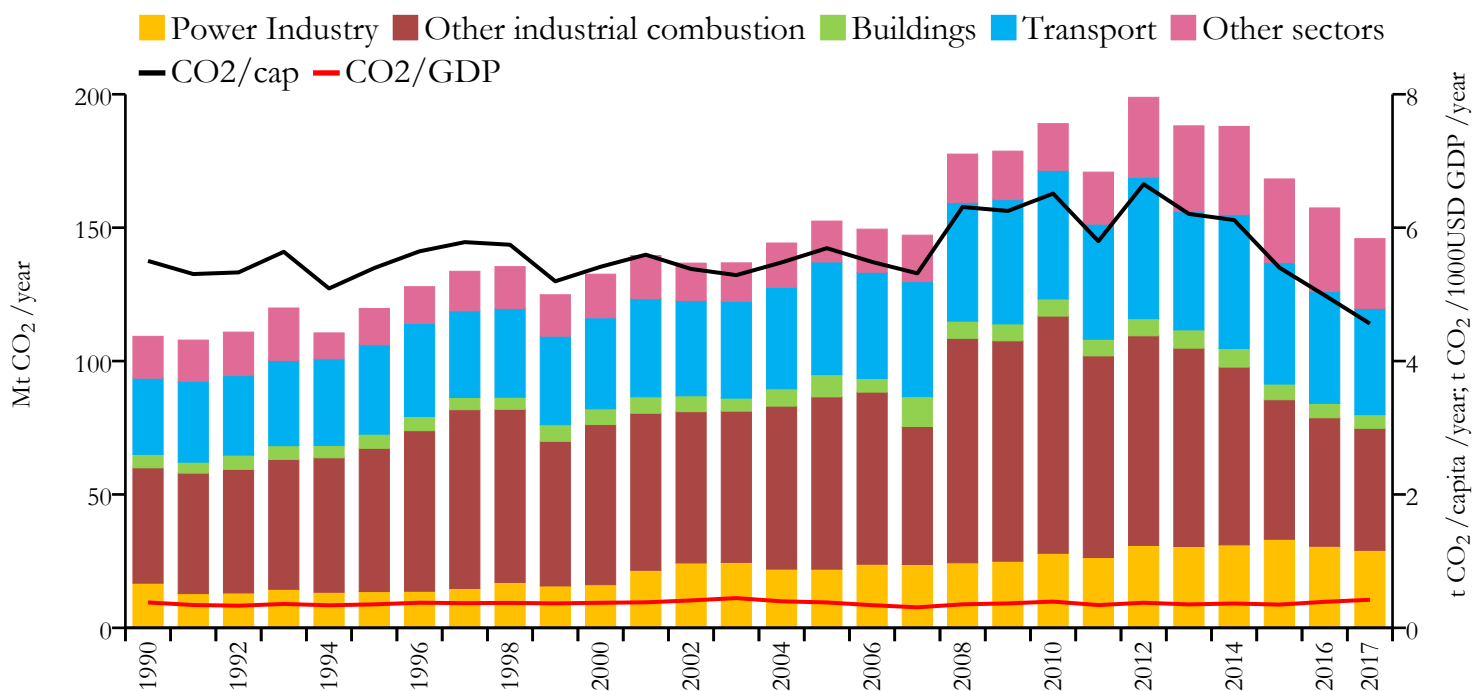




# Venezuela



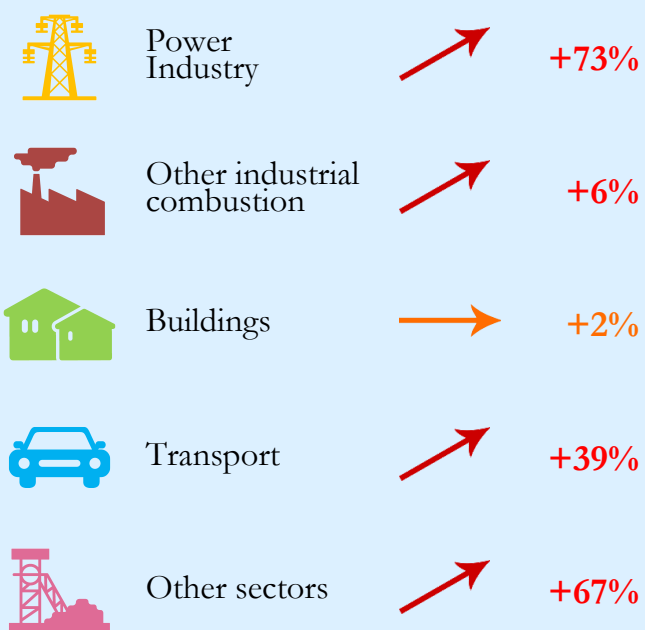
## Fossil CO<sub>2</sub> emissions by sector



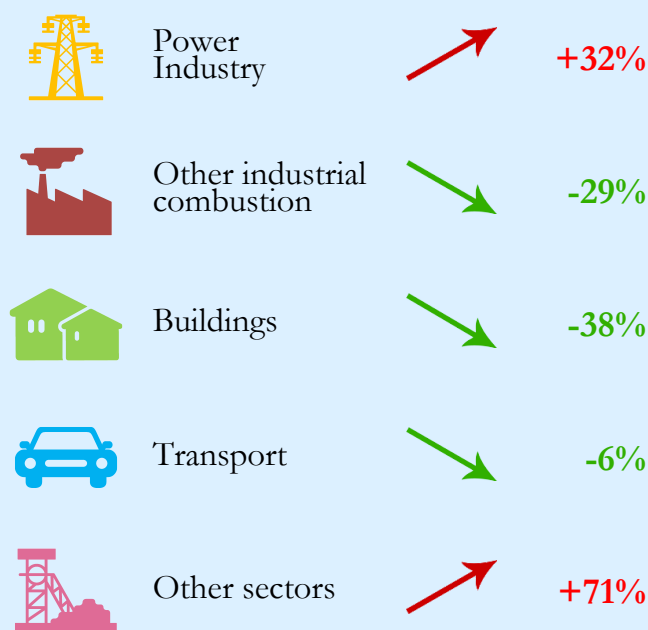
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	145.877	4.562	0.421	31977065
2005	152.464	5.692	0.381	26784161
1990	109.268	5.501	0.381	19861956



### 2017 vs 1990

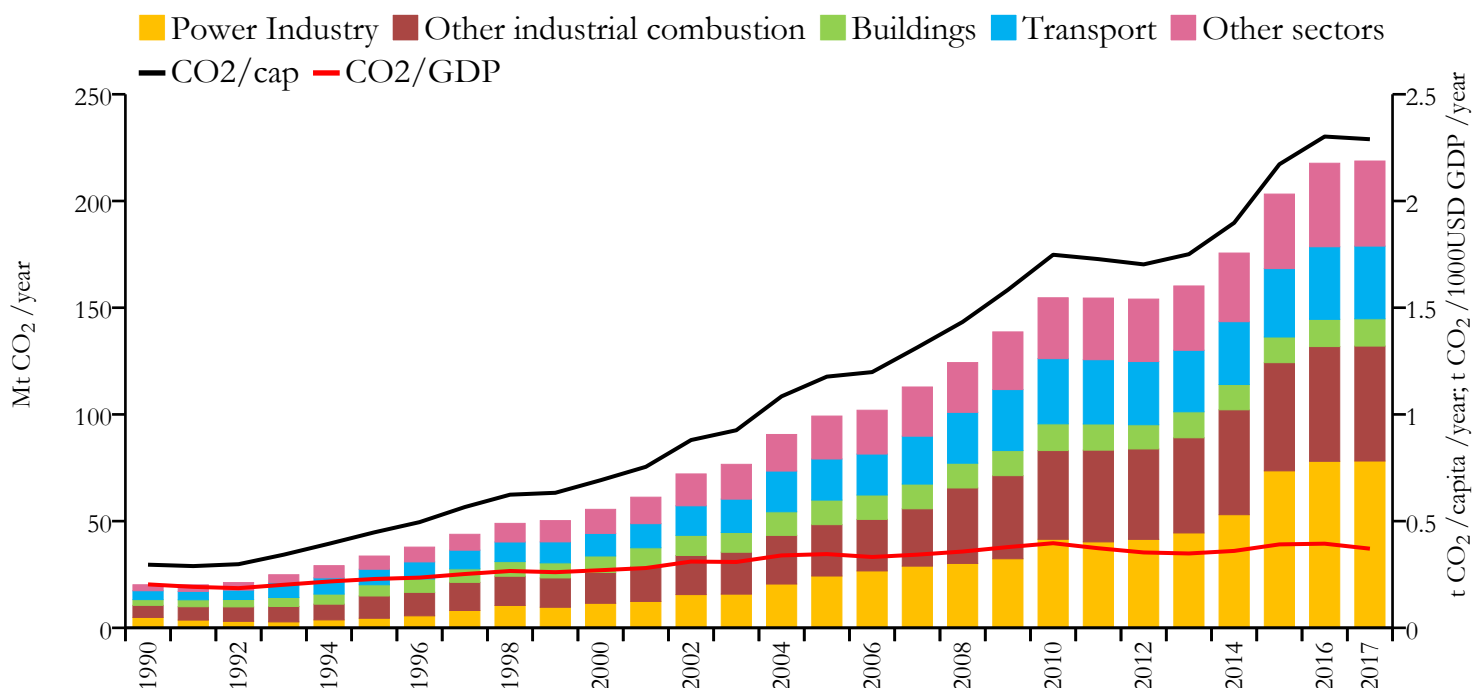


### 2017 vs 2005

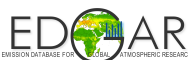




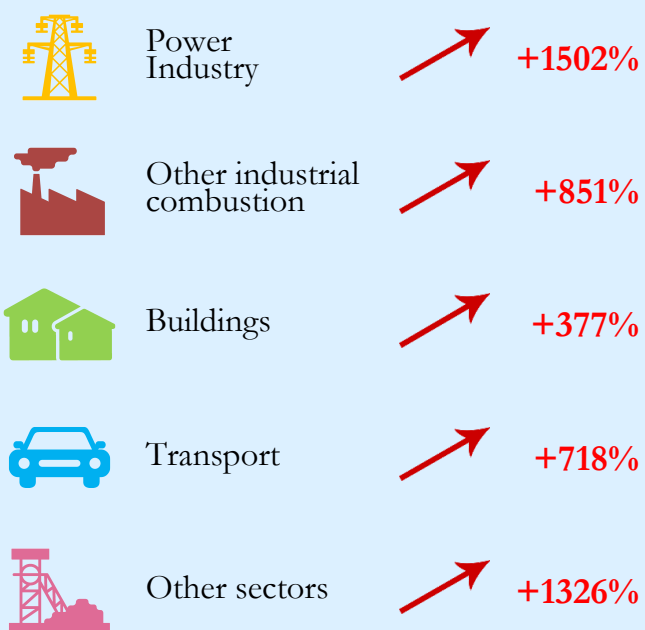
## Fossil CO<sub>2</sub> emissions by sector



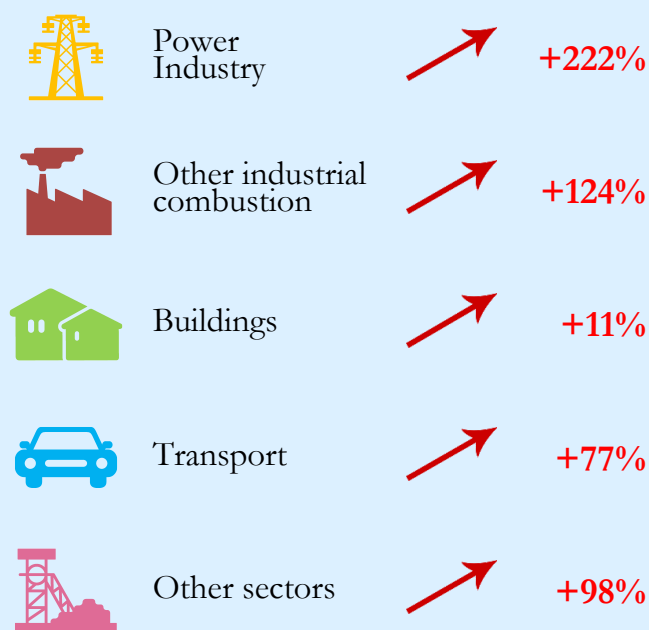
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	218.729	2.289	0.371	95540800
2005	99.231	1.177	0.346	84308843
1990	20.182	0.296	0.204	68209605



### 2017 vs 1990



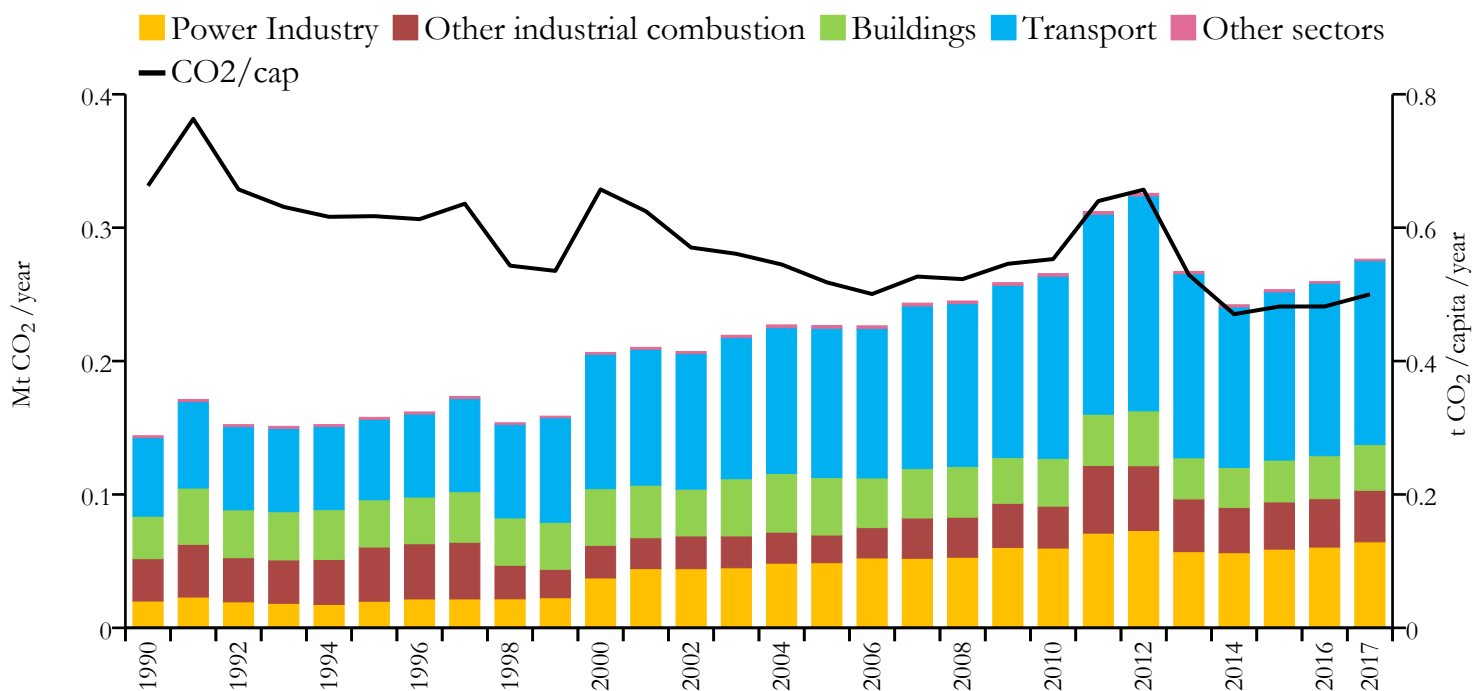
### 2017 vs 2005



# Western Sahara



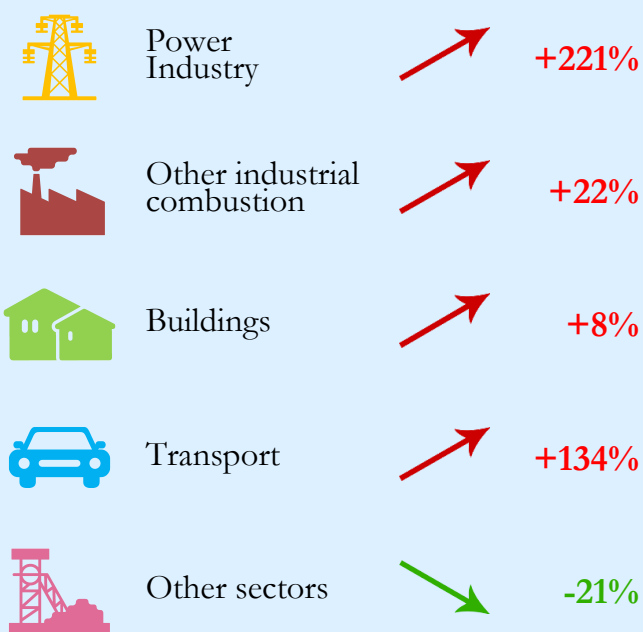
## Fossil CO<sub>2</sub> emissions by sector



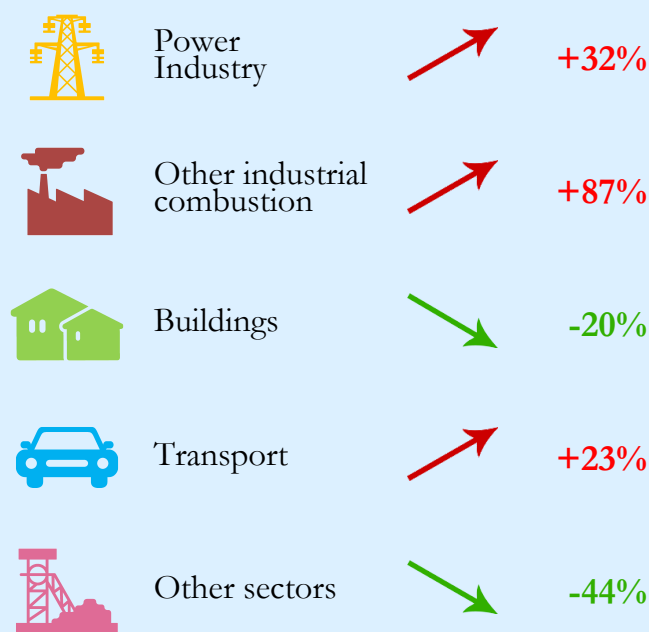
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	0.276	0.500	n/a	552628
2005	0.227	0.518	n/a	437515
1990	0.144	0.663	n/a	217258



### 2017 vs 1990



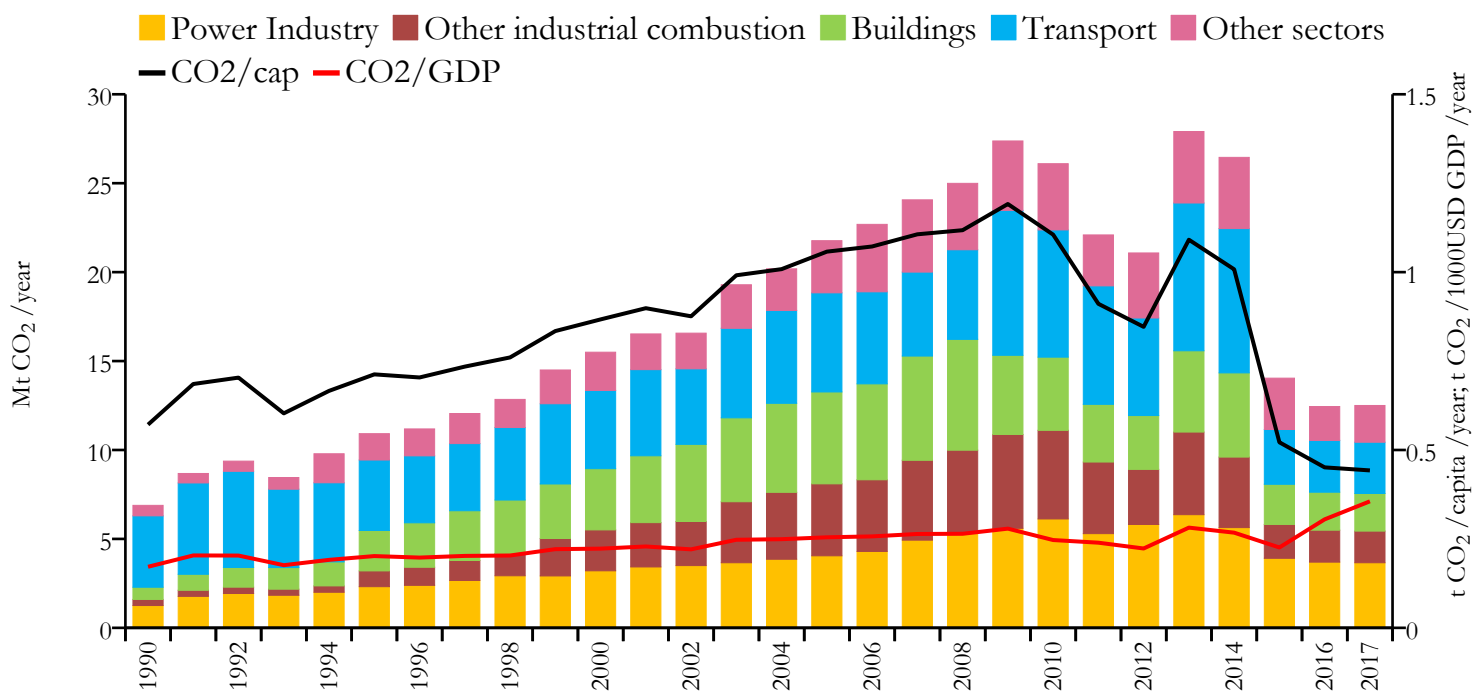
### 2017 vs 2005



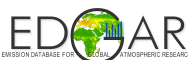
# Yemen



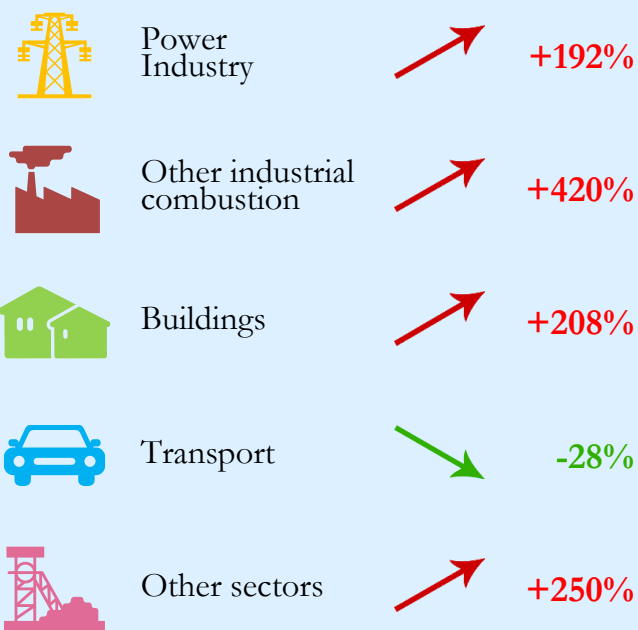
## Fossil CO<sub>2</sub> emissions by sector



Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	12.503	0.443	0.356	28250420
2005	21.768	1.058	0.255	20582927
1990	6.887	0.571	0.172	12057039



### 2017 vs 1990

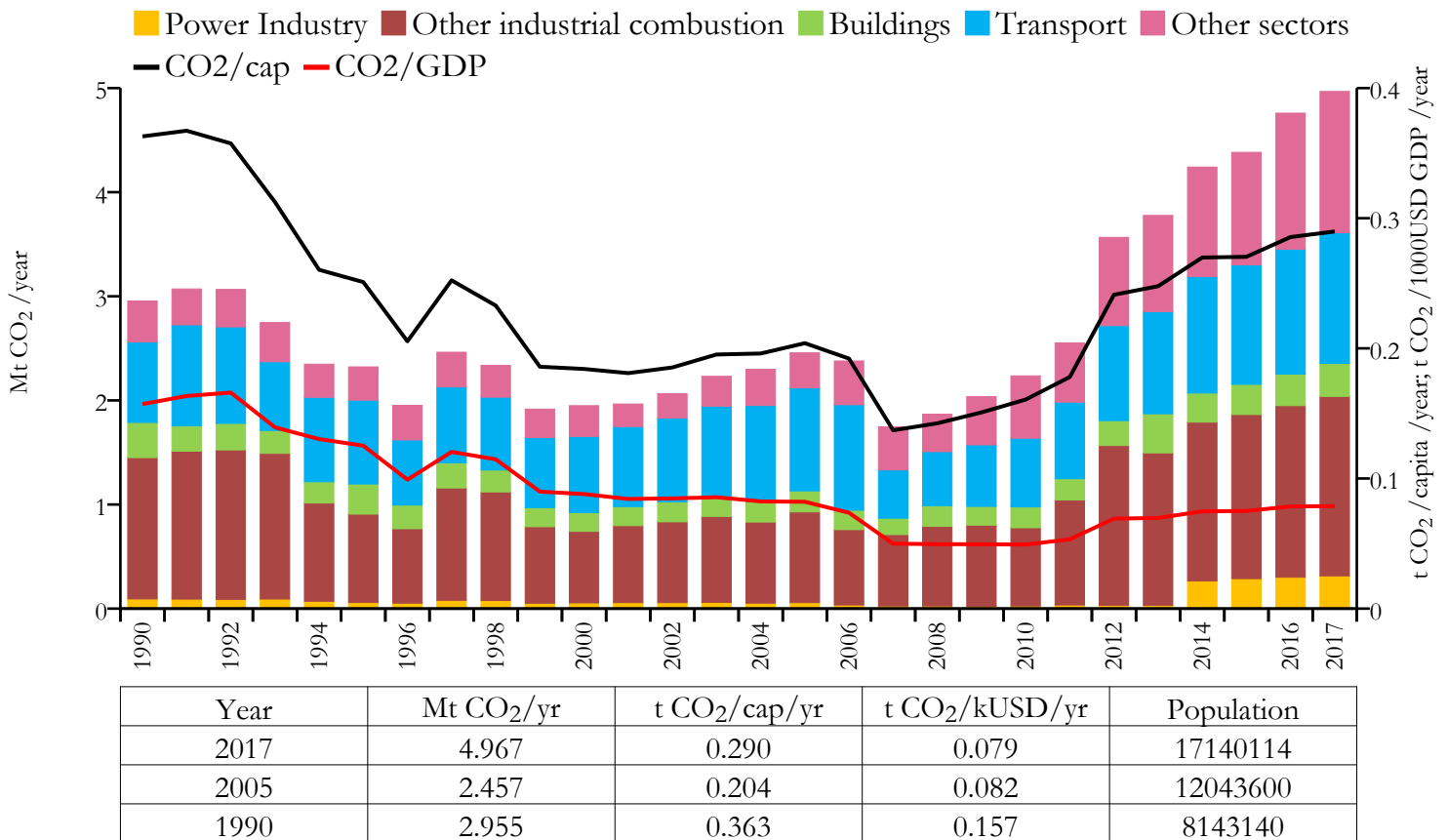


### 2017 vs 2005

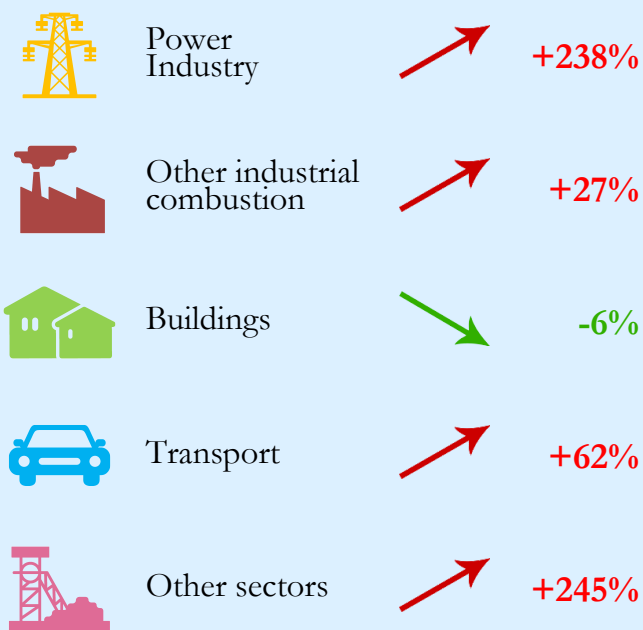




## Fossil CO<sub>2</sub> emissions by sector



### 2017 vs 1990

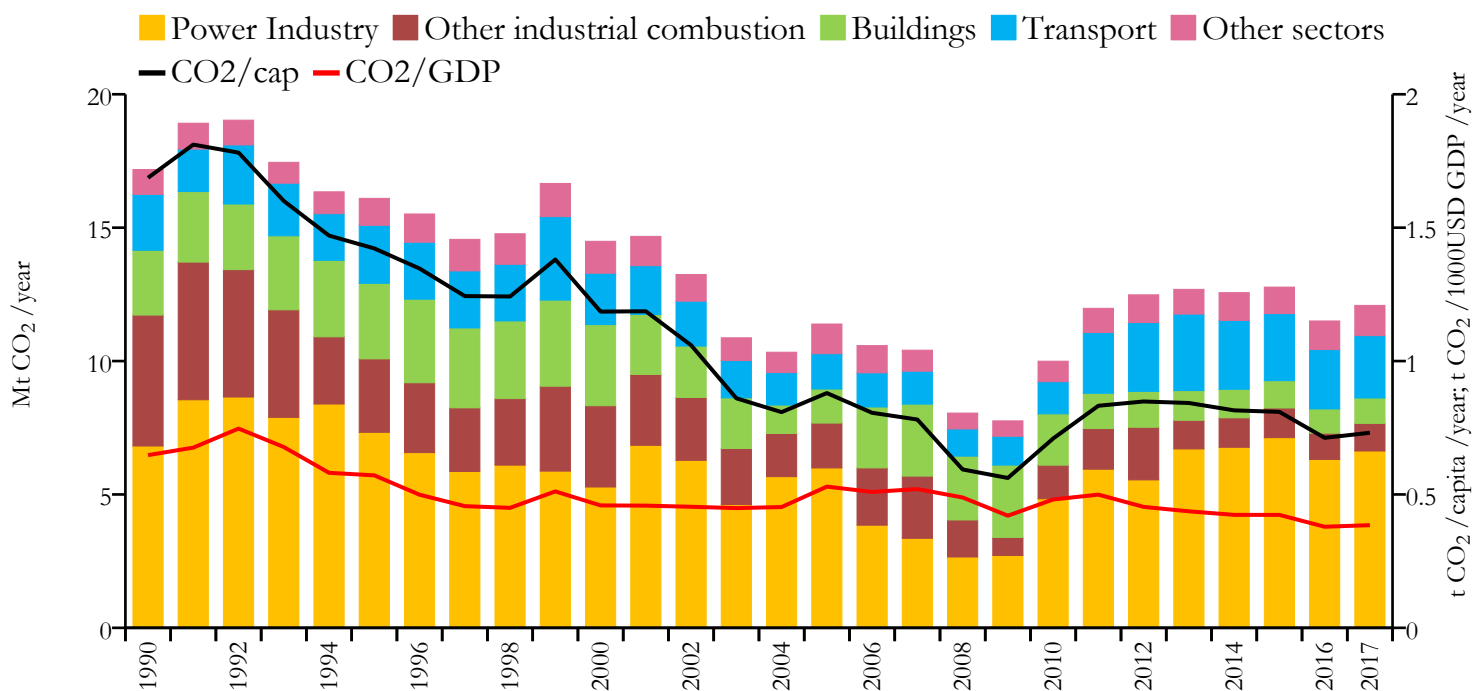


### 2017 vs 2005

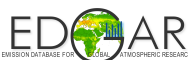




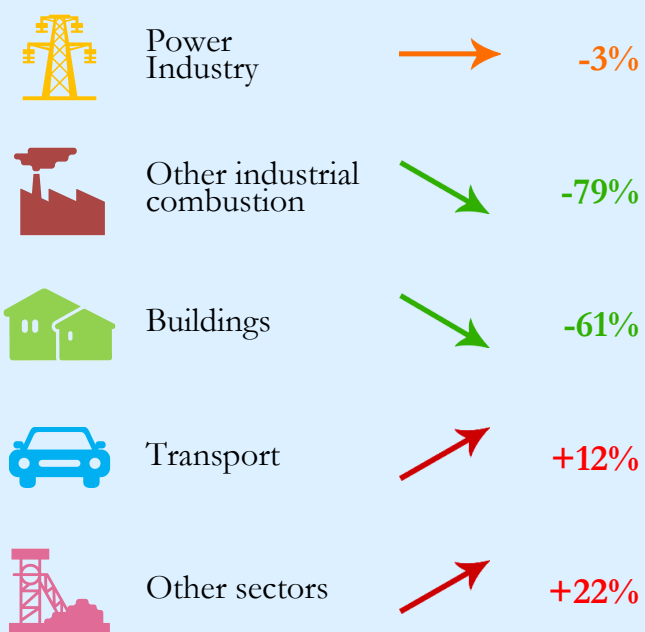
## Fossil CO<sub>2</sub> emissions by sector



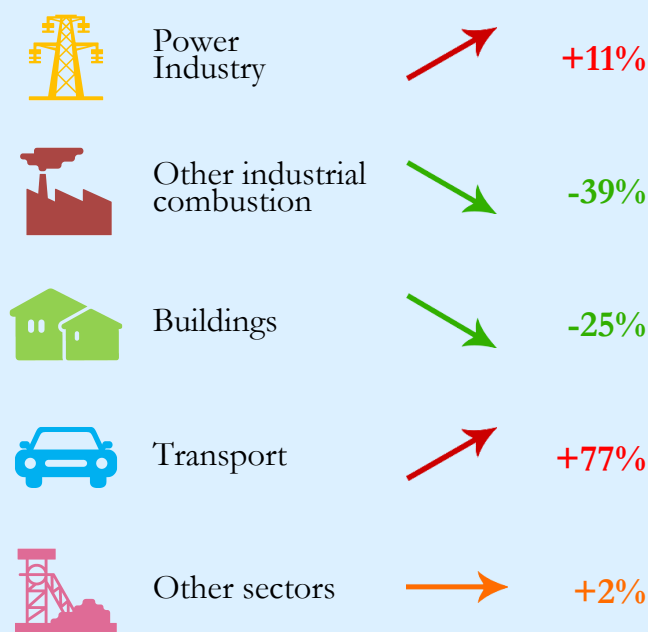
Year	Mt CO <sub>2</sub> /yr	t CO <sub>2</sub> /cap/yr	t CO <sub>2</sub> /kUSD/yr	Population
2017	12.087	0.731	0.385	16529904
2005	11.388	0.880	0.529	12940032
1990	17.178	1.687	0.647	10183113



### 2017 vs 1990



### 2017 vs 2005



## Disclaimer

This publication presents the fossil CO<sub>2</sub> emissions from all countries without any prejudice to the status or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory. Country names are consistent with the Interinstitutional Style Guide of the European Commission available at <http://publications.europa.eu/code/en/en-370100.htm>, the “Short name” definition listed in the "List of countries, territories and currencies" table at <http://publications.europa.eu/code/en/en-5000500.htm> has been used (updated at 18/09/2018).

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