

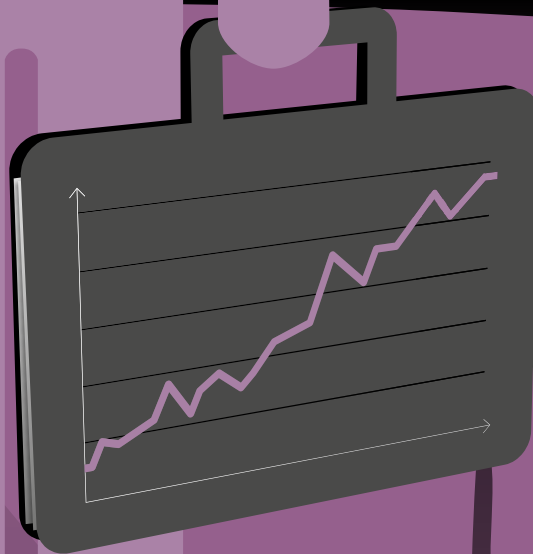


WWF

2014

OWN IT!

Swedish investments in the global energy sector
and how capital affects climate change.



Summary based on
the report "Swedish
Capital Allocated to
Global Energy Invest-
ments" (2014), by
PwC, commissioned
by WWF.

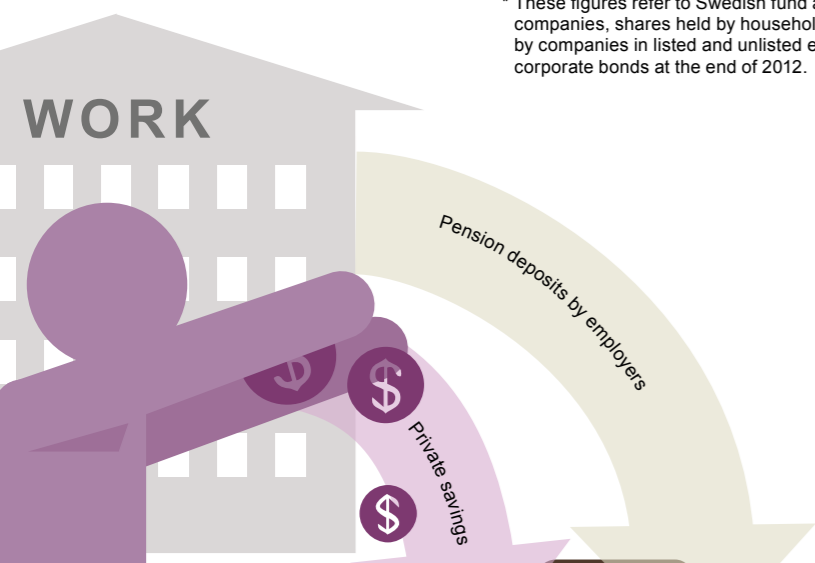
How your savings impact climate change

In addition to our bank accounts, the majority of Swedes also save money through investment and insurance companies. Deposits are made by employers and through private savings in e.g. pension/pension schemes, housing investments and savings for children.

The banks and companies that we use then invest our savings into stocks and securities on the global financial market. Our total savings are 4,000 billion Swedish Kronor (SEK) (\$540 billion). Of that, 60% is invested outside of Sweden* and about 9% is invested in energy companies. These companies are mostly active in the extraction, production and distribution of fossil fuel based energy: coal, oil and gas.

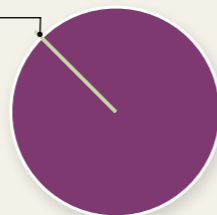
Through our savings we are all shareholders in activities that contribute to climate change, which threatens the lives of people as well as one third of species to extinction on our planet.

* These figures refer to Swedish fund and pension companies, shares held by households and by companies in listed and unlisted equity and corporate bonds at the end of 2012.



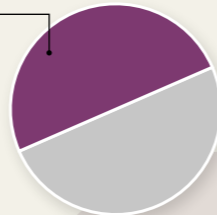
Swedish funds focused on renewable energy

There are 16,623 funds on the Swedish market. Of those, 106 focus on energy. Only 17 of those focus on renewable energy like solar and wind power.



Carbon-intensive companies in Swedish funds

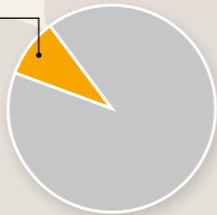
Of Sweden's 501 funds, 250 are invested in at least one of the world's 200 most carbon-intensive companies.



Source: Carbon Tracker (2011), Finansinspektionen (the Swedish Financial Supervisory Authority) (2014), Fondout (2014)

Swedish investments in energy

9% of total Swedish investment capital is in the energy sector. That's 50,000 SEK (\$6,750) for every Swede.



Future emissions from fossil fuel reserves

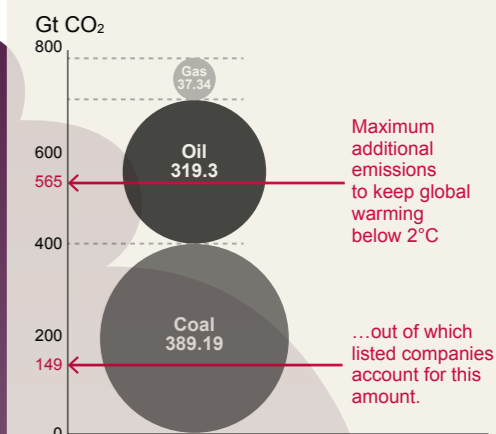
753 tonnes/person

during an active life span*

Through all the different types of saving and investment accounts, everyday people hold shares in numerous companies on the world's stock markets. The Swedish share of listed coal, oil and gas companies has an estimated impact of 5,057 million tonnes of CO₂ in future emissions if all those reserves are used. That is 753 tonnes of emissions for each of the 6,7 million pension holders in Sweden.

Fossil fuel reserves are the known amount of coal, oil and gas that are economically able to be extracted with today's technology. (IEA 2013)

FOSSIL FUEL RESERVES



Scientific calculations show that we can only emit an additional 565 Gt CO₂ between now and 2050 to keep global warming below 2°C. The known reserves of fossil fuels amounts to 2,795 Gt CO₂, or five times the amount that can be emitted.

The fossil fuel reserves held by the most carbon-intensive stock-exchange listed companies adds up to 745 Gt CO₂. This alone exceeds the global carbon budget by 180 Gt CO₂.

If the climate budget is equally divided between all reserves only 149 Gt CO₂ (one fifth of 745 Gt CO₂) of the fossil resources can be used up. The remaining 596 Gt CO₂ is what we call 'unburnable carbon', which creates a carbon bubble - resources that can't be used if we are to avoid increasing global temperature. As such, it also constitutes a financial risk for anyone investing in these companies.

Source: "Unburnable Carbon", Carbon Tracker Initiative (2011)

Emissions from annual energy production

The amount of coal, oil and gas production coming from Swedish investments on the world's stock markets is 53 million tonnes of CO₂ per year. That's 7.9 tonnes per person each year.

Emissions from annual energy consumption

The amount of energy used by Sweden as a whole produces 98 million tonnes of CO₂/year. That's 10.6 tonnes per person each year. Swedish Environmental Protection Agency (2012)

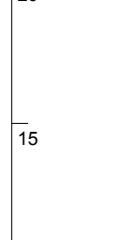
490 tonnes/person

during an active life span*

869 tonnes/person

during an active life span*

tonnes CO₂



- Transports including car:** c. 3 tonnes/year
- Food and drink:** c. 2,5 tonnes/year
- Housing and clothing:** c. 4,5 tonnes/year

10 years

20 years

30 years

40 years

50 years

60 years

70 years

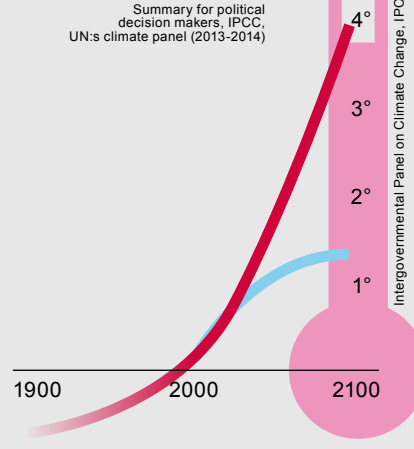
80 years

A globally fair and sustainable share of greenhouse gases per person is <1 tonnes/year.

* Emissions from consumption are made throughout our lives. When we start working, typically at the age of 20, our occupational pension scheme begins to accumulate. This is often supplemented with private savings for future investments. Given an average life span of 82 years (Statistics Sweden) the active period of accumulating capital is 62 years.

WHAT CLIMATE SCIENCE TELLS US THE CHALLENGE

The human influence on climate is evident. Continuous emissions of greenhouse gases will cause additional global warming. To keep the temperature increase below 2°C in 2050 substantial changes in our energy system are required.

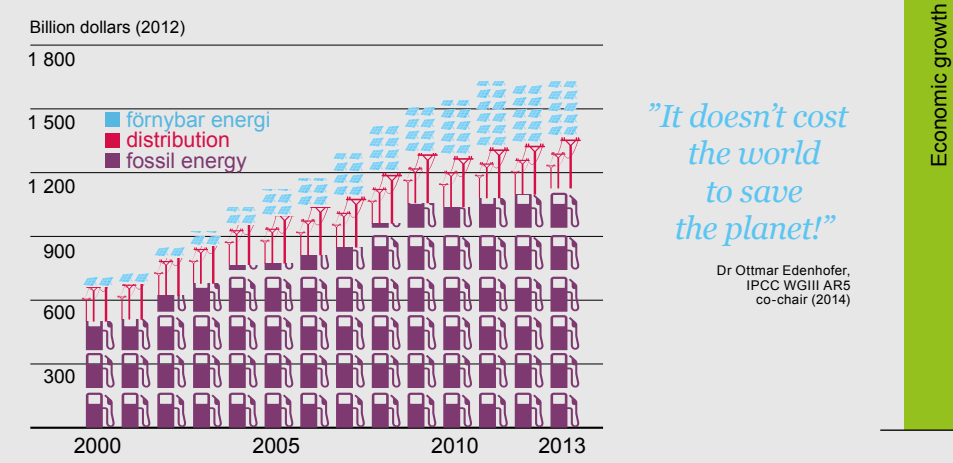


PRESENT SITUATION GLOBAL ENERGY INVESTMENTS 2012

Parallel to a substantial increase in renewable energy investments, investments in fossil fuel are rising, too. This means that necessary transformation of the world's energy systems isn't happening at the pace that climate science dictates.

More than \$1,600 billion are annually invested to provide the world with energy. Out of this, \$1,100 billion are invested in fuel production, primarily oil and gas.

The share invested in renewable energy has increased substantially and now amounts to \$250 billion per year. However, this is only 15% of the global energy budget. World Energy Investment Outlook, IEA (2014)



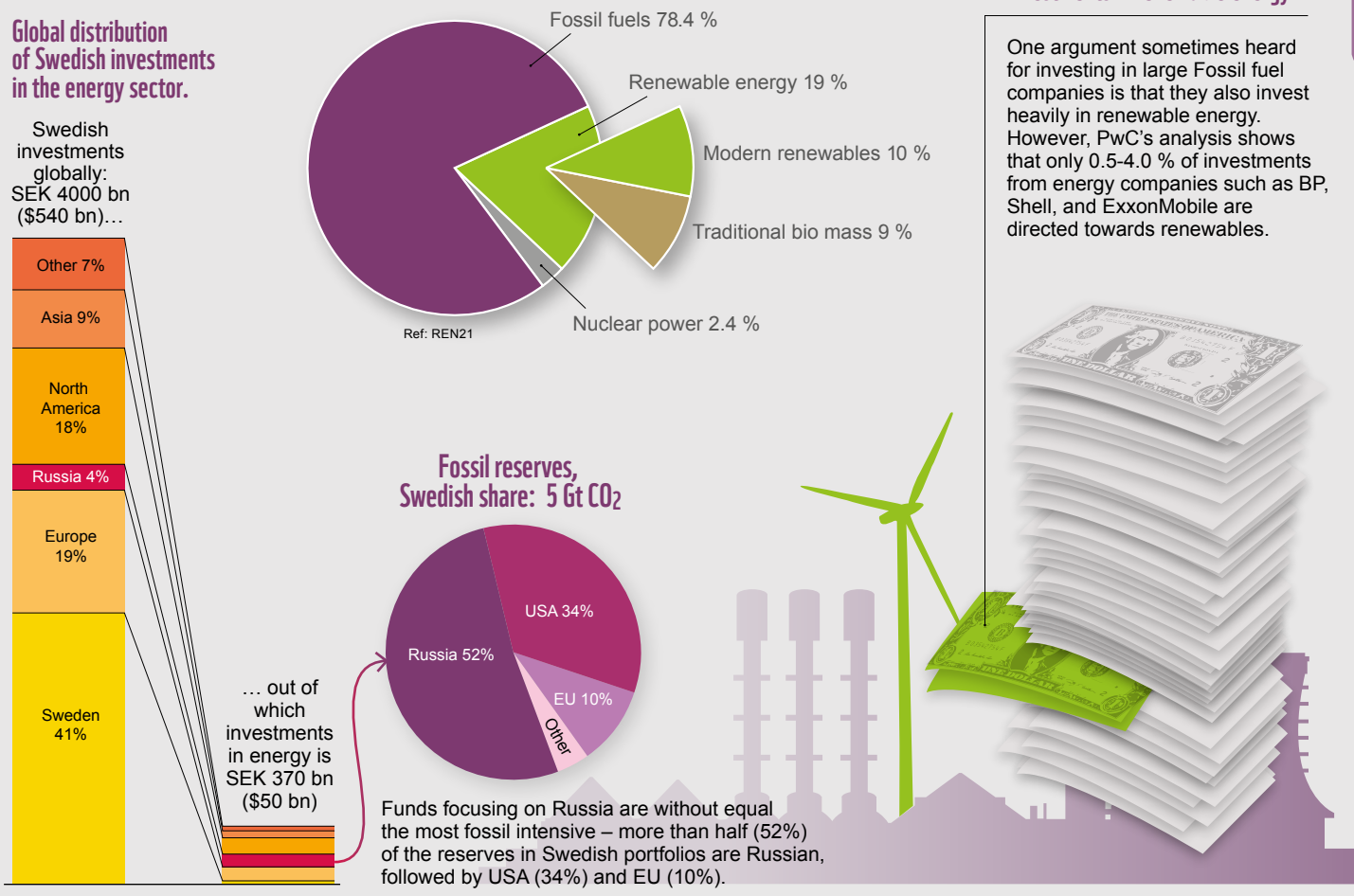
"It doesn't cost the world to save the planet!"

Dr Ottmar Edenhofer, IPCC WGIII AR5 co-chair (2014)

"SUBSTANTIAL REDUCTIONS OF EMISSIONS REQUIRE SUBSTANTIAL CHANGES IN INVESTMENT FLOWS."

IPCC WGIII AR5 (2014)

FACTS



The parliament, the government and its agencies, and the EU establish the framework for the financial market

Who makes the decisions that lead us to investing in the problem?

ASSET OWNERS

Private actors

Insurance companies 52%
Banks and funds 27%

AP funds

National Pension Funds 21%

Swedish invested capital stemming from our savings adds up to SEK 4000 bn (\$540 bn).

OWNERSHIP POLICY

- 1 Aims for a high return on investment for its customers
- 2 States the company's obligations according to external rules, owner's vision and ethical principles
- 3 States how to act within, and influence, the companies in which one holds shares
- 4 The Annual General Meeting (AGM) elects a board that decides on the ownership policy
- 5 Deliver a return that contributes to national pension scheme payments
- 6 Act for longterm gain and take ethical and environmental considerations without compromising on returns*
- 7 Regulated by law prepared by the Ministry of Finance, agreed by the multi-party Pension Group and decided by Parliament

* According to the cross-party pension scheme agreement from 2000, which is being reviewed based on a decision from 2014 will now be reviewed.

STRATEGIC CAPITAL ALLOCATION

- 8 States how investments are allocated between different assets (listed and unlisted stocks, bonds, loans, commodities, etc.)
- 9 States acceptable risk levels and management costs
- 10 Capital allocation policy is the responsibility of the board but it is often designed by the fund's manager
- 11 Minimum 30% in fixed income instruments
- 12 Maximum 5% in unlisted securities
- 13 Maximum 40% to be exposed to exchange rate risk
- 14 Restrictions on direct investments
- 15 Not allowed to invest in commodities

INVESTMENT STRATEGY

- 16 There are many different ways to achieve the results desired by whoever owns the capital.
- 17 Any strategy for investment starts with an ownership policy and guidelines for how to invest that capital.
- 18 Investments are usually made by investment managers who have a mandate for a certain part of the fund's or bank's capital.
- 19 The AP pension funds are obliged to use external managers for at least 10% of their capital.

There is a serious group of companies that have a voice that is much louder, that is better funded, that operates much more in unison and that is still stuck in the technologies and the fuels of yesterday..

Christiana Figueres, UN's Climate Convention UNFCCC

FUTURE

Increased water stress, reduced access to fresh water.

1/3 of animal species are at risk of extinction from climate change impacts.

150,000 people die prematurely every year as a consequence of climate change.

Increased risk of catastrophic flooding.

Harvests of wheat, maize and rice become reduced at 1°C global warming, resulting in reduced food security.

Rising sea levels will place land under water and increase coastal erosion.

instead of solutions?

APPROXIMATE FUEL COST OF A MEDIUM-SIZED CAR

144 COUNTRIES HAVE STATED GOALS ON RENEWABLE ENERGY

COST PER KW FROM LARGE-SCALE ENERGY PRODUCTION

GLOBAL PHOTOVOLTAIC CAPACITY AND ANNUAL INVESTMENTS

INVESTMENTS IN SOLAR ENERGY -22% CAPACITY +32%

View other inspiring climate innovations at www.climatesolver.org

Challenges in the investment decision process:

- 1 The oil and gas industry is backed by powerful interests that affect politicians and asset owners through sophisticated lobbying.
- 2 People or entities who own the capital often lack knowledge – and ask too little – about the impact of their investments on climate change.
- 3 Asset owners apply limitations to their responsibility and ignore the reality of climate change.
- 4 Short-term financial return is by default prioritized over long-term responsibility.
- 5 Investors minor shares in fossil fuel companies limits the effects from “engagement”.
- 6 Narrow definitions of “risk” omit the connection between investments and climate change.
- 7 Investment regulations on risk and solvency currently favor listed fossil fuel companies.
- 8 Fund managers lack incentive to include climate change data in their investment decisions.
- 9 Fund managers lack a mandate to develop climate change compliant investment strategies.
- 10 Fund managers have no or low competence about the relationship between investments and climate change.

Who owns the problem?

OWN IT! Invest in renewables and increased energy efficiency for a living planet.

PARLIAMENT AND GOVERNMENT

Make CO2 disclosure mandatory

Help customers make active decisions and make it mandatory for all banks, funds, and insurance companies in Sweden to disclose the carbon footprint of their investments.

Climate-proof the AP funds

Assign the AP funds to immediately phase out their holdings in coal companies and to develop their management in line with the findings in climate research in order to keep global warming below 2°C.

ASSET OWNERS

Climate-proof the management of your assets

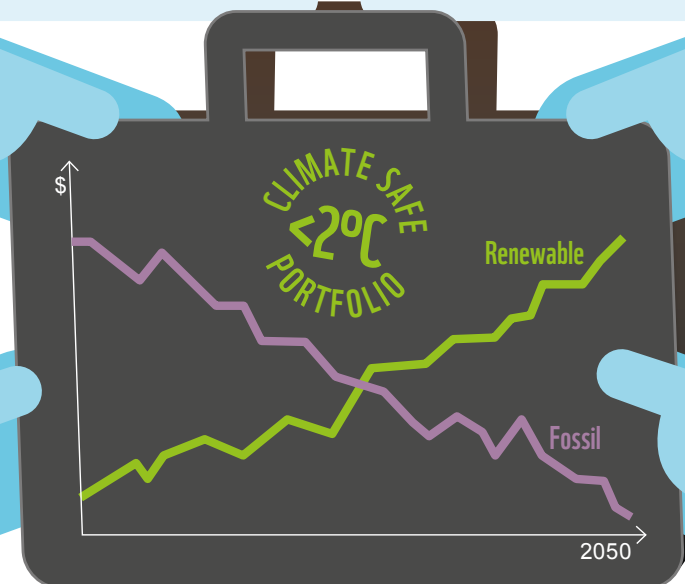
Chose managers who offer measurable strategies to keep global warming below 2°C with viable investments in energy efficiency and renewable energy according to climate change science.

Be transparent towards customers and politicians

Take the initiative to build an open dialogue with both politicians and investors regarding what it takes to steer the capital flows in society to limit global warming below 2°C.

PARLIAMENT AND GOVERNMENT

ASSET OWNERS



ASSET MANAGERS

INDIVIDUAL SAVERS

ASSET MANAGERS

Climate-proof your asset management

Develop strategies and internal incentives for asset management in line with climate change science in order to keep global warming below 2°C.

Be transparent towards customers and politicians

Help institutional and private investors to take active decisions by disclosing the climate change impact of your investments.


INDIVIDUAL SAVERS

Make your savings climate safe

Ask your fund manager or bank how your own savings impact – and are impacted by – the climate change. Ask for investment options that consider both your capital and the future of the planet.

Raise your demands

Call on the government and parliament to commission the AP funds to develop their management in line with climate change science in order to keep global warming below 2°C.

	<p>Why we are here To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.</p> <p>wwf.se</p>
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SUMMARY BASED ON THE REPORT "SWEDISH CAPITAL ALLOCATED TO GLOBAL ENERGY INVESTMENTS" (2014), PWC, COMMISSIONED BY WWF. ALL FACTS ARE FROM PWC'S REPORT IF NOT OTHERWISE STATED.

THANKS TO:

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