

Dirty & Dangerous:

the fossil fuel investments of
Dutch pension fund ABP

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Both ENDS

Nieuwe Keizersgracht 45
1018 VC Amsterdam
the Netherlands
www.bothends.org



Urgewald

Von Galen Straße 4
48336 Sassenberg
Germany
urgewald.org



Fossilvrij NL

Minahassastraat 1
1094RS Amsterdam
Netherlands
<http://fossilvrij.nl/>



CREDITS

Research:

Nicole Brusa, Noah Schucking

Text: Christina Beberdick, Johanna

Bozuwa, Cindy Coltman

Contributing editors:

Danielle Hirsch, Heffa Schücking

Photography:

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Design:

Patricia Bosveld
(www.ineenkeerbeed.nl)

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AIMS OF THIS REPORT

This report aims foremost to inform the pension savers of Dutch ABP of how their retirement savings are being invested in the fossil fuel industry and the devastating environmental and human impacts of these investments. In many aspects, our analysis can be considered a sort of 'shadow' report to ABP's own Sustainability and Responsible investment reporting of 2015 and 2016.

Secondly, we aim to confront ABP's Board of Trustees and the managers at ABP who have the decision making power to change this situation. We want to encourage them to increase the ambitions of its investment policy.

Finally we aim to raise awareness within the Dutch public. A lack of transparency is a critical issue within the Dutch pension fund sector. Often, pension funds do not provide full access to the list of companies that they invest in on the pension savers' behalf. This disallows for pension savers to investigate the climate and human impacts of their pension. But more than likely their pension funds are invested in coal, oil and gas companies.

EXECUTIVE SUMMARY

At the Paris Climate Summit, 195 countries agreed to limit global temperature rise to well below 2°C, and to strive for 1.5°C. In order to keep to these limits, fossil fuels must be kept in the ground.¹ This means that new fossil fuel development needs to stop and that existing fossil fuel infrastructure needs to be phased out.

In October 2015 the Board of Trustees for the largest pension fund in the Netherlands and the fifth largest in the world² - **Algemeen Burgerlijk Pensioenfonds (ABP)** - publicly announced a sharpening of its investment policy in terms of responsible and sustainable investments. In its Vision 2020 ABP explicitly announced that it aims to be a 'sustainable fund.'³

We recognise that ABP's Vision 2020 is an important first step. If ABP truly wants to become a sustainable pension fund, it must stop investing in the coal, oil and gas industry. This is particularly necessary since there is very little indication so far that engagement efforts are leading fossil fuel companies to make the necessary radical change to their core business models.^{4/5/6} The very first step on this path should be the divestment from its coal assets. These are among the

pension fund's most risky and climate-disrupting investments.

The precedent for divestment has been set: The world's largest sovereign wealth fund⁷, the Norwegian GPF,⁸ Norway's largest private pension fund serving public employees, KLP; the French insurance AXA;⁹ and the German insurance Allianz¹⁰ have already divested from coal for both financial and environmental reasons.¹¹ Their example shows that large investors can make their investments more sustainable and achieve good returns for their clients.

However, our research shows that ABP is still a major investor in the fossil fuel industry. **In December 2016, ABP's investments in coal, oil and gas came to €10,4 billion.**

ABP's coal investments amounted to €4,3 billion. This is 18% (€658 million) higher than in December 2015. Especially worrying is the fact that many companies in ABP's portfolio are pursuing plans to build new coal capacity and infrastructure. Altogether, the companies in ABP's holdings plan to build over 239.000 MW of new coal-fired capacity. This is almost 5 times the size of Russia's current fleet of coal-fired power stations, or 50 times the



notes

¹ McGlade & Ekins conclude in their Nature (2015) article that 'globally, a third of oil reserves, half of gas reserves and over 80% of current coal reserves should remain unused in order to meet the target of 2 °C.'. <http://www.nature.com/nature/journal/v517/n7533/full/nature14016.html> Carbon Tracker estimates for listed firms that '60 - 80% of coal, oil and gas reserves of listed firms are unburnable'. <http://carbontracker.live.kiln.digital/Unburnable-Carbon-2-Web-Version.pdf>

² <https://www.willistowerswatson.com/en/insights/2016/09/The-worlds-300-largest-pension-funds-year-ended-2015>

³ ABP's Duurzaam en verantwoord beleggen 2015 verslag, Foreword.

⁴ <https://www.theguardian.com/environment/2015/jan/15/engaging-with-oil-companies-climate-change-futile-admits-leading-environmentalist>

⁵ <https://www.greenbiz.com/blog/2013/05/29/why-shareholder-engagement-fossil-fuels-companies-wont-work>

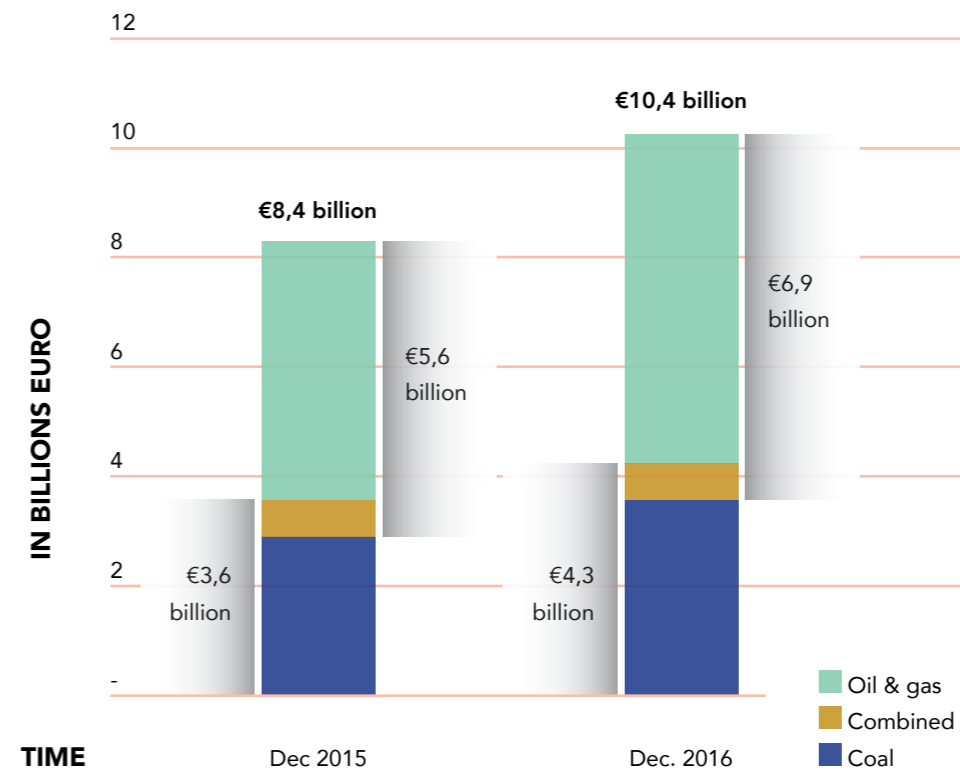
⁶ <https://www.theguardian.com/environment/2015/mar/09/10-myths-about-fossil-fuel-divestment-put-to-the-sword>

⁷ <http://www.investopedia.com/news/5-largest-sovereign-wealth-funds/>

⁸ <https://www.stortinget.no/en/In-English/About-the-Storting/News-archive/Front-page-news/2014-2015/hj9/>

⁹ <https://www.axa.com/en/newsroom/news/about-whether-about-when>

(DIRECT) FOSSIL ENERGY INDUSTRY INVESTMENTS BY ABP (x bln Euro)



Dutch, and is completely at odds with the goals of the Paris Agreement.

ABP is also heavily invested in oil and gas companies - €6,9 billion in December 2016¹²-an increase of 23 % (€1,3 billion) from 2015. These companies' core business models are based on new exploration and production of oil and gas, while already the potential carbon emissions from the world's currently operating fields and mines will take us beyond 2°C.¹³

ABP's continued high investments in coal, oil and gas is worrying in light of climate disruption. But this is not the only reason why the activities of the fossil industry are problematic. With our report, we give voice to communities suffering from the impacts of the most dirty and climate-disrupting investments, in coal.

■ **INDONESIA: ABP invests in Itochu, Electric Power Development, and Adaro Power, the three companies spearheading the construction of the Batang Power Plant, which is slated to be the biggest coal fired power plant in Indonesia.¹⁴ Residents around the plant have been jailed and intimidated for their opposition. Yet, between June and December 2016, ABP increased its investments in all three companies.**

■ **COLOMBIA: ABP invests in three of the largest coal mining companies in the country: BHP Billiton, Glencore, and Anglo American. Colombia has become one of the biggest coal exporters in the world, delivering most of its product to Western Europe.¹⁵ Colombians are not reaping the**

notes

¹⁰ https://www.allianz.com/en/press/news/financials/stakes_investments/151123_allianz-is-phasing-out-coal/ <https://www.theguardian.com/environment/2015/nov/24/allianz-to-cut-investments-in-companies-using-coal-in-favour-of-renewable-energy>

¹¹ <https://www.theguardian.com/environment/2015/may/22/axa-divest-high-risk-coal-funds-due-threat-climate-change>

¹² Six 'combined' companies are included in both subtotals for their classification as both coal and oil & gas companies. These are CNOOC, Sasol, CONSOL, SINOPEC, ENGIE, and BHP Billiton.

¹³ <http://priceofoil.org/2016/09/22/the-skys-limit-report/>

¹⁴ <http://www.bhimasenapower.co.id/content/2527/central-java-coal-fired-power-plant-awarded-as-power-deal-of-the-year-2016-for-asia-pacific-region>

¹⁵ <http://www.climatechangenews.com/2015/10/29/colombia-must-reduce-its-dependence-on-coal-exports/>

benefit from these exports, as communities in the coal mining region have been impoverished, displaced, and subjected to violence by paramilitary groups associated with Colombia's 'blood coal.'

■ **AUSTRALIA:** A recent analysis showed that BHP Billiton and other coal companies have bought over 700.000 acres of land in New South Wales-- taking over a significant portion of the highest quality agricultural land in the country. These coal mines could threaten Australia's food and water security.¹⁶

■ **EUROPE:** From a climate perspective, lignite is the dirtiest part of the coal industry and ABP is invested in Europe's largest lignite producers - RWE from Germany, Poland's PGE, and the Czech utility CEZ. From September to December 2016, ABP sold off a large portion of its investment in RWE, but now needs to fully divest from such companies.

■ **UNITED STATES:** Around 1/3 of ABP's coal investments are in US coal mining and coal power companies - more than €1,4 billion. Altogether, the annual greenhouse gas emissions from these eighteen companies comes to a whopping 753 million metric tons CO₂eq.¹⁷ This is 3,8 times larger than the entire emissions of the Netherlands, which are 196 million metric tons CO₂eq. annually.¹⁸

In reviewing its entire portfolio against sustainability criteria, ABP expects that of the current 5.000 funds in which it invests, by 2020 only 3.500 will remain.¹⁹ Yet, ABP's investment policy does not give a clear indication of the conditions and timeframe under which it will divest its fossil fuel holdings. We recommend ABP to responsibly exit out of the fossil fuel industry and:

1. **Sell off all of its investments in coal companies and permanently exclude the coal industry from its investments portfolio** (as defined in the Global Coal Exit List) **by the end of 2017.**
2. **Commit to selling off remaining oil and gas investments over the next five years and permanently exclude the oil & gas industry from its investment portfolio** (as defined in The Carbon Underground 200™).
3. **Increase transparency of its fossil fuel portfolio.** Provide clear and understandable information to the public each year regarding the scope and scale of all fossil fuel investments and its efforts to phase these out. This information should include the scope of fossil fuel investments in hands of external managers, information not currently made available to the public.

notes

¹⁶ http://www.lockthegate.org.au/flogging_the_farm

¹⁷ See methodology for in Appendices

¹⁸ <https://www.cbs.nl/en-gb/news/2016/36/greenhouse-gas-emissions-5-percent-higher-in-2015>

¹⁹ 'ABP dumps 30% of investment funds in action plan towards sustainable investments' by Cor de Horde, 14 October 2015. <http://fd.nl/ondernemen/1122708/pensioenfonds-abp-wil-duurzamer-gaan-beleggen&hl=nl&gbv=1&sei=UceVtfYGovoasvNqAJ&&ct=clnk>

SAMENVATTING

Op de klimaatop in Parijs hebben 195 landen afgesproken om de wereldwijde temperatuurstijging ruim onder de 2°C te houden en ernaar te streven die te beperken tot 1,5°C. Dat doel kan alleen bereikt worden als we fossiele brandstoffen in de grond laten zitten. Dat betekent: stoppen met het ontginnen van nieuwe voorraden aan fossiele brandstoffen en de bestaande infrastructuur voor winning van olie, gas en kolen zo snel mogelijk afbouwen.

In oktober 2015 maakte het Algemeen Burgerlijk Pensioenfonds (ABP) – het grootste Nederlandse pensioenfonds en het vier na grootste ter wereld – een verscherping van zijn investeringsbeleid bekend in termen van maatschappelijk verantwoord en duurzaam beleggen. In zijn Visie 2020 stelt ABP expliciet dat het een 'duurzaam pensioenfonds' wil zijn.

We erkennen dat ABP's Visie 2020 een belangrijke eerste stap is. Als ABP werkelijk een duurzaam pensioenfonds wil zijn, kan het niet doorgaan met investeren in de kolen- olie- en gasindustrie. Vooral omdat er tot dusverre nauwelijks aanwijzingen zijn dat de engagement-inspanningen van het fonds de producenten van fossiele brandstoffen bewegen tot het maken van de noodzakelijke radicale herziening van hun kernactiviteiten. Het afstoten van zijn kolenbeleggingen zou de eerste concrete stap voor ABP moeten zijn. Deze behoren immers tot de meest riskante en klimaatontwrichtende investeringen.

Lichtende voorbeelden van divestering zijn er al: het Noorse GPF (het grootste staatsfonds ter wereld), het eveneens Noorse KLP (het pensioenfonds voor de publieke sector), de Franse

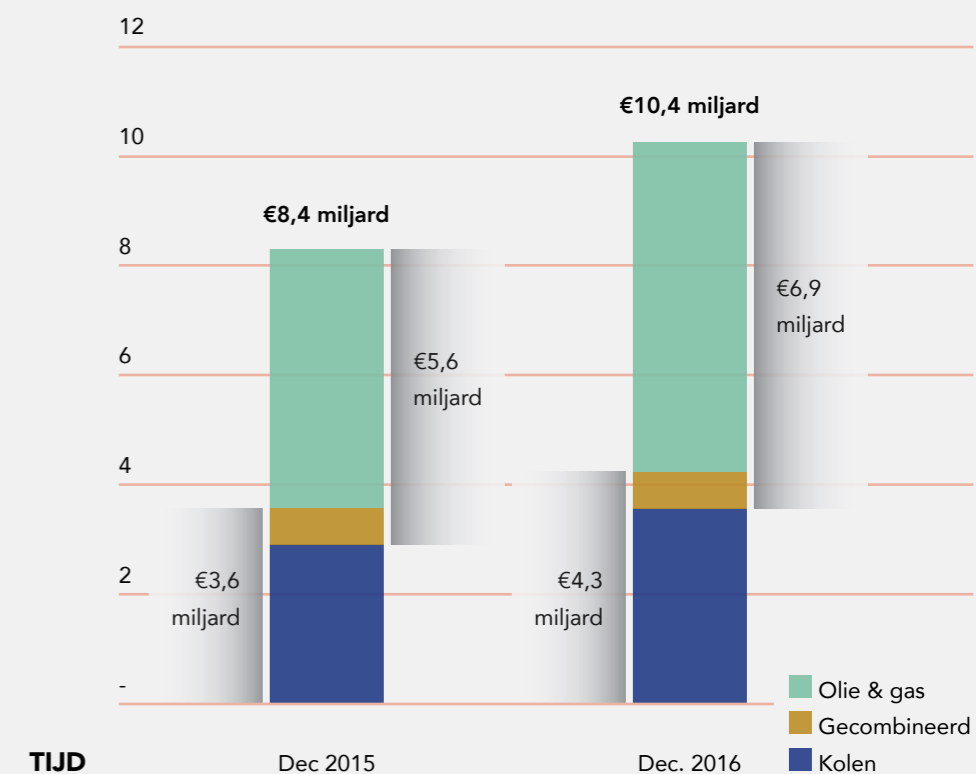
pensioenverzekeraar AXA en het Duitse Allianz hebben, op financiële gronden en uit milieuoverwegingen, al gedivesteed uit kolen. Zij hebben laten zien dat grote investeerders hun beleggingen duurzamer kunnen maken zonder dat dit leidt tot een daling van de rendementen die ze voor hun cliënten behalen.

Ons onderzoek toont aan dat ABP nog altijd één van de grote investeerders in de fossiele brandstoffenindustrie is. In december 2016 bedroegen de investeringen van ABP in kolen, olie en gas €10,4 miljard. ABP investeert €4,3 miljard in kolen, 18% (€658 miljoen) meer dan het jaar ervoor. Extra verontrustend is het feit dat veel bedrijven in de investeringsportefeuille van ABP plannen hebben voor de bouw van nieuwe kolencentrales, het ontwikkelen van nieuwe

koolmijnen en het uitbreiden van de transportinfrastructuur, zoals de aanleg van nieuwe koolhavens en spoorlijnen. Worden al deze plannen uitgevoerd, dan zal dit bij elkaar een toename van 239.000 megawatt aan kolengestookte elektriciteit opleveren, bijna vijf keer de capaciteit van de alle huidige kolencentrales in Rusland, of vijftig keer de kolencentrales in Nederland. Die plannen zijn volkomen strijdig met de doelen van het Parijse klimaatakkoord.

ABP heeft ook een groot belang in olie- en gasbedrijven – €6,9 miljard in december 2016, een toename van 23% (1,3 miljard). De bedrijfsmodellen van deze ondernemingen zijn gebaseerd op het ontwikkelen van nieuwe velden en de winning van olie en gas, terwijl de hoeveelheid koolstofdioxide die vrij zal komen bij het verbranden van de

ABP: INVESTERINGEN IN DE FOSSIELE ENERGIE INDUSTRIE (x mld Euro)



olie-, gas- en kolenreserves in velden en mijnen die momenteel operationeel zijn, al genoeg is om de wereldwijde temperatuur voorbij de 2 °C te stuwen. Dat ABP blijft investeren in olie, kolen en gas is zorgwekkend in het licht van wereldwijde klimaatontwrichting. Maar dat is niet het enige probleem dat deze beleggingen met zich meebrengen. Met dit rapport geven we een stem aan lokale gemeenschappen die zwaar te lijden hebben onder de directe gevolgen van ABP's meest vervuilende en klimaatverstorende investeringen: die in kolen.

INDONESIË: ABP investeert in Itochu, Electric Power Development en Adaro Power, de drie ondernemingen achter de bouw van de Batang elektriciteitscentrale, die als grootste kolencentrale van Indonesië al veel internationale kritiek heeft geoogst. Omwonenden die in opstand kwamen tegen de centrale, zijn gevangengezet en geïntimideerd. Toch heeft ABP tussen juni en december 2016 zijn investeringen in alle drie de bedrijven vergroot.

COLOMBIA: ABP investeert in drie van de grootste mijnbedrijven van het land: BHP Billiton, Glencore en Anglo American. Colombia is een van de grootste kolenexporteurs ter wereld geworden en levert het merendeel van zijn productie aan West-Europa. De Colombiaanse bevolking deelt niet in de winst van deze exporten; de gemeenschappen in de mijnregio's zijn verarmd, verdreven en onderhevig aan het geweld van paramilitaire groepen die betrokken zijn bij de winning van de 'bloedkolen.'

AUSTRALIË: Een recente analyse laat zien dat BHP Billiton en andere mijnbedrijven meer dan 700.000 hectare land hebben gekocht in New South Wales, waarmee ze een aanzienlijk deel van de kwalitatief meest hoogwaardige landbouwgrond in het land opslokken. De ontginning van kolen kan ook de voedselveiligheid en de veiligheid van het drinkwater in gevaar brengen.

EUROPA: Vanuit klimaat oogpunt vormt bruinkool het smerigste deel van de kolenindustrie en ABP heeft belangen in de grootste bruinkoolbedrijven van Europa: RWE in Duitsland, het Poolse PGE en het Tsjechische nutsbedrijf CEZ. Tussen september en december 2016 heeft ABP een groot deel van zijn belangen in RWE verkocht, maar inmiddels in het moment gekomen om volledig te divesteren uit dergelijke ondernemingen.

VERENIGDE STATEN: Ongeveer een derde van de kolenbeleggingen van ABP zitten in Amerikaanse mijnen en kolencentrales – samen ruim €1,4 miljard. Bij elkaar opgeteld bedraagt de jaarlijkse broeikasgasuitstoot van deze achttien bedrijven een kolossale 753 miljoen ton koolstofdioxide. Dit is 3,8 keer zo groot als de volledige uitstoot van Nederland (196 miljoen ton koolstofdioxide).

In het kader van duurzaamheid heeft ABP de verwachting uitgesproken dat het in 2020 nog 3.500 fondsen overheeft van de in totaal 5.000 fondsen waarin het nu investeert. Het investeringsbeleid van ABP geeft echter geen heldere indicatie binnen welke voorwaarden en welke termijn het wil divesteren uit zijn belangen in fossiele energie. Wij vragen ABP om verantwoord uit de fossiele brandstoffenindustrie te stappen en:

1. Al zijn investeringen in kolenbedrijven te verkopen en de kolenindustrie permanent uit te sluiten van zijn investeringsportefeuille (zoals beschreven in de Global Coal Exit List) voor het einde van 2017.
2. Zich te committeren aan het verkopen van alle investeringen in olie en gas in de komende vijf jaar en de olie- en gasindustrie permanent uit te sluiten van zijn investeringsportefeuille (zoals beschreven in de Carbon Underground 200™)
3. De transparantie van zijn investeringsportefeuille te vergroten door het publiek elk jaar heldere en begrijpelijke informatie te verstrekken over de reikwijdte en schaal van alle investeringen in fossiele brandstoffen en zijn inspanningen om die af te bouwen. Deze informatie moet ook inzicht geven in de reikwijdte en schaal van investeringen in de fossiele industrie die in handen zijn van externe beheerders, informatie die momenteel niet publiekelijk beschikbaar is.



1

INTRODUCTION

The Algemeen Burgerlijk Pensioenfonds (ABP) is the largest Pension Fund in the Netherlands and fifth largest in the world, set up in 1922 for Dutch civil servants and teachers' pensions. Today, all civil servants are required to have their pension with ABP and the fund is responsible for 2,8 million people. ABP currently manages €389 billion.²⁰

In 2014, a group of ABP's pension savers became increasingly uncomfortable with the knowledge that their pension fund is heavily invested in fossil fuels--directly contributing to climate change. They organized themselves under the banner of the 'ABP Fossilvrij' (ABP Fossil Free) campaign and called on their pension fund to divest from coal, oil and gas - citing the urgent need to decommission fossil fuel infrastructure in order to stay below widely agreed limits of dangerous climate change.²¹ In March 2015, ABP Fossilvrij presented a petition signed by over ten thousand concerned pension holders to the vice-chair of ABP, Ms. José Meijer.

In response, ABP published its Vision 2020 in October 2015, committing to become a 'sustainable pension fund.' If ABP truly plans to achieve such a goal, it must divest itself from coal, oil and gas. This is particularly necessary since there is very little indication so far that engagement efforts are leading fossil fuel companies to massively change their core business models.^{22/23/24} The logical first step would be to divest from coal companies, since these comprise ABP's most risky and climate-disrupting investments.

The precedent for divestment has been set: The world's largest sovereign wealth fund,²⁵ the GPF; KLP, Norway's largest private pension fund serving public employees,²⁶ the French insurance AXA²⁷ and the German insurance Allianz²⁸ have already divested from coal for both financial and environmental reasons.²⁹ Their example shows that large investors can make their investments more sustainable and achieve good returns for their clients.

This report examines ABP's progress towards its goal of becoming a sustainable pension fund. In the coming chapters, we analyze ABP's changes in investment policy as well as the development of its fossil fuel portfolio since the implementation of Vision 2020. We use case studies to provide a sketch of the links to climate, environmental, and human effects associated with the coal industry and its supply chains.

notes

²⁰ As of 5 April 2016 per ABP's website <https://www.abp.nl/over-abp/financiele-situatie/actuele-financiele-situatie/>

²¹ <http://www.carbontracker.org/report/carbon-bubble/>

²² <https://www.theguardian.com/environment/2015/jan/15/engaging-with-oil-companies-climate-change-futile-admits-leading-environmentalist>

²³ <https://www.greenbiz.com/blog/2013/05/29/why-shareholder-engagement-fossil-fuels-companies-wont-work>

²⁴ <https://www.theguardian.com/environment/2015/mar/09/10-myths-about-fossil-fuel-divestment-put-to-the-sword>

²⁵ <http://www.investopedia.com/news/5-largest-sovereign-wealth-funds/>

²⁶ <https://www.stortinget.no/en/In-English/About-the-Storting/News-archive/Front-page-news/2014-2015/hj9/>

²⁷ <https://www.axa.com/en/newsroom/news/about-whether-about-when>

²⁸ https://www.allianz.com/en/press/news/financials/stakes_investments/151123_allianz-is-phasing-out-coal/

²⁹ <https://www.theguardian.com/environment/2015/nov/24/allianz-to-cut-investments-in-companies-using-coal-in-favour-of-renewable-energy>

²⁹ <https://www.theguardian.com/environment/2015/may/22/axa-divest-high-risk-coal-funds-due-threat-climate-change>

2

METHODOLOGY

ABOUT THE AUTHORS:

■ **Both ENDS** is an environmental and human rights organisation that has researched and engaged with ABP in a complaint about prior human rights concerns related to a company that ABP was invested in.³⁰ Both ENDS supports the aims of the global fossil free movement and are specialised in linking international capital to local social and environmental challenges.

■ **Fossilvrij NL** is a Dutch citizens movement calling on ABP and other pension funds, cities and universities to divest from coal, oil and gas.

■ **Urgewald** is a research-based advocate for the environment and has extensive experience with corporate research and accountability. Urgewald was the main author of the 'Dirty and Dangerous' report on the coal investments of the Norwegian Government Pension Fund, which was co-published with Framtiden i våre hender (Future in our Hands Norway) and Greenpeace Norway in November 2014.³¹

ABP FINANCIAL DATA

ABP sets the policies for investment and APG Group is the asset manager, managing the bulk of investments on behalf of ABP. To its credit, ABP publishes the latest value of its shares and bonds investments in publicly listed companies every three months. This enabled the authors to analyse investment portfolio changes from 2014 (when the data collection by Fossilvrij NL was initiated) onwards.³²

In addition, APG contracts external managers. On the ABP website there is a list of their most significant external managers-- 27 in 2015, including Blackrock Investment Management Ltd

and UBS Global Assets Management. However, the investment data made available to the public excludes detailed investments managed by external managers. As stated on ABP's website: 'The volume of assets managed by the published external managers above ranges from 0,8 billion to 6,3 billion' but no precise data is revealed.³³ Presumably these portfolios also include investments in coal, oil and gas companies, but could not be included in this report because this data is not publicly available.

COAL INVESTMENT ANALYSIS

We argue that the definitions used by Bloomberg and the Industry

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³⁰ <http://www.bothends.org/en/News/Laatste-nieuws/newsitem/308/-Posco-case-closed-by-Dutch-NCP>

³¹ https://urgewald.org/sites/default/files/dirty_and_dangerous_coal_gpf.pdf

³² <https://www.abp.nl/english/press-releases/quarterly-report-q4-2016.aspx>

³³ <https://www.abp.nl/over-abp/beleggen/hoe-beleggen-we.aspx>

Classification Benchmark to identify coal investments are insufficient in breadth. Therefore, this report makes use of the Global Coal Exit List (GCEL) developed by Urgewald to determine the coal content of ABP's investment portfolio. The GCEL is an extensive database of over 1.000 companies compiled over the past 1 1/2 years.³⁴ The database covers all major players in the thermal coal industry throughout the entire value chain, most notably the power generation sector, the mining sector and the infrastructure & services sector. A company is listed if it fulfils at least one of the following three criteria:

1. **30% or more of the company's power production or revenues are coal-based;**
2. **The company's annual coal production exceeds 20 million tons or it burns more than 20 million tons annually; and/or**
3. **The company plans to build new coal power plants, coal-to-oil or coal-to-gas facilities, develop new mines, and/or set up new coal transport infrastructure.**

For a full list of ABP's investments in companies on the GCEL, see Appendix 2.

OIL AND GAS INVESTMENT ANALYSIS

This report makes use of the Carbon Underground 200™ developed by Fossil Free Indexes to identify the oil and gas content of ABP's investment portfolio. The Carbon Underground 200™ identifies the top 100 public oil and gas companies globally, rated by the carbon emission potential of their reported fossil fuel reserves.³⁵ It also identifies the top 100 public coal companies, but the use of GCEL

is preferable as it is more exhaustive list. No equivalent list to GCEL has been collected for oil and gas so we used the best publicly available data. For a list of ABP's investments in oil and gas companies on the Carbon Underground 200™, see Appendix 3.

CASE STUDY SOURCES

Case studies are based on written sources, interviews and statements made by local people living in the areas. Written sources include media publications, reports from Urgewald³⁶ and Both ENDS³⁷ and other CSOs, information and data from authorities, academic publications and websites with company information.

This report does not aim to be a full accounting of ABP's investments, but instead provides evidence of where the meaning of the Vision 2020 is not yet interpreted into practice. It presents a concise account through illustrative case studies that portray the impacts of ABP's coal investments to inform a direct dialogue between Dutch pension savers and ABP.

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³⁴ The GCEL will be officially published in June 2017.

³⁵ <http://fossilfreeindexes.com/research/the-carbon-underground/>

³⁶ www.urgewald.org

³⁷ Both ENDS Briefing Paper: 'A burning issue - the global footprint of coal-fired energy in the Netherlands', March 2011 <http://www.bothends.org/en/Publications/document/95/A-Burning-Issue?category=Water%20Cland%20CGeld>

3

ABP'S SHIFT TO INVESTMENT POLICY VISION 2020

In October 2015, the Board of ABP publicly announced a sharpening of its investment policy in terms of responsible and sustainable investments. The Vision 2020 policy is based on three principles: contribute to financial returns (in relation to the risk); demonstrate ABP's social responsibility; and contribute to the integrity of the financial markets. They also reiterated their commitment to human and labour rights and required companies to reach the standards put forth by the UN Global Compact.³⁸

In its Vision 2020 ABP explicitly announced that it aims to be a 'sustainable fund' by 2020. In reviewing its entire portfolio against sustainability criteria, ABP expects that, of the current 5.000 funds in which it invests, by 2020 only 3.500 will remain.³⁹

Specifically, ABP committed to:

- **reduce its CO² footprint for the whole portfolio by 25% (baseline 2015)**
- **double its investments with high sustainable value from 29 billion euros to €58 billion, with a thematic focus on security, education and economic infrastructure.**
- **increase investments in renewable energy to €5 billion (from €1 billion in 2014)⁴⁰**

In its 'Policy Note on Responsible Investment', ABP describes how

it will invest in 'front runners' but acknowledges that a small part of the investment portfolio will comprise of companies 'who are not so far with their attention to responsible business and the transition to a sustainable economy but remain a financially attractive investment.'⁴¹

We recognize that ABP has demonstrated commitment with its new investment policy and that Vision 2020 is an important first step. In ABP's recent 2016 Sustainable and Responsible Investment Report, they reported that they have cut their emissions by 16%, on track for their 25% target.

Yet, if ABP is able to reach its carbon reduction targets as specified in the Vision 2020 without eliminating investments in coal, oil and gas, then it will have to significantly ratchet up ambition after 2020 to be in line with the Paris Agreement.

In its policy, ABP has indicated a preference for inclusion, dialogue and engagement rather than exclusion of companies. The Appendix of its 2016 Sustainable and Responsible Investment Report lists 245 companies that ABP, through its specialists in its investment manager (APG), has had contact with on sustainability and good management in 2016.⁴² In the list is a matrix of the issues in which it engaged companies: against corruption, business management, banning child labour, environment,

notes

³⁸ ABP's Duurzaam and verantwoord beleggen 2015 verslag, page 31 http://jaarverslag.abp.nl/docs/pdfs/ABP_Duurzaam_en_Verantwoord_Beleggen_2015.pdf

³⁹ 'ABP dumps 30% of investment funds in action plan towards sustainable investments' by Cor de Horde, 14 October 2015. <http://fd.nl/ondernemen/1122708/pensioenfonds-abp-wil-duurzamer-gaan-beleggen&hl=nl&gbv=1&sei=oUceVtfYGovoasVnqAJ&&ct=clnk>

⁴⁰ ABP's Duurzaam and verantwoord beleggen 2015 verslag, page 31 http://jaarverslag.abp.nl/docs/pdfs/ABP_Duurzaam_en_Verantwoord_Beleggen_2015.pdf

⁴¹ Pension fund ABP policy note on responsible investment, Fall 2015. http://jaarverslag.abp.nl/docs/pdfs/ABP_Duurzaam_en_Verantwoord_Beleggen_2015.pdf

⁴² <https://www.abp.nl/images/verslag-duurzaam-en-verantwoord-beleggen-2016.pdf>

human rights, and safe labour conditions. The Appendix clearly shows that:

■ **The majority of the coal companies on the GCEL list and the oil and gas companies from The Carbon Underground 200™ are not on this list. ABP engaged with only nine fossil fuel companies in 2016.⁴³**

■ **When a fossil fuel company is on this list, ABP is more often discussing management issues than environment or human rights issues.**

Tackling climate change requires radically overhauling the core business model of the fossil fuel industry – this is something shareholder engagement and action is not made to address. Although shareholder engagement has achieved successes in other industries, there is no evidence that engagement strategies have developed an ask or a timeline that matches the size or urgency of the climate challenge. **The shareholder resolutions ABP has supported so far are too weak in light of climate change. Engagement efforts are allowing these companies to look responsible and benign, while continuing with their business-as-usual plan.⁴⁴**

Given the environmental and social impacts, our concern is that ABP's new policy does not give a clear indication of the conditions or timeframe under which it will manage a responsible exit from coal, oil and gas companies. It is clearly giving the wrong signal if ABP continues to increase investments in fossil fuel companies while simultaneously aiming to be a sustainable pension fund.

notes

⁴³ These nine companies are: American Electric Power, BP, DTE Energy, Engie, Royal Dutch Shell (UK), Shell (NL), Sinopec Shanghai, Statoil, and Total.
⁴⁴ <https://gofossilfree.org/uk/divestment-vs-engagement-combatting-the-greenwash/>

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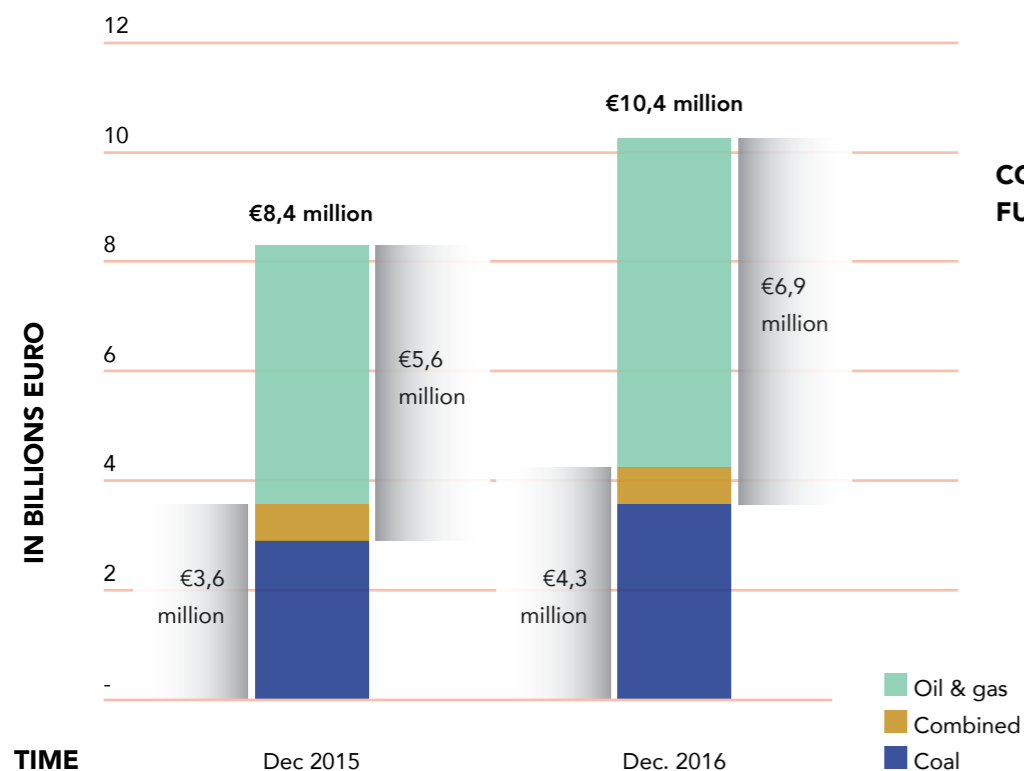
ANALYZING THE NUMBERS: ABP'S INVESTMENTS IN FOSSIL FUELS

At the Paris Climate Summit, 195 countries agreed to limit global temperature rise to well below 2°C, and to strive for 1,5°C. The potential carbon emissions from the coal, oil and gas in the world's currently operating fields and mines alone will take us beyond 2°C.⁴⁵ This means that new fossil fuel development needs to stop and that existing infrastructure needs to be phased out to meet the goal of the Paris Agreement, leaving fossil fuel companies with significant stranded assets in unburnable carbon.

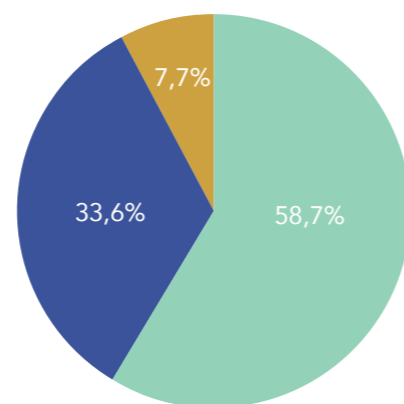
TOTAL FOSSIL FUEL INVESTMENTS

ABP currently invests a grand total of €10,4 billion directly in fossil fuel companies. The investments are composed of 33,6% coal companies, 57,7% oil and gas companies, and 7,7% companies that are diversified in all three fossil fuel types. This total is a raise of over €2 billion from December 2015, the first datapoint after the official release of Vision 2020. Our analysis shows that this raise cannot solely be attributed to a raise in share price.⁴⁶

(DIRECT) FOSSIL ENERGY INDUSTRY INVESTMENTS BY ABP (x bln Euro)



COMPOSITION OF ABP'S FOSSIL FUEL PORTFOLIO



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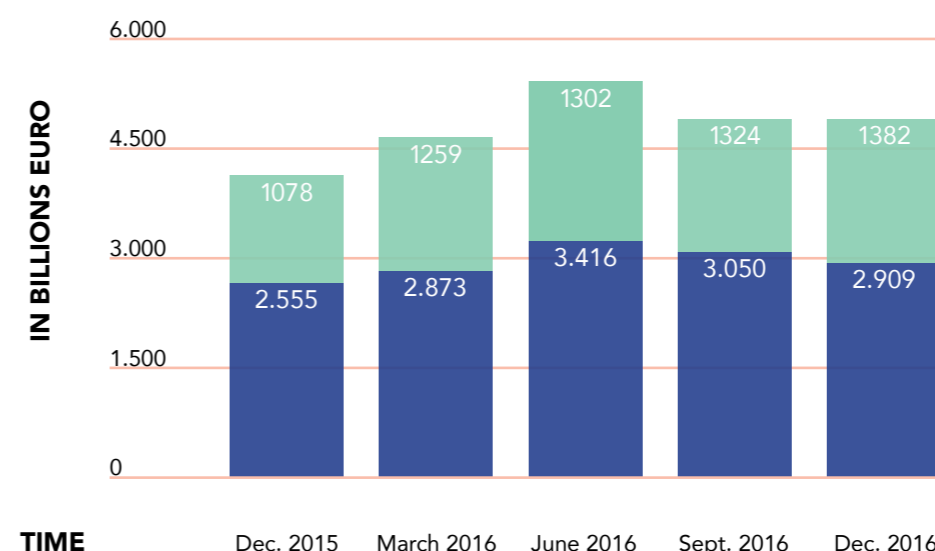
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⁴⁵ <http://priceofoil.org/2016/09/22/the-skys-limit-report/>
⁴⁶ Insufficient data is available publicly to determine this accurately. However, we were able to make an estimation of share price development for a representative selection of coal and oil & gas investments, and relate that to the change in total investments. Relative to the total shares and bonds investments communicated by ABP, the share of fossil investments increased from 7,8% to 8,7%. This is just an indication of the share in ABP's total portfolio, as only part of the investments are communicated (€150 billion, about one third of the total portfolio). See the appendix 4 for more information.

COAL

The total value of ABP's coal investments fluctuated throughout 2016, but consistently remained higher than December 2015. ABP's coal investments topped at €4,5 billion⁴⁷ in June 2016. In December 2016 they still totalled €4,3 billion, an increase of 18% in comparison to December 2015.⁴⁸

ABP INVESTMENTS IN COAL FROM DECEMBER 2015 TO 2016



TIME

Corporate Bonds

Shares & Convertible Bonds

To put this into context: ABP's coal investments are still 1.5 times as high as its investments in renewable energy - €2,8 billion in 2016.⁴⁹ Making matters worse, ABP is invested in 41 companies that are planning new coal-fired capacity that our climate cannot afford. Representatives include South Korea's KEPCO, United States' the Southern Company and Hong Kong based CLP Holdings. These and further companies from ABP's portfolio have plans to build a total of over 239.000 MW of new coal-fired capacity. This

is almost 5 times the size of Russia's entire fleet of coal-fired power stations, and 50 times the Dutch.⁵⁰ If built, this glut of new coal-fired capacity will ruin all chances of meeting the goals of the Paris Agreement.

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⁴⁷ Approximately €0.8 billion of this €4.5 billion includes diversified energy companies that also qualify as oil & gas companies on the CU200™
⁴⁸ Appendix 2 provides a detailed listing of all ABP's current investment values in coal. It should be noted that E.on was not included in the GCEL. E.on was previously on the GCEL (77 million in Dec 2015), but was eliminated when it split into E.on and the fossil fuel company Uniper in January 2016, in which ABP has invested €15 million. It should be noted that Eon was not included in the GCEL. E.on was previously on the GCEL (77 million in Dec 2015), but was eliminated when it split into E.on and the fossil fuel company Uniper in January 2016, in which ABP has invested 15 million.
⁴⁹ <https://www.abp.nl/images/verslag-duurzaam-en-verantwoord-beleggen-2016.pdf>

The years leading up to Paris saw a large wave of coal companies in the US file for bankruptcy and their share prices declined drastically. This makes ABP's 18% increase in investments all the more unsettling. Recently the Financial Times wrote, that the stock of US based coal producers globally has lost two thirds of its value since 2011. The realization is growing that the decline of the coal industry is long term and irreversible.⁵¹ Financial experts are therefore warning pension funds and other investors to get out of coal:

'For most investment managers looking at the future prospects for coal, there is clearly a recognition that this sector is in major decline. As Bernstein the US investment bank recently advised their clients, demand for coal will peak by 2020 and will fall thereafter. In some markets, particularly the US, this decline is accelerating as coal power generation is being replaced by natural gas and renewables such as wind. As a consequence, asset owners are exercising due judgement and are dropping their investment exposure to the coal industry. The evidence is now clear; this is a sunset industry, an industry in decline. And as an asset owner you have a duty to be prudent; to

properly manage risk; and in particular to protect your capital,' says Mark Campanale, founder and Executive Director of Carbon Tracker Initiative.⁵²

When it comes to taking action on coal, ABP is still lagging behind its progressive peers such as KLP, Norway's largest private pension fund. As a company that serves public employees, KLP has adopted strong environment and human rights guidelines and publicly lists the names of companies it excludes from its portfolio. KLP began divesting from coal companies in 2014 and now excludes all companies that base more than 30% of their revenues or power generation on coal.⁵³

OIL AND GAS

Selling off ABP's coal investments is the logical first step in becoming a sustainable pension fund, but further steps are needed to address its oil and gas holdings. In December 2016, ABP had €6,9 billion⁵⁴ in oil & gas-- a 23% increase from December 2015.

During the course of 2016, the share prices of these oil and gas companies have increased. Thus had ABP stayed

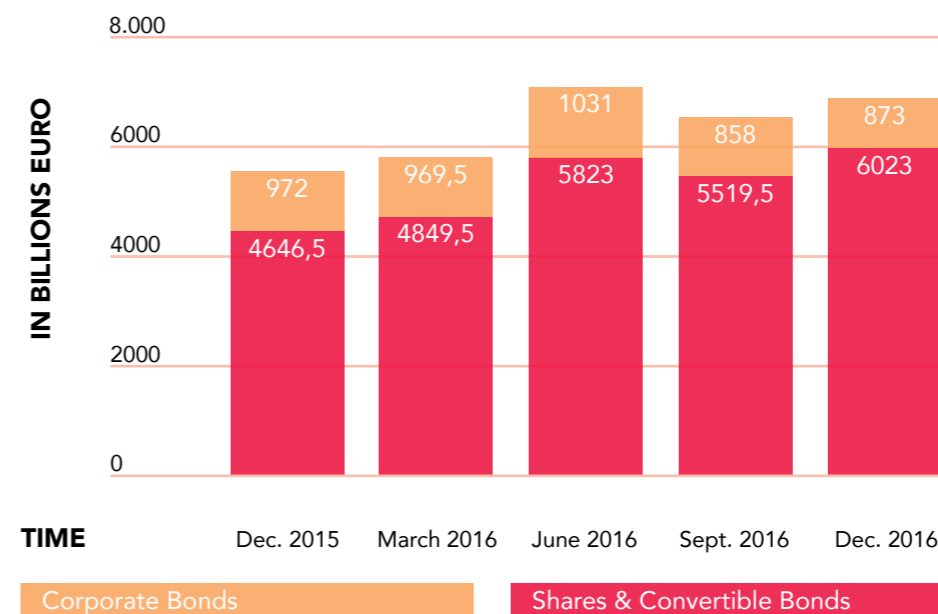
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⁴⁹ <https://www.abp.nl/images/verslag-duurzaam-verantwoord-beleggen-2016.pdf>
⁵⁰ Installed coal fired electricity generation in Netherlands amounts 4700 MW; this excludes the power plant scheduled for closing in July 2017 but includes the remaining ones that might face closure in the near future.
⁵¹ <http://www.nasdaq.com/article/the-decline-of-the-coal-industry-is-longterm-and-irreversible-cm581400>
⁵² Correspondence with Mark Campanale, 19 April 2017
⁵³ http://english.klp.no/polopoly_fs/1.35753.14893938701/menu/standard/file/KLP-LISTEN_13%2003%202017_ENGLISH.pdf
⁵⁴ Approximately €0.8 billion of this €6.9billion includes diversified energy companies that also qualify as coal companies on the Global Coal Exit List.

notes

⁵⁵ <https://www.theguardian.com/environment/2017/feb/28/shell-knew-oil-giants-1991-film-warned-climate-change-danger>
⁵⁶ <https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40-years-ago/>

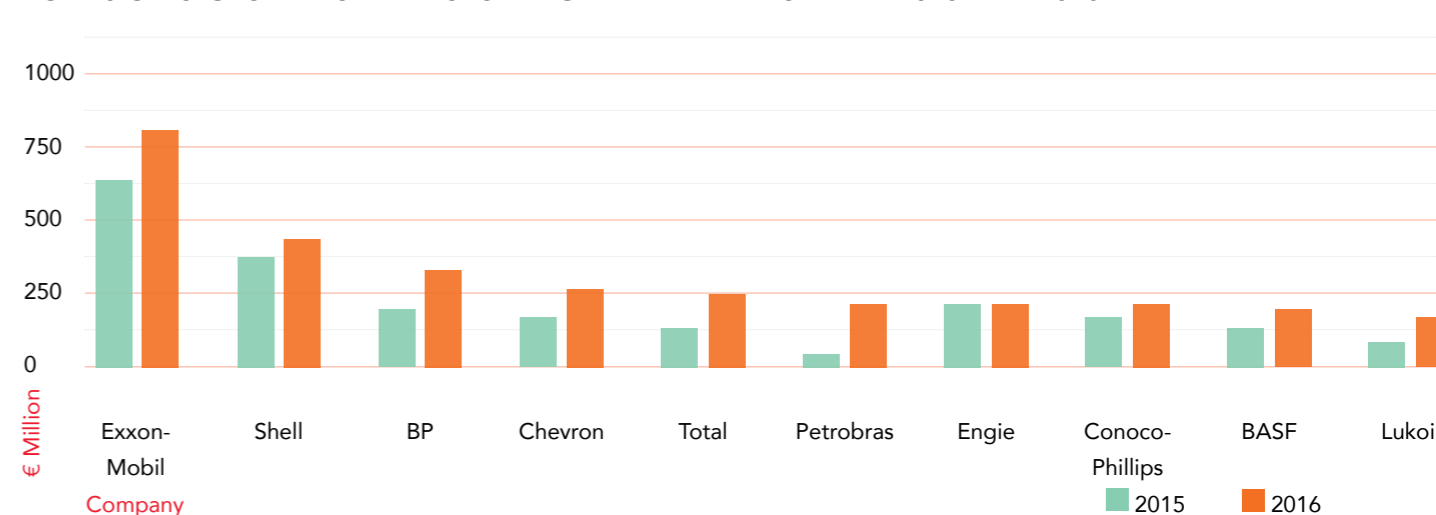
ABP INVESTMENTS IN OIL & GAS FROM DECEMBER 2015 TO 2016



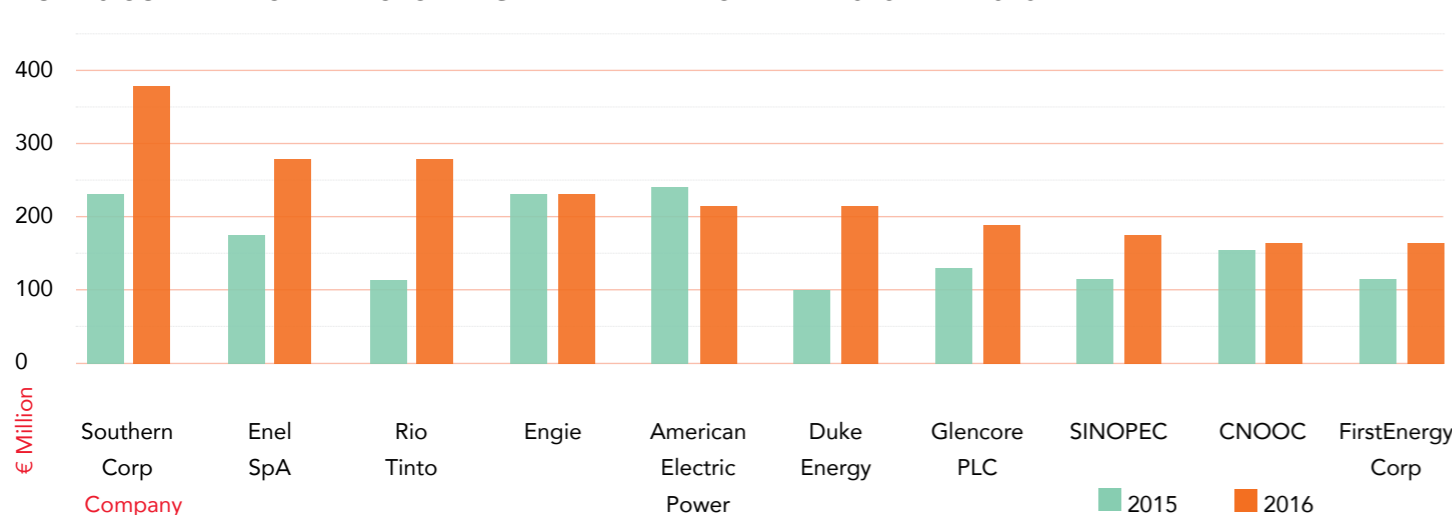
the same in its holdings, the value of its portfolio would have naturally risen. However, our analysis shows that the value in its portfolio is higher than can be explained solely through rising share prices, which means that ABP bought additional shares and bonds of these companies between 2015 and 2016. This is in discord with their commitment to becoming a sustainable pension fund since these oil and gas companies' core business models are based on new exploration and production of oil and gas.

For instance, both Royal Dutch Shell and Exxon Mobil, ABP's largest oil & gas investments, knew about climate change in the early seventies and continued to invest heavily in oil reserves as well as lobby against climate action.^{55/56} Throughout the period of analysis (December 2015-2016) ExxonMobil was the largest oil & gas investment - ABP had a total of €832 million and Royal Dutch Shell followed in second, with an investment of €472 million.

TOP 10 OIL & GAS INVESTMENTS: CHANGE BETWEEN DECEMBER 2015 AND 2016



TOP 10 COAL INVESTMENTS: CHANGE BETWEEN DECEMBER 2015 AND 2016



5

CASE STUDIES

5.1 Case study areas

The following chapter includes five case studies in order to illustrate the diversity of effect of ABP's coal investments. The cases reflect examples from different points in the supply chain, with a focus on some of the largest investments, and represent almost every continent from around the world: Indonesia, Australia, Colombia,

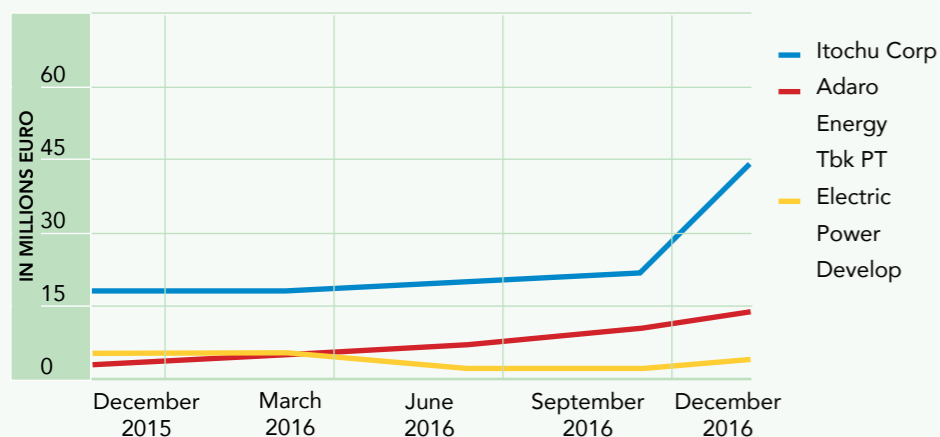
Poland, Germany and the United States. Each case study highlights the climate, environmental and human impact of coal companies that ABP invests in both globally and locally. In some instances, a link to unethical practices and corruption is made. Associated with every case study is the amount that ABP has invested, both in shares & convertible bonds and corporate bonds between December 2015 and December 2016.

5.2 Indonesia

Central Java Power Plant

Itochu Corp: €45 million in shares and convertible bonds
 Adaro Energy: €14 million in shares and convertible bonds
 Electric Power Development: €4 million in shares and convertible bonds

SHARES AND BONDS OF ITOCHU CORP, ELECTRIC POWER DEVELOPMENT AND ADARO ENERGY



Community members rally against the Batang power plant construction.
 Source: *urgewald*

ABP invests in Itochu,⁵⁷ Electric Power Development and Adaro Power, the three companies spearheading the construction of the Batang Power Plant, which is slated to be the biggest coal fired power plant in Indonesia.⁵⁸ The 2.000 MW plant is expected to go online by 2020, with carbon emissions estimated around 10,8 million tons annually.⁵⁹ The project has been stalled for over four years due to community outcry. Over 7.000 community members have spoken out against the coal plant. In spring 2016, the project moved forward with a loan agreement by the Japanese bank, JBIC, in spite of the community and environment effects.

INDONESIA'S DEATHLY COMMITMENT TO COAL

The Indonesian government is in favor of the plant even though it stands in direct conflict with its commitment to reduce greenhouse gases by 26% by 2020. Indonesia has highly lenient emissions standards⁶⁰ for even the newest of power plants, with ten times higher emissions allowed by law than even China.⁶¹

Outside of India and China, Indonesia is the largest source of coal emissions with no plans to stop developing their dependence on coal: the government

aim to build 176 coal plants by 2030, one of which is Batang.⁶² Greenpeace projects that there will be 780 premature deaths per year due to Batang's emissions alone.⁶³

LIVELIHOODS IN DISTRESS

Batang is the site of the protected marine area, Ujungnegoro-Roban, filled with beautiful mangroves and coral reefs. Ujungnegoro-Roban is the basis of many community members' livelihoods. This marine area was also a 'shelter' for fisherman from other districts whose catch had already been affected by the Cirebon and Jepara coal power plants.

In an area that used to be one of the most productive fishing spots in northern Java, fishing yields are already declining due to the construction. On a yearly basis the village of Roban was able to generate €600.000 from fishing—a huge amount for a small village in Indonesia. Now fishermen can barely cover their expenses with their meagre catch,⁶⁴ including paying for damage to their nets caused by jetty construction. Furthermore, the plant has the potential to pump 200 kg of highly poisonous mercury each year into the protected marine area.⁶⁵

notes

⁵⁷ ABP is invested in Itochu but this company is not in the GCEL. However Itochu's involvement in this case makes the investment pertinent.

⁵⁸ <http://www.bhimasenapower.co.id/content/2527/central-java-coal-fired-power-plant-awarded-as-power-deal-of-the-year-2016-for-asia-pacific-region>

⁵⁹ <http://www.greenpeace.org/seasia/id/PageFiles/695938/full-report-human-cost-of-coal-power.pdf>

⁶⁰ regarding: (NOx, SO2, CO2, and PM)

⁶¹ <https://news.mongabay.com/2017/01/southeast-asias-coal-boom-could-cause-70000-deaths-per-year-by-2030-report-says/>

⁶² Koplitz, S., Jacob D., Sulprizio, M., Mullyvirta, L., and Reid, C. (2017). Burden of Disease from Rising Coal-Fired Power Plant Emissions in Southeast Asia. Environmental Science and Technology, Publication (Web): Jan. 12, 2017. <http://pubs.acs.org/doi/pdf/10.1021/acs.est.6b03731>

⁶³ <http://www.greenpeace.org/seasia/id/PageFiles/695938/full-report-human-cost-of-coal-power.pdf>

⁶⁴ <https://news.mongabay.com/2017/01/as-construction-begins-on-javas-batang-coal-plant-a-divided-community-faces-environmental-problems/>

⁶⁵ http://www.greenpeace.org/seasia/id/PageFiles/587242/2014-03%20Batang%20briefing%20paper_FINAL.pdf

The local Batang government has actively worked against conserving this legally protected marine area. It enacted special regulation that allows the company to get around

disrupted the region's water supply.⁶⁹ As Mr. Karomat, a farmer from Ujungnegoro, said 'Our farmland is the only source of our livelihood [...] but will be destroyed by this project.'⁷⁰



Indonesian fisherman send a protest message using their boats. Source: urgewald

the building restrictions. A Maritime Ministry Official has stated that the local government does not have such authority, but the federal government seems to be turning a blind eye.⁶⁶ This could also devastate the growing tourism industry, which has become an integral component of the local economy.

Landowners have sold off much of their land to the project, mainly due to intimidation, and tenant farmers are left jobless. During the early phase of land acquisition, the local population was harassed daily by company and military personnel. People who rejected the project were denounced as anti-government or communists to create conflict within the community.⁶⁷ Many local farmers have continued to resist selling off their land-- causing much of the project's four-year delay.⁶⁸ Even as farmers stand strong, their harvests have been reduced because of the heavy equipment that has

The companies also built a two-meter high wall to separate the community members from their land, even though the villagers claimed claims they had not sold it yet.⁷¹ This land grab has stripped the community of its livelihood and cultural heritage. The government applied a land procurement law that allows it to acquire land if it is for the 'benefit of the greatest prosperity of the people.' Yet, the private companies are the only ones who will be reaping the majority of the benefit.⁷²

CRIMINALIZING PEACEFUL ACTION

'People opposing are also arrested and jailed. One community leader was jailed for seven months. It makes people very scared. Even when they try to inform the police, if it is from someone opposing, the police do not care,' said Didit Wikasono, a coordinator at Greenpeace Indonesia.

notes

- ⁶⁶ <https://www.rnw.org/archive/greenpeace-slams-illegal-indonesia-coal-plant>
- ⁶⁷ Interview with Didit Wikasono, Greenpeace Indonesia
- ⁶⁸ <http://jakartaglobe.id/news/residents-continue-fight-batang-power-plant/>
- ⁶⁹ http://www.foejapan.org/aid/jbic02/batang/pdf/161205_Batang_Objection.pdf
- ⁷⁰ <http://endcoal.org/2015/08/in-japan-indonesian-villagers-file-official-complaints-on-batang-coal-plant/>
- ⁷¹ http://www.foejapan.org/aid/jbic02/batang/pdf/20150729_JBIC%20Objection_Batang.pdf
- ⁷² <https://news.mongabay.com/2017/01/as-construction-begins-on-javas-batang-coal-plant-a-divided-community-faces-environmental-problems/>

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Five community members were jailed for over five months, even though there was no evidence for their arrests other than the fact that they held anti-coal sentiments. When they were finally released because of the lack of evidence, they were not compensated for their unjust arrest.

Protests have erupted across the region, with over 22 actions since March 2014. For example, farmers and fishermen came together to write out 'Food Not Coal' in banners on their land.⁷³ But some of these peaceful protests have been confronted with violence. At a rally of over 500 people, 17 were wounded by the police and hired thugs.^{74/75}

In spite of the human right abuses of peaceful protesters, the harm to the protected Ujungnegoro-Roban marine area and the fact that the project hinders Indonesia's ability to reach its climate goals, ABP chose to increase its investments in the project's three sponsors between September and December 2016. From the local to the international level, the Batang Coal Fired Power Plant has a disastrous effects that far outweigh any benefits.

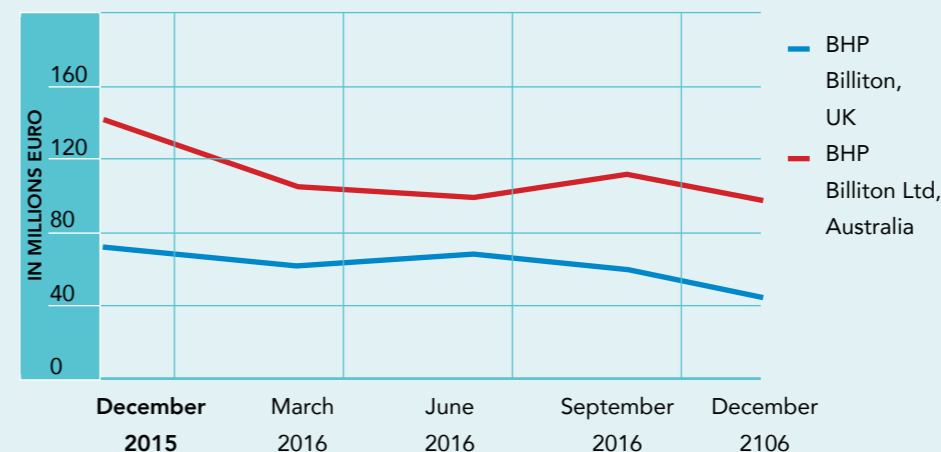
- ⁷³ http://www.greenpeace.org/seasia/id/PageFiles/587242/2014-03%20Batang%20briefing%20paper_FINAL.pdf
- ⁷⁴ <http://www.mongabay.co.id/2013/07/31/warga-desa-bentrok-dengan-aparat-menolak-pengeboran-proyek-pltu-batang/>
- ⁷⁵ <http://www.mongabay.co.id/2013/07/31/warga-desa-bentrok-dengan-aparat-menolak-pengeboran-proyek-pltu-batang/>

5.3 Australia

NEW SOUTH WALES

BHP Billiton: €77 million in shares and convertible bonds; €18 million in Corporate Bonds (Australia); and €42 million in shares and convertible bonds (UK)

SHARES AND BONDS OF BHP BILLITON AUS AND BHP BILLITON UK



BHP is the biggest mining company in the world. According to one 2015 report, if all of BHP's projects, both working and planned, were exploited it would produce over 44 billion tons of carbon dioxide.⁷⁶ BHP's holdings are spread over different continents and constitute some of the biggest coal mines in the world-- from South Africa to Colombia to Australia. This includes the Cerrejon mine wrought with human rights abuses in Colombia, which earned BHP the prize of the fourth most controversial mining company in 2011.⁷⁷ Over the past few years the company has continued to lose money on their energy coal investments as prices have plummeted.⁷⁸

AUSTRALIA CO-OPTED BY COAL

BHP is one of the biggest contributors to Australia's heralded title as a leading greenhouse gas emitter. It was at the opening of one of BHP Billiton's mines where Tony Abbott, the former Prime Minister, spoke his infamous words 'Coal is good for humanity.'⁷⁹

BHP is an active member of the Minerals Council of Australia, the prime lobby group for Australian coal. Mike Henry, BHP's President of Coal, even sits on the lobby group's Board of Directors.⁸⁰ The group has secured around €20 million per year in tax deductions and consistently opposed against solar feed-in tariffs and renewable energy targets, while advocating for government investment in carbon capture sequestration (CCS) as a climate solution.⁸¹

NEW SOUTH WALES ENERGY COAL MINING - A FLOUNDERING ECONOMY

Mount Arthur is owned by BHP and is the biggest coal mine in the state of New South Wales. The mine generates around 20 million tons of energy coal per year but even with such high yields, the drop in coal prices has left Mount Arthur with dwindling profits.⁸² In 2016, 300 of 1.700 jobs were slashed to 'increase efficiency' of the mine. The CFMEU, the miners union, is highly concerned that they will replace the permanent jobs with contractors.⁸³ Contractors make \$70,000 less than their permanent counterparts at Mount Arthur, not to mention the loss of job security. On so-called 'wet days' when work can't be done, contractors are sent home without pay.⁸⁴

The coal party line has been that the coal provides jobs and supports the Australian economy, but jobs are becoming less reliable and dwindling as coal loses its value. As Georgina Woods from the Lock the Gate Alliance put it, 'What we really need is a transition plan that provides jobs for the long term. Coal is in turmoil around the world and losing money left, right, and centre.'⁸⁵ There has been some speculation as to whether the company might reduce its coal assets, but BHP remains determined to continue exploiting the Mount Arthur mine, while lowering the benefits for local job seekers.⁸⁶

notes

⁷⁶ https://platform.reprisk.com/downloads/specialreports/23/Top%2010%20Most%20Controversial%20Mining%20Companies_RepRisk%20150312.pdf

⁷⁷ https://platform.reprisk.com/downloads/specialreports/23/Top%2010%20Most%20Controversial%20Mining%20Companies_RepRisk%20150312.pdf

⁷⁸ <https://www.worldcoal.com/coal/16082016/bhp-billiton-coal-business-hit-by-lower-prices-2016-2242/>

⁷⁹ <https://www.theguardian.com/world/2014/oct/13/tony-abbott-says-coal-is-good-for-humanity-while-opening-mine>

⁸⁰ http://www.minerals.org.au/mca/mca_board_directors

⁸¹ <https://www.theguardian.com/environment/2015/jun/15/deductions-for-mining-company-lobbying-cost-tax-payers-20m-a-year>

⁸² <http://www.theaustralian.com.au/business/mining-energy/bhp-mount-arthur-coal-mine-on-the-brink-as-profits-dive/news-story/b37ef63a3b8cda29d7cfaf-8427c5b210>

⁸³ <http://www.smh.com.au/business/energy/bhp-billiton-to-axe-290-hunter-valley-coal-mine-jobs-20160308-gndimf.html>

⁸⁴ <http://www.theherald.com.au/story/3105796/the-same-job-the-same-shift-for-70k-less-a-year/>

⁸⁵ <http://www.abc.net.au/news/2014-11-04/bitter-blow3a-bhp-to-cut-150-jobs-at-mount-arthur-coal-mine/5865280>

⁸⁶ <http://www.afr.com/business/mining/coal/bhp-and-rio-tin-to-are-quietly-exiting-coal-20151202-gl0do0o>

NEWCASTLE AND THE DESTRUCTION OF THE GREAT BARRIER REEF

BHP owns 35% of the Newcastle Port, which is the world's largest coal port.⁸⁷ Its exports are almost exclusively coal and this is where two thirds of Mt. Arthur's coal production is transported.⁸⁸ Newcastle is right next to the Great Barrier Reef, a natural wonder that is protected as both a UNESCO World Heritage Site and an Australian National Park. BHP's influence is two-fold:

1. Climate change leads to ocean acidification, which bleaches and kills coral.⁸⁹ Studies estimate that coral cover of the Great Barrier Reef has diminished to only about 20-30% of what it was in the 1960s.⁹⁰

2. The Port uses a practice called dredging to cut away large parts of the seafloor so the huge ships can dock at the ports and load up with coal. They suck up the seafloor and then dump it elsewhere killing the seagrass, coral and marine animals that live there.⁹¹

PERMITTING AWAY AUSTRALIA'S BREAD BASKET

A recent analysis showed that coal companies, including BHP, have bought up over 700,000 acres of land in the New South Wales state-- taking over a significant majority of the highest quality agricultural land in the country. Not only is agriculture the bedrock of the region's economy, these coal mines could threaten Australia's food and water security.⁹² The mines threaten aquifers and surface water vital to the parched continent's population by dumping heavy metals and increasing salinity by as much as ten times in some places.⁹³

BHP shows little regard for the risk of its operations on farmers' livelihoods and the country's water supply. One of the most telling examples was the ten-year long battle over the Carroona coal permit. BHP paid the New South Wales government \$100 million in 2006 for an exploratory license that spanned over 21 private properties, most of which belonged to farmers who helped cultivate the most fertile region of the continent. Yet, the farmers never consented to the exploration.⁹⁴

The farmers, afraid for the aquifers and their livelihoods, fought back in a court battle. '*Carroona farmers are standing up for environmental protection against state and federal governments which continually fail to put any meaningful limits on irresponsible mining developments across highly productive agricultural land. The profit interest of the mining lobby should not drive projects that will destroy the agricultural capacity of Australia for all time,*' said Doug Ranken, from Carroona Coal Action Group (CCAG).⁹⁵ In 2016, BHP was finally forced to sell back the permit back to the Australian government-- a huge win for the New South Wales community.

Although ABP's investments in BHP Billiton had decreased over 2016, it still has a total €137 million worth of investments in the company. Their contribution to the irreparable damage to the Great Barrier Reef and overreaching permits in water scarce areas make this an unacceptable investment at any amount. The old justification that coal is a jobs generator does not hold up, as fewer New South Wales workers can count on a fair paycheck from the company as the coal economy flounders.

notes

⁸⁷ <http://www.newportcorp.com.au/site/index.cfm?display=111627>

⁸⁸ <http://www.mining-technology.com/projects/mt-arthur/>

⁸⁹ <https://www.carbonbrief.org/ocean-acidification-decline-of-great-barrier-reef-likely-to-be-worse-than-feared>

⁹⁰ <http://www.sciencedirect.com/science/article/pii/S0272771412000856>

⁹¹ <https://fightforthereef.org.au/wp-content/uploads/2014/05/REEF-DREDGE-Doc.Spreads-2.pdf>

⁹² http://www.lockthegate.org.au/flogging_the_farm

⁹³ <http://www.smh.com.au/environment/liver-pool-plains-baird-government-to-pay-bhp-billiton-220-million-for-licence-20160811-gqqhkv.html>

⁹⁴ <http://www.theaustralian.com.au/archive/business-old/farmer-vindicated-after-court-win-against-bhp/news-story/5e65b075e48762555cbff-faa0d2ac1cc>

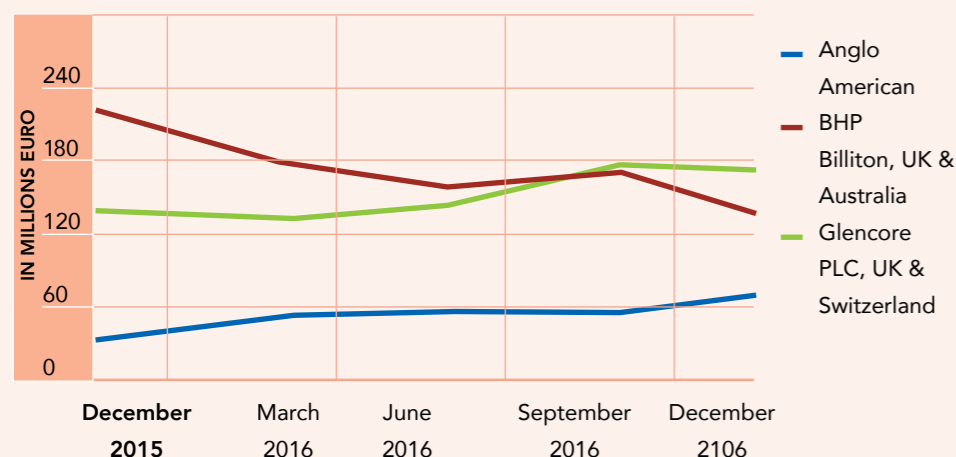
⁹⁵ <https://www.greenleft.org.au/content/nsw-farmers-take-bhp-billiton>

5.4 COLOMBIA

CESAR AND LA GUAJIRA REGIONS

Glencore	€81 million in shares and convertible bonds; €94 million in corporate bonds
BHP Billiton	€77 million in shares and convertible bonds; €18 million in Corporate Bonds (Australia); and €42 million in shares and convertible bonds (UK)
Anglo American	€52 million in shares and convertible bonds; €15 million in Corporate Bonds

SHARES AND BONDS OF BHP BILLITON (UK & AUSTRALIA) GLENCORE (UK & SWITZERLAND) AND ANGLO AMERICAN



As of 2014, Colombia became the fifth largest coal exporter in the world.⁹⁶ 92% of all of Colombia’s coal is destined for outside its borders-- most of it to Western Europe.⁹⁷ Yet, according to Climate Analytics, in order to adhere to the Paris Agreement, rich countries need to completely phase out the use of coal by 2030 and the rest of the world must follow absolutely no later than 2050.⁹⁸ That means that Colombia has only about twelve years of viable exports left.

Colombia’s coal is often referred to as ‘blood coal’ due to the gory history of murders, disappearances, and community displacement associated

with the mining operations.⁹⁹ Between 2001 and 2011, there were at least 274 anti-mining protests around the country. These protests were often met with death threats to community leaders and activists.¹⁰⁰ PAX’s report Civil Society Under Threat found that over 200 people have been victims of assaults or intimidation in Colombia’s Cesar region between 2012 and 2016-- often connected with their opposition to coal mining.¹⁰¹

A COMPLICIT NETHERLANDS

Forty percent of all coal exported from Colombia finds its way into Dutch harbours. It is also the largest source

notes

- ⁹⁶ <https://www.worldcoal.org/coal/coal-market-pricing>
- ⁹⁷ <http://www.climatechangenews.com/2015/10/29/colombia-must-reduce-its-dependence-on-coal-exports/>
- ⁹⁸ http://climateanalytics.org/files/climateanalytics-coalreport_nov2016_1.pdf
- ⁹⁹ <https://www.paxforpeace.nl/stay-informed/in-depth/stop-blood-coal>
- ¹⁰⁰ <http://www.christianaid.org.uk/images/giving-it-away-colombia-mining-report.pdf>
- ¹⁰¹ <https://www.paxforpeace.nl/publications/all-publications/civil-society-under-threat>

of coal in Dutch power plants.^{102/103} Last year the Amsterdam City Council expressed concern that the Amsterdam Port was the gateway for so much blood coal into the country and is now looking to ban coal with such severe human rights violations from its Port.¹⁰⁴

indirectly benefitting the mining companies, as they were able to expand the mines without having to relocate communities.¹⁰⁶ From 1996 to 2006, 3.100 people were murdered and 55.000 farmers forcibly removed from their land in the Cesar Region.¹⁰⁷



Community El Hatillo living next to Cesar mining Source: ©Sebastian Rotters

Not only does the Dutch economy use Colombian coal, the Dutch citizens’ pensions are also wrapped up in this dirty industry, too. ABP invests in three of the largest coal mining companies in the country: BHP Billiton, Glencore, and Anglo American. All three companies together own the Cerrejon Mine in the La Guajira Region.¹⁰⁵ Glencore’s 100% subsidiary, Prodeco, also runs two further mines in the Cesar Region-- La Jagua and Calenturitas. All of these mines are wrought with human rights and environmental abuses.

CAPITALIZING ON CONFLICT - CESAR REGION

Prodeco (Glencore’s subsidiary in the Cesar region) turned a blind eye to the violence waged by paramilitaries against the local population in the mining region. The paramilitaries displaced thousands of families,

PAX’s report The Dark Side of Coal investigated the relationship between mining companies and paramilitary forces from 1996 to 2006. It cites sworn testimonies of ex-paramilitaries commanders who describe the alleged strategic, logistic and financial cooperation between the paramilitaries and the mining companies. ‘All this is done because of the coal-rich land: it brings in a lot of money, and that explains this [forced] displacement.’ said El Samario, an ex-paramilitary.¹⁰⁸

A 2012 Colombian investigation found that in 2002, 10 people were murdered by paramilitary forces near one of Prodeco’s coal mines. The paramilitary then occupied the land and ceded it to the government, which was then promptly sold the land to Prodeco so they could expand the mine. Although Prodeco did not give the orders, the courts determined that the massacre

notes

- ¹⁰² <https://www.somo.nl/wp-content/uploads/2014/06/Colombian-Coal-in-Europe-1.pdf>
- ¹⁰³ <https://www.paxforpeace.nl/stay-informed/in-depth/stop-blood-coal>
- ¹⁰⁴ <https://www.paxforpeace.nl/stay-informed/news/amsterdam-wants-blood-coal-banned-from-its-port>
- ¹⁰⁵ <http://www.cerrejon.com/site/english/our-company/shareholders.aspx>
- ¹⁰⁶ <https://www.paxforpeace.nl/stay-informed/in-depth/stop-blood-coal>
- ¹⁰⁷ <https://www.paxforpeace.nl/stay-informed/news/amsterdam-wants-blood-coal-banned-from-its-port>
- ¹⁰⁸ <https://www.paxforpeace.nl/stay-informed/in-depth/stop-blood-coal>



Nestor Martinez - activist killed on September 11th, 2016 © Sebastian Rotters

occurred specifically to acquire land on Prodeco's behalf.¹⁰⁹

LUNGS FILLED WITH CARBON - LA GUAJIRA REGION

The Cerrejon mine is one of the biggest open pit coal export mining operations in the world.¹¹⁰ ABP is invested in all three of the mining giants running the mine: Glencore, BHP Billiton and Anglo American. Cerrejon is situated directly in territory that belonged to the Wayuu people and Afro-Colombian communities' territory.¹¹¹ 12,000 hectares of dry tropical forest, several villages and a major river have been lost to mining expansion.¹¹²

Although the companies have fulfilled certain bureaucratic procedures, their insufficient negotiations with communities has led to severe problems including communities losing their way of life as they're forced into urban areas with no skills to compete with others in the market, destining them for a decline into poverty.¹¹³ Samuel Arregoces, a former inhabitant of Tabaco talks about the loss of his

home, 'They destroyed the entire village. They took all our land away. We lost our livestock, everything. They relocate us to other districts, where we now live in poverty since we cannot grow anything... we have become destitute, since we no longer have a village.'¹¹⁴

Communities that are still living in the mining region are affected by air and water pollution caused by the coal operations.¹¹⁵ The mining jeopardizes over 13.000 community members-- none of whom will reap the benefits of the coal excavated from their ground.¹¹⁶ The residents have increasingly been struck with skin diseases, stomach problems, eye disorders and respiratory problems. Women have found themselves at particular risk since they spend time in the polluted rivers washing clothing and collecting water. 'There has been a change in the way we live our lives. Today the air is polluted and our lungs are filled with carbon,' explains Yasmin Romero Epiayu of La Guajira.¹¹⁷

Not only is the residents' water polluted, the mining company is

notes

- ¹⁰⁹ <https://www.somo.nl/wp-content/uploads/2014/06/Colombian-Coal-in-Europe-1.pdf>
- ¹¹⁰ <http://www.cerrejon.com/site/english/our-company/shareholders.aspx>
- ¹¹¹ <https://www.sciencedaily.com/releases/2007/10/071012100630.htm>
- ¹¹² <https://www.theguardian.com/environment/2013/apr/15/mining-mining>
- ¹¹³ http://www.forumsyd.org/PageFiles/7127/Kol_rapport_FS_web.pdf
- ¹¹⁴ <https://www.paxforpeace.nl/stay-informed/in-depth/stop-blood-coal>
- ¹¹⁵ <https://www.theguardian.com/sustainable-business/cerrejon-mine-colombia-human-rights>
- ¹¹⁶ <https://www.theguardian.com/environment/2013/apr/15/mining-mining>
- ¹¹⁷ http://www.forumsyd.org/PageFiles/7127/Kol_rapport_FS_web.pdf

diverting and drying up their rivers. La Guajira is one of the driest regions in the country, yet the government worked with the mining company to dam up one of the major rivers, the Rancheria River, so they could use more of its water in their processes and spray down coal dust down. The mining companies give the residents water in tanks but often it is of bad quality, 'We are suffering a huge crisis because of the lack of water, since the company Cerrejon has caused an irreversible damage with the diversion of streams,' testifies Rogelio Ustate Arregoces from Tabaco.¹¹⁸

ABP's €379 million investment in Glencore, BHP Billiton and Anglo American as of December 2016-- three of the largest coal miners in Colombia-- means that Dutch pension savers money is tied up in blood coal and the impoverishment of local communities.



Cerrejon Mine source © Sebastian Rotters

notes

- ¹¹⁸ http://www.forumsyd.org/PageFiles/7127/Kol_rapport_FS_web.pdf

5.5 poland and germany

EUROPEAN LIGNITE COMPANIES

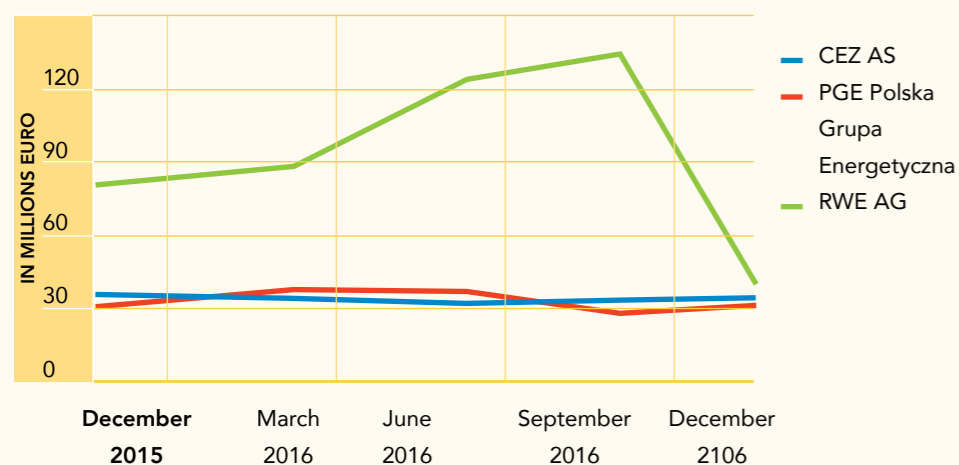
CEZ AS - Czech - €9 million in shares and convertible bonds

PGE Polska Grupa Energetyczna SA - Poland - €6 million in shares and convertible bonds

RWE AG - Germany - €9 million shares and convertible bonds;

€7 million in corporate bonds

SHARES AND BONDS IN CEZ AS, PGE POLSKA GRUPA ENERGETYCZNA SA AND RWE AG



In the past two years, climate activists from all over Europe made global headlines twice when their peaceful civil disobedience actions brought lignite operations in Germany to a halt. A total of more than 3,000 people confronted lignite giant RWE and Swedish state-owned utility, Vattenfall,¹¹⁹ with a powerful message: urgent action is needed to address the climate crisis.

Lignite, or 'brown coal' is one of the worst-polluting and CO² intensive fossil fuels currently in use. Lignite is excavated through strip mining and for years after mines are closed, the deep cuts in the landscape will remain visible and water pollution stays as a permanent threat.¹²⁰

ABP is invested in Germany and Poland's lignite giants: RWE, PGE and the Czech utility CEZ. During 2016, ABP increased its investment in RWE and had invested over €100 million as of September 2016. ABP sold off a large amount during the last few months of 2016, as the holdings as of December 2016 now show €15 million worth of investments. It is unknown whether this drop in investment in RWE is temporary or permanent.

POLISH COAL

ABP's investments in Polish coal companies are particularly troublesome. Despite the Paris Agreement, the Polish government is committed to

notes

¹¹⁹ In September 2016 Vattenfall officially sold its lignite operations in Lusatia to the Czech utility EPH. Vattenfall wants to reduce its climate footprint. However, the harmful activities in Lusatia continue and the climate does not care who burns the coal that tears huge holes into the landscape and displaces thousands of people. <http://www.handelsblatt.com/unternehmen/industrie/eph-und-vattenfall-tschechen-uebernehmen-offiziell-ostdeutsche-braunkohle/14631446.html>
¹²⁰ 'Kostenrisiken für die Gesellschaft durch den deutschen Braunkohletagebau,' Greenpeace May 2014 as cited in 'Dirty & Dangerous: The Norwegian Government Pension Fund's Coal Investments' Urgewald November 2014

perpetuating the country's dependence on coal. PGE is Poland's largest utility. In 2016 PGE generated 53,67 Twh of electricity, 90% generated by burning lignite or hard coal¹²¹ which emitted 56 million tons of CO² equivalent.¹²² PGE mined 48 million tons of lignite in 2016, constituting 79% of all lignite mining in Poland.¹²³ The company also owns and operates Europe's biggest lignite power plant in Bełchatów (5298 MW), which is the dirtiest power plant in the EU and emits 35 million tons of CO² equivalent every year.¹²⁴ Despite public opposition in Poland and Germany, PGE plans to open two brand-new open-pit mines – Złoczew and Gubin-Brod with total coal resources of nearly 2 billion tons. In 2009, local referenda conducted in Gubin and Brody communities showed that an overwhelming majority of residents are against plans for new lignite mines.

Poland has the highest percentage of water intake by the coal sector in the world. 70% of the water is used by the coal mining and powering industry, with the remaining 30% used by everyone else. In 2016, PGE drained 228 million cubic meters of mine water and used 1,1 billion cubic meters of water for cooling. Over the course of three years, the mines sucked dry the equivalent of Poland's largest lake-- 660 million cubic meters of water. The detrimental impacts of the mines on water resources has become a unifying issue for farmers, fishermen, and local communities fighting against increased lignite mining in Poland.¹²⁵



German lignite mine. Source: urgewald

notes

¹²¹ http://www.gkpge.pl/media/pdf/Relacje_Inwestorskie/Mngmnt_Board_consolidated_report_PGE_CG_2016.pdf p. 4
¹²² http://www.gkpge.pl/media/pdf/Relacje_Inwestorskie/Mngmnt_Board_consolidated_report_PGE_CG_2016.pdf p. 53
¹²³ http://www.gkpge.pl/media/pdf/Relacje_Inwestorskie/Mngmnt_Board_consolidated_report_PGE_CG_2016.pdf p. 42
¹²⁴ http://www.gkpge.pl/media/pdf/Relacje_Inwestorskie/Mngmnt_Board_consolidated_report_PGE_CG_2016.pdf p. 95
¹²⁵ <http://rozwojtak-odkrywkinie.pl/index.php/en/rt-on-en/o-nas-en>

notes

- ¹²⁶ <http://www.kohlenstatistik.de/19-0-Braunkohle.html>
- ¹²⁷ <https://www.bund-nrw.de/themen/braunkohle/hintergruende-und-publikationen/braunkohlenkraftwerke/kraftwerksstandorte/>
- ¹²⁸ <https://www.bund-nrw.de/themen/braunkohle/hintergruende-und-publikationen/braunkohlentagebaue/hambach/>

COAL AND RWE

The German utility RWE's lignite operations are in the Rhineland. In the area between Cologne and Aachen, RWE runs three large lignite mines and four lignite-fired power plants. RWE is the world's largest lignite miner, hauling up more than 95 million tons of lignite in 2015.¹²⁶ RWE's four lignite-fired power plants have a total net capacity of 10.120MW, making the company Europe's largest polluter. Every year they emit about 82 million tons of CO₂e into the atmosphere.¹²⁷ Nothing stands in the way-- RWE destroys old villages, tears down houses, churches, schools and even resettles graveyards in order to expand their lignite mining. More than 17.000 people have lost or will lose their homes for the expansion of the mines.¹²⁸ Even in Germany, communities rarely maintain their living standard after the resettlement.

As if this was not enough, RWE's mining activities are gradually cutting through the 12.000-year-old Hambacher Forest – one of Germany's oldest forests. The forest used to stretch across an area of more than 4.000ha before mining activities started, but RWE plans to mine lignite until 2045 and destroy all but 300ha of the Hambacher forest along the way.

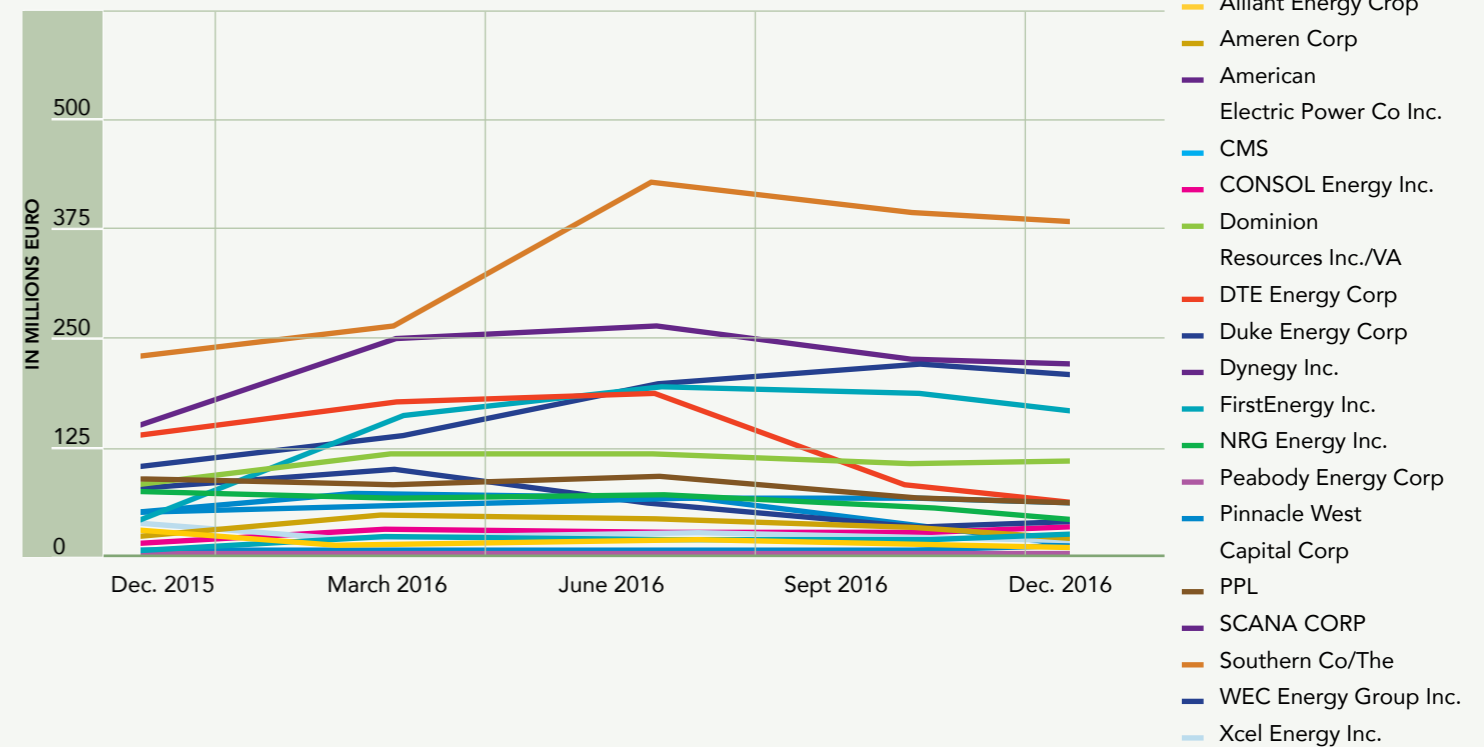
As this case study demonstrates, it is high time that ABP permanently divest from their investments in European lignite producers. According to ABP's 2016 fourth quarter report, ABP has significantly reduced its investments in RWE. The question is if this trend will continue. We advocate for ABP to publicly state that they will not buy bonds or shares of lignite companies in the future and that they will completely sell off their existing investments in these companies and their subsidiaries.

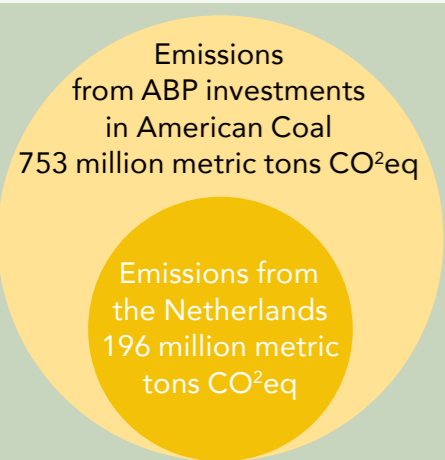
5.6 united states

AMERICAN COAL POWER PLANTS

- Arch Coal (bankrupt)
- AES (€10 million shares and convertible bonds; €8 million in corporate bonds)
- Alliant (0 million shares)
- Ameren (€11 million shares; €8 million in corporate bonds)
- American Electric Power Co Inc (€112 million shares and convertible bonds; €102 million corporate bonds)
- CONSOL Energy (€10 million bonds)
- Dominion Resources Inc (€91 million shares and convertible bonds; €17 million corporate bonds)
- DTE Energy Co (€44 million shares and convertible bonds)
- Duke Energy Corp (€98 million shares and convertible bonds; €109 million corporate bonds)
- Dynegy Inc (€10 million corporate bonds)
- FirstEnergy Corp (€58 million shares and convertible bonds; €96 million corporate bonds)
- NRG Energy Inc (€5 million shares and convertible bonds; €23 million corporate bonds,)
- Peabody Energy Corp (bankrupt)
- Pinnacle West Capital Corp (€57 million shares and convertible bonds)
- SCANA Corp (€27 million shares)
- The Southern Co (€159 million shares and convertible bonds; €224 million corporate bonds,)
- WEC Energy Group Inc (€36 million shares)
- Xcel Energy Inc (€20 million shares and convertible bonds; €11 million corporate bonds)

SHARES AND BONDS IN AMERICAN COAL COMPANIES





ABP'S BILLIONS OF DOLLARS IN AMERICAN COAL

ABP has invested more than €1,4 billion in American coal mining and coal power companies. Altogether the greenhouse gas emissions from all 18 companies comes to a whopping 753 million metric tons CO₂eq¹²⁹. This is more than 3,8 times the size of the Netherlands' total annual emissions, which were 196 million metric tons CO₂eq in 2015.¹³⁰ According to a study published by Nature, the US cannot exploit 92% of its remaining coal reserves if we are to have a shot at staying below the two degree limit.¹³¹

Furthermore, the companies' investments in coal are folding under economic pressure, with mines and plants closing at a rapid pace. Even with the energy transition at their heels, the American companies are dragging their feet and using every tool in their arsenal to keep on polluting.

GENERATING INEQUALITY WITH POWER PLANTS

The NAACP's report, Coal Blooded: Putting Profits before People, they determined that the 6 million

Americans living within 3 miles of a coal are earning below average annual income and that coal power plants have a large and destructive impact on their health. People of colour are disproportionately affected by the health impacts of coal power plants as these are often sited in their neighborhoods.¹³² The sulfur dioxide, nitrogen oxide, mercury and fine particulate matter from coal power stacks has instigated widespread asthma, respiratory diseases, heart disease and cancer. The pollution has significant effects on children-- it increases the frequency of premature births (one of the major causes of infant mortality) and asthma.

Of the twelve companies with an 'F' rating for Corporate Environmental Justice Performance (CEJP), ABP is invested in six: FirstEnergy, Dominion Resources, Duke Energy, Xcel Energy, Southern Company, and DTE Energy. These companies are choosing the path of least resistance, keeping their emissions-heavy plants running in communities that don't have the political or financial capital to say no.

INDIANA: A HOTSPOT FOR EMISSIONS



image of Duke Energy's Gibson Plant directly next to a National Wildlife Refuge © Duke Energy

notes

¹²⁹ see Methodology in Appendix 5

¹³⁰ <https://www.cbs.nl/en-gb/news/2016/36/greenhouse-gas-emissions-5-percent-higher-in-2015>

¹³¹ <http://www.cbsnews.com/news/what-would-it-take-to-slow-global-warming-gigatonnes-of-restraint/>

¹³² <http://www.naacp.org/wp-content/uploads/2016/04/CoalBlooded.pdf>



Evansville area - Vectren's AB Brown plant (not one of ABP's investments but is in the polluting zone) © Cory Woolsey

Five of the most polluting coal-fired power plants in the United States are in Indiana, according to a 2016 study by the Center for Public Integrity.¹³⁴ Of those five 'super polluters', ABP is invested in three: the Gibson Power Plant (Duke Energy), Rockport Power Plant (American Electric Power)¹³⁵, and the Petersburg Power Plant (AES). The Gibson Power Plant tops the chart, emitting 2,9 million pounds of toxic compounds and 16,3 million metric tons of CO₂eq.

This has generated lower life expectancies in the surrounding area and severe public health issues. Asthma is pervasive around the power plants. 'We would line up all of our inhalers in a row on the benches before we would go run, just in case,' recounts Kirstin Ethridge of Evansville, Indiana, where four super polluters are located.

'We have usually weeks on end in the summer of ozone alerts. I didn't know this, but that's not common in the rest of the country,' says Evansville resident and mother, Mallory Rodenberg. On such ozone days, children shouldn't play outside, but local schools are inconsistent in protecting children from air pollution. Indiana's coal power plant pollution has significantly contributed to infant mortality, making it the 9th worst in the nation, according to

Dr. Norma Kreilein, a pediatrician in Southwest Indiana.

The power plants are not just polluting the air, but are also threatening the water supply. The three power plants contribute to the 2.100 pounds of mercury dumped each year into the Great Lakes, the largest system of freshwater lakes in the world that millions of people rely on for their drinking supply. Mercury is highly toxic and affects brain and neurological capacity-- building up in fish and animals that people eat. Native communities on the Great Lakes have been particularly affected by mercury poisoning since they rely upon subsistence fishing.¹³⁶ Every Indiana waterway that has been assessed has been found to be contaminated with mercury.

The clincher is the fact that half of the coal burned in Southwest Indiana doesn't even make it into the local electricity grid, but instead is routed up north and out of state. "This region has one of the highest concentrations of coal-burning power plants in the country, including some of the dirtiest, and more than half of the the power generated is exported. We are left the pollution," says Wendy Bredhold, a Sierra Club Beyond Coal Campaign Representative living in Southwest Indiana.

notes

¹³⁴ <https://www.publicintegrity.org/2016/09/29/20271/here-are-super-polluters>

¹³⁵ of the three that ABP is invested in, this one is not specifically a coal plant. Instead it uses Distillate Fuel Oil No. 2, not coal.

¹³⁶ <https://www.nrdc.org/sites/default/files/poisoning-the-great-lakes.pdf>

Mary Anne Hitt, director of the Beyond Coal Campaign, says, 'We don't have to accept living with dangerous, filthy energy, and we won't. Indiana's Ohio River Valley residents will continue to lead the charge to retire these super polluters in their backyard and replace them with clean energy.'

IN AMERICAN DEMOCRACY, MONEY VOTES

Together, the 18 US coal companies in ABP's holdings contributed a grand total of €10 billion to the 2016 American election campaigns.¹³⁷ The majority of these campaign contributions went to Republican politicians who have returned the favor by rolling back environmental regulations, fighting the Clean Power Plan, and denying the existence of climate change.¹³⁸ Instead of addressing the harm caused by their coal plants, these companies have poured money into public and political campaigns to obscure the impacts and actively work against solutions.

A front group for coal companies, the American Coalition for Clean Coal Electricity (ACCCE), works to oppose climate action. It is funded by many of ABP's coal companies including the Southern Company, Drummond, and American Electric Power.¹³⁹ The ACCCE is one of the major groups behind the stalling of the Clean Power Plan to review the legal challenges. It has funded misleading reports and even secretly lobbied state attorney generals to tell the federal court to set aside the Plan.¹⁴⁰ This behavior cannot be construed as anything but a subversive influence to derail climate action.

ABP is invested in US coal companies whose emissions altogether are 3,8 times more carbon intensive than the entire Dutch economy. Their coal power plants are a health hazard for low income communities and these companies are using their money and lobbying power to derail environmental progress and climate action.

¹³⁷ <https://www.opensecrets.org/orgs/>

¹³⁸ <http://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf>

¹³⁹ <http://www.americaspower.org/about-accce/bios/members/>

¹⁴⁰ <http://www.ucsusa.org/global-warming/fight-misinformation/whos-fighting-clean-power-plan-and-epa-action-climate#bf-toc-3>

6

CONCLUSIONS AND RECOMMENDATIONS

Our research shows that ABP is still a major investor in the fossil fuel industry. As of December 2016, ABP has invested €10,4 billion altogether in coal, oil and gas.¹⁴¹ It is particularly worrying that ABP has not divested from its most climate disrupting investments-- specifically from coal. This concern is heightened since many of the coal companies in ABP's portfolio are pursuing new coal-fired capacity, totalling to 239.000 MW. To be clear this analysis is a conservative estimate since it relies on publicly listed investments that ABP makes available to the public and does not include the ABP investments in the hands of external managers.¹⁴²

The case studies discussed in this report provide ample evidence that ABP's investments in the coal industry have significant negative climate, environment, and human rights impacts.

The year 2016 was the hottest in the third year running.¹⁴³ The urgency for climate action is paramount. At its current rate of change, the Netherlands' largest pension fund will **not** be able to bring its portfolio in line with the target set in Paris. It would clearly be giving the wrong signal if ABP continues to

increase investments in coal, oil and gas companies while aiming to be a sustainable pension fund. **Engagement is ineffective as the core business of these companies is the core of the problem.** Specifically, we recommend ABP to:

- 1. Sell off all of its investments in coal companies and permanently exclude the coal industry from its investments portfolio** (as defined in the Global Coal Exit List) **by the end of 2017.**
- 2. Commit to selling off remaining oil and gas investments over the next five years and permanently exclude the oil & gas industry from its investment portfolio** (as defined in The Carbon Underground 200™).
- 3. Increase transparency of its fossil fuel portfolio.** Provide clear and understandable information to the public each year regarding the scope and scale of all fossil fuel investments and efforts to phase these out. This information should include the scope of fossil fuel investments in hands of external managers, information not currently made available to the public.

¹⁴¹ Six companies are listed in both the GCEL and CU200 oil & gas: CNOOC, Sasol, CONSOL, Engie, SINOPEC, and BHP Billiton. These companies are referred to as "combined" companies for their classification under both the coal and oil & gas lists.

¹⁴² See chapter on Methodology for description of data not made available to the public

¹⁴³ <https://www.theguardian.com/environment/2017/jan/18/2016-hottest-year-ever-recorded-and-scientists-say-human-activity-to-blame>

APPENDICES

1 METHODOLOGY OF THE 'COAL EXIT LIST'

To determine the coal content of ABP's investment portfolio, this report made use of the Global Coal Exit List (GCEL). ABP's investments were compared to the companies listed on the GCEL. The GCEL is a database developed by German NGO Urgewald and will be officially published in June 2017. The database captures all major players in the thermal coal industry, most notably the power generation sector, the mining sector, and the infrastructure & services sector. The tool covers the entire coal value chain.

The GCEL lists more than 1000 companies worldwide. A company is listed if it fulfils at least one of the following three criteria:

1. 30% OR MORE OF THE COMPANY'S POWER PRODUCTION OR REVENUES ARE COAL-BASED.

30% of coal business means that a company is so dependent on coal that it is unlikely that it will rethink its business model. If a company has less than 30% coal business, there could be room for an engagement strategy. However, this can only be the case if the company changes its business model or reduces its dependency on coal significantly.

2. THE COMPANY'S ANNUAL COAL PRODUCTION EXCEEDS 20 MILLION TONS OR IT BURNS MORE THAN 20 MILLION TONS ANNUALLY.

Some of the world's largest coal producers are so immensely diversified that their coal share of revenue lies below 30%. Companies producing massive amounts of 20 million tons of coal or more annually should be divested regardless of the percentage of their coal business. 20 million tons of coal equals the coal consumption of a mid-size country such as Italy. Of the world's 80 largest coal producers, each produces as much coal or more than Italy burns in a year.

3. THE COMPANY PLANS TO BUILD NEW COAL POWER PLANTS, DEVELOP NEW MINES AND SET UP NEW COAL TRANSPORT INFRASTRUCTURE.

In a way, this criterion is the most important as it is about the future. Even before the Paris agreement was signed Christiana Figueres, former Executive Director of the United Nations Framework Convention



notes

¹⁴⁴ <https://www.theguardian.com/environment/2015/may/04/un-climate-chief-says-the-science-is-clear-there-is-no-space-for-new-coal>

on Climate Change (UNFCCC) observed: 'There is no space for new coal'.¹⁴⁴ Today however, many companies are building new coal-fired power plants, more than 1000 are still in the pipeline. New mines, coal harbours and special coal railroads are offering the supply for this ever-hungry demand. If built, these coal-fired power plants will put us on a highway towards a 4-degree world.

To coal companies publicly available data was used. Annual reports, investor presentation or websites of companies are the main sources for the data provided in the GCEL.

The GCEL was developed as a 'divestment to-do-list' for large investors such as ABP, but it is not a complete databank of all companies that have some coal-based business activities. It focuses on the thermal coal industry and does not cover steel makers or cement companies. It does not cover companies with coal-related business smaller than the abovementioned criteria.

2 ABP INVESTMENTS IN 'GLOBAL COAL EXIT LIST'

* Legend: Divestment Criteria

- cspp = coal share of power production > 30%
- csr = coal share of revenue > 30%
- mt = mining or consumption of > 20 million tons of coal per year
- ctg = Coal to Gas or Coal to Liquids operations/ extensions
- exp = expansion plans in the coal sector (power plants, mines, coal facilities)
- sub = subsidiary of a company to which the divestment criteria apply

Company	Country	Shares & convertible bonds		Corporate bonds		KLP divested	Divestment Criteria*	Industry Sector	Annual Coal		Coal Power Expansion Plans in MW
		31 Dec. 2015	31 Dec. 2016	31 Dec. 2015	31 Dec. 2016				Production in million tons	Capacity in MW	
AGL Energy Ltd	Australia	7	18			•	cspp	mining, power	30	6,850	
Aurizon Holdings Ltd	Australia	5	10	39	49		csr, exp	services			
BHP Billiton Ltd, Australia (BHP Billiton Gr)	Australia, UK	160	119	18	137		mt	mining	184,5		
Origin Energy Ltd	Australia	37	39	43	82		cspp	power			
South32 Ltd	Australia	7	24		24		mt	mining	40		
Whitehaven	Australia	0	6		6	•	csr, exp	mining	15,1		
Fortis Inc/Canada	Canada	6	10		10		cspp	power		1,515	
Teck Resources Ltd	Canada	9	32	4	51		csr, mt, exp	mining	25,3		
AES Gener SA	Chile	1	1		1		cspp, sub	power			
Beijing Enterprises (Beikong) Holdings	China	15	4		4		ctg	services			
China Coal Energy Co Ltd	China	2	7		7	•	csr, mt	mining	86,6		
China Power Intern. Develop. Ltd (CPI)	China	2	10		10	•	cspp, csr, exp	power		71,998	30,397
China Resources Power Holdings Co Ltd	China	17	18		18	•	cspp, csr	power, mining	13,9	29,746	10,700
China Shenhua Energy Co Ltd	China	13	29		29	•	cspp, csr, mt	power, mining	280,9	40,907	26,041
Datang International Power Gen. Co Ltd	China	4	1		1	•	cspp, exp	power		31,278	28,945
Huaneng Power International Inc	China	33	21		21	•	cspp, exp	power		71,944	20,750
Shanghai Electric Group	China	5	1		1	•	exp	services			7,127

Company	Country	Shares & convertible bonds		Shares & convertible bonds		Corporate bonds		Total 2016	KLP divested	Divestment Criteria*	Industry Sector	Annual Coal Production in million tons	Installed Coal Capacity in MW	Coal Power Expansion Plans in MW
		31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016							
Sinopec Engineering Group Co Ltd	China	<0.5	5					5	ctg	services				
Yanzhou Coal Mining Co Ltd	China	20	9					9	•	csr, mt, exp	mining	72,6		
ChinaPetroleum&ChemicalCorp.(SINOPEC)	China	132	159					159		ctg	power		4.485	
CNOOC Ltd	China	149	159					159		ctg	services			
CEZAS	Czech Rep.	12	9					9		exp, cspp	power,mining	21	6.462	1.410
EDF (Électricité de France)	France	1	5	55	128			133		mt	power		10.600	
ENGIE (GDF Suez & Intern. Power)	France	103	116	122	106			222		exp	power		7.645	950
EnBW	Germany	0	9	100	93			93		cspp	power,mining	4,8	5.651	
RWE AG	Germany	52	9	3	7			16		cspp,csr,mt,exp	power,mining	90,5		1.475
Uniper	Germany	0	15					15		cspp, exp	power		9.132	1.100
CLP Holdings Ltd	Hong Kong	105	123					123	•	cspp, csr, exp	power		11.397	3.670
HK Electric Investments Ltd	Hong Kong	3	2					2	•	csr, cspp	power		2.500	
Adani Ports & Special Economic Zone Ltd	India	17	15					15		sub, exp	services			
Bharat Heavy Electricals Ltd (BHEL)	India	2	1					1		exp	services			1.480
Coal India Ltd	India	28	5					5	•	cspp, csr, exp	power,mining	538,8		1.600
NTPC Ltd	India	2	2					2	•	cspp, csr, exp	power		44.004	38.372
Power Finance Corporation	India	5	16					16		exp	financials			12.000
Tata Power Co Ltd	India	1	5					5	•	cspp, csr, exp	power		14.600	3.170
Reliance Infrastructure	India	0	2					2	•	cspp, csr, exp	pow.,min.,serv.		500	
Steel Authority of India	India	9	9					9		exp	services		557	200
Adaro Energy Tbk PT	Indonesia	2	14					14	•	csr, mt, exp	mining	50,4	60	1.033
PT AKR Corporindo Tbk	Indonesia	1	6					6		exp	mining,services			660
Enel SpA	Italy	55	165	126	110			275		exp	power		16.103	110
Chubu Electric Power	Japan	30	39					39		exp	power,mining		4.133	2.378
Chugoku Electric Power Co Inc/The	Japan	2	0,5					0,5	•	cspp, exp	power		2.371	1.801
Electric Power Develop. Co Ltd (J-Power)	Japan	3	4					4	•	cspp, exp	power,mining	3	9.400	3.158

Dirty & Dangerous: the fossil fuel investments of Dutch pension fund ABP • 2. ABP INVESTMENTS IN 'COAL EXIT LIST'

Company	Country	Shares & convertible bonds		Shares & convertible bonds		Corporate bonds		Total 2016	KLP divested	Divestment Criteria*	Industry Sector	Annual Coal Production in million tons	Installed Coal Capacity in MW	Coal Power Expansion Plans in MW
		31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016							
Hokkaido Electric Power Co Inc	Japan	<0.5						0	•	cspp, csr	power		2.500	
Hokuriku Electric Power Co	Japan	4	1					1	•	cspp, csr	power		2.900	
Idemitsu Kosan Company	Japan	11	26					26		exp	services,mining	11		667
JGC Corp. (Japan Gasoline Co)	Japan	2	6					6		exp, ctg	services			1.050
KANSAI ELECTRIC POWER CO	Japan	11	17					17		exp	power		1.800	1.817
Marubeni	Japan	17	40					40		exp	pow.,serv.,min.	6,7	1.231	5.865
Shikoku Electric Power Co Inc	Japan	8	0,5					0,5	•	cspp, csr, exp	power, mining	3,3	1.106	500
Tohoku Electric Power Co Inc (TEPCO)	Japan	13	13					13		cspp, exp	power		3.200	933
Tenaga Nasional Bhd (TNB)	Malaysia	102	76					76	•	cspp, exp	power		4.780	3.260
Aboitiz Power Corp	Philippines	4	3					3	•	cspp, exp	power		300	899
DMCI Holdings Inc	Philippines	1	4					4	•	cspp, exp	power		900	350
JG Summit Holdings	Philippines	6	9					9		exp	services			600
Manila Electric Co (MERALCO)	Philippines	4	3					3		cspp, exp	power		288	2.090
PGE Polska Grupa Energetyczna SA	Poland	9	6					6		cspp,csr,mt,exp	power,mining	47,7	9.724	5.260
Tauron Polska Energia SA	Poland	5	7					7		cspp, csr, exp	power,mining	6,4	4.922	910
Sembcorp	Singapore	2	2					2		cspp, exp	power		660	330
African Rainbow Minerals Ltd	South Africa	5	4					4		mt	mining	21		
Exxaro Resources Ltd	South Africa	1	20					20	•	csr, mt, exp	mining	42		315
Sasol Ltd	South Africa	98	112					112		ctg, exp	power,mining	39,2		
Korea Electric Power Corp (KEPCO)	South Korea	77	55					55	•	cspp, exp	power		27.327	10.480
Endesa SA	Spain	44	62					62		cspp	power		497	
Vattenfall	Sweden	0	41	25	41			41		cspp	power		11.283	
Banpu Public Co Ltd	Thailand	1	2					2	•	csr, exp	power		926	
Glow Energy PCL	Thailand	3	8					8	•	csr, sub	power		1.258	
Anglo American PLC	UK	38	52					67		mt, exp	mining	94,8		
Glencore PLC	UK/ Switzerland	32	81	105	94			175	•	mt, exp	mining	124,9		

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Company	Country	Shares & convertible bonds		Shares & convertible bonds		Corporate bonds		Total 2016	KLP divested Criteria*	Divestment Sector	Industry	Annual Coal Production in million tons	Installed Coal Capacity in MW	Coal Power Expansion Plans in MW
		31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016	31Dec.2015	31Dec.2016							
Rio Tinto	UK+Australia	119	274		274		274	•	mt, exp	mining		30,2		
AES Corp/VA	USA	9	10	15	8		18	•	cspp, exp	power			9.056	641
Ameren Corp	USA	21	11	12	8		19	•	cspp	power			5.109	
American Electric Power Co Inc	USA	146	112	90	102		214	•	cspp, mt	power			14.318	
CMS Energy Corp	USA	14	17				17	•	cspp	power			2.154	
CONSOL Energy Inc	USA	0	1	4	6		7	•	csr, mt	mining		26,6		
Dominion Resources Inc/VA	USA	44	91	39	17		108	•	cspp	power			4.971	
DTE Energy Co	USA	148	44				44	•	cspp	power			6.259	
Duke Energy Corp	USA	53	98	47	109		207	•	cspp	power			17.958	
Dynegy Inc	USA			0	10		10	•	cspp, csr	power			11.200	
FirstEnergy Corp	USA	39	58	84	96		154	•	cspp	power			9.249	
NRG Energy Inc	USA	44	5	25	23		28	•	cspp	power			13.184	
OGE Energy Corp	USA	5	9				9	•	cspp, csr	power			2.852	
Pinnacle West Capital Corp	USA	47	57				57	•	cspp, csr	power			2.475	
PPL Corporation	USA	24	26	18	30		56	•	cspp	power			11.682	
SCANA CORP	USA	11	27				27	•	cspp	power			1.819	
Southern Co/The	USA	176	159	50	224		383	•	cspp, exp	power			19.141	582
WEC Energy Group Inc	USA	52	36	32			36	•	cspp	power			5.044	
Westar	USA	0			25		25	•	cspp, csr	power			2.759	
Xcel Energy Inc	USA	47	20	8	11		31	•	cspp	power			8.487	
Total		2.554	2.909	1.078	1.382		4.291							
For Information														
Itochu Corp	Japan	20	45						exp, but csr too smal.	power, mining		13,4		633

Dirty & Dangerous: the fossil fuel investments of Dutch pension fund ABP • 2. ABP INVESTMENTS IN 'COAL EXIT LIST'

3

ABP INVESTMENTS IN OIL AND GAS

This report makes use of The Carbon Underground 200™ developed by Fossil Free Indexes to identify the oil and gas content of ABP's investment portfolio. The Carbon Underground 200™ identifies the top 100 public coal companies globally and the top 100 public oil and gas companies globally, ranked by the potential carbon emissions content of their proven fossil fuel reserves.

<http://fossilfreeindexes.com/research/the-carbon-underground/>

In this chart are ABP investments in the top 100 oil and gas companies in The Carbon Underground 200™. Values are in millions euros.

Company	Shares & convertible bonds	Shares & convertible bonds	Corporate bonds	Corporate bonds	Total
	December 2015	December 2016	December 2015	December 2016	December 2016
Gazprom	89	128	0	0	128
Rosneft	15	57	0	0	57
PetroChina	0	0	0	0	0
ExxonMobil	622	804	18	27	831
Lukoil	104	211	0	0	211
BP	189	257	41	89	346
Royal Dutch Shell	310	447	76	25	472
Petrobras	40	232	2	0	232
Chevron	127	211	78	66	277
Novatek	99	155	0	0	155
Total	120	156	50	94	250
Tatneft	27	60	0	0	60
ENI	182	66	0	0	66
ConocoPhillips	152	168	34	50	218
ONGC - Oil & Natural Gas Corp Ltd (India)	42	49	0	0	49
Statoil	178	12	0	0	12
CNOOC	149	159	0	0	159
China Petroleum & Chemical Corp = SINOPEC	132	159			159
Canadian Natural Resources	82	89	0	0	89
Bashneft	0	0	0	0	0
Repsol	65	72	28	0	72
Inpex	20	39	0	0	39
Occidental	146	166	0	18	184
EOG Resources	65	119	42	0	119
Suncor Energy	145	125	0	0	125
Anadarko Petroleum	17	75	41	48	123
Ecopetrol	3	5	12	0	5
Antero Resources	2	6	5	11	17
BHP Billiton	160	119	55	18	137
Marathon Oil	31	26	50	30	56
Devon Energy	20	16	27	15	31
Imperial Oil	11	13	0	0	13
BASF	157	216	0	0	216
Apache	37	89	11	0	89
EQT	11	0	0	0	0
Range Resources	6	8	4	7	15
Chesapeake Energy	3	4	4	10	14
Noble Energy	24	21	19	12	33
Continental Resources	2	30	0	14	44
Cabot Oil & Gas	9	6	0	0	6
YPF	10	13	0	0	13
Hess	28	130	6	20	150
OMV	43	61	38	1	62
Cenovus Energy	20	30	0	24	54

Company	Shares & convertible bonds	Shares & convertible bonds	Corporate bonds	Corporate bonds	Total
	December 2015	December 2016	December 2015	December 2016	December 2016
Encana	5	22	0	17	39
Woodside Petroleum	96	72	0	0	72
Southwestern Energy	10	6	0	8	14
KazMunaiGas EP	0	0	0	0	0
Whiting Petroleum	2	2	3	11	13
Husky Energy	12	10	0	0	10
CONSOL Energy	0	1	4	6	7
PTT	56	59	0	0	59
Murphy Oil	15	10	7	6	16
SK Innovation	78	82	0	0	82
Linn Energy	0	0	2	0	0
California Resources	6	0	3	4	4
Sasol	98	112	0	0	112
Pioneer Natural Resources	11	39	34	25	64
Concho Resources	5	23	13	13	36
QEP Resources	1	0	0	5	5
Crescent Point Energy	15	34	0	0	34
EP Energy	0	0	0	8	8
WPX Energy	0	0	2	7	7
Tourmaline Oil	3	24	0	0	24
Newfield Exploration	2	4	3	6	10
Mitsui	27	62	15	0	62
MEG Energy	1	0	5	7	7
Cimarex Energy	46	54	0	0	54
SM Energy Company	0	0,5	2	0	0,5
Lundin Petroleum	0	7	0	0	7
Det Norske	0	0	0	0	0
Santos	2	7	41	24	31
Memorial Resource	0	0	0	0	0
Oil India	9	12	0	0	12
Ultra Petroleum	0	0	0	0	0
Maersk	76	99	64	0	99
GDF SUEZ	103	116	122	106	222
Energen	1	2	0	0	2
Seven Generations Energy	0	10	0	0	10
National Fuel Gas	0	0	0	0	0
MOL	6	7	0	0	7
JX Holdings	110	128	0	0	128
Denbury Resources	6	12	0	5	17
'Polish Oil & Gas - Polskie Gornictwo Gazownictwo'	5	13	0	0	13
ARC Resources	12	18	0	0	18
Oando Energy	0	0	0	0	0
Galp Energia	2	35	0	0	35

Company	Shares & convertible bonds	Shares & convertible bonds	Corporate bonds	Corporate bonds	Total
	December 2015	December 2016	December 2015	December 2016	December 2016
SandRidge Energy	0	1	2	0	1
Peyto E&D	2	5	0	0	5
Centrica	111	79	0	0	79
Birchcliff Energy	0	0	0	0	0
TAQA	0	0	0	0	0
DNO International	0	0	0	0	0
Xcite Energy	0	0	0	0	0
Freeport-McMoRan	18	31	9	36	67
Oil Search	0,5	14	0	0	14
PDC Energy	0	0	0	0	0
Painted Pony Petroleum	0	0	0	0	0
Great Eastern	0	0,5	0	0	0,5
Gulfport Energy	0	1	0	0	1
TOTAL	4.647	6.023	972	873	6.896

4

RELATING TO SHARE PRICE DEVELOPMENTS

ATTRIBUTION OF CHANGES IN HOLDINGS

ABP invests a grand total of €10,4 billion directly in fossil fuel companies (December 2016). This total is an increase of over €2 billion from December 2015. This indicates ABP effectively bought additional shares and bonds over 2016. This raise, however, might also be attributed to other factors, such as the development of share prices. And indeed, the stock exchanges did well in 2016, and also share prices of oil & gas and coal companies generally increased. ABP publishes insufficient data to determine accurately the effect of these developments on the holdings.

For a single company, ABP can invest in different types of shares, and also different types of bonds. Also, the exact moment of buying/selling matters, the three month interval of the data points is not precise enough.

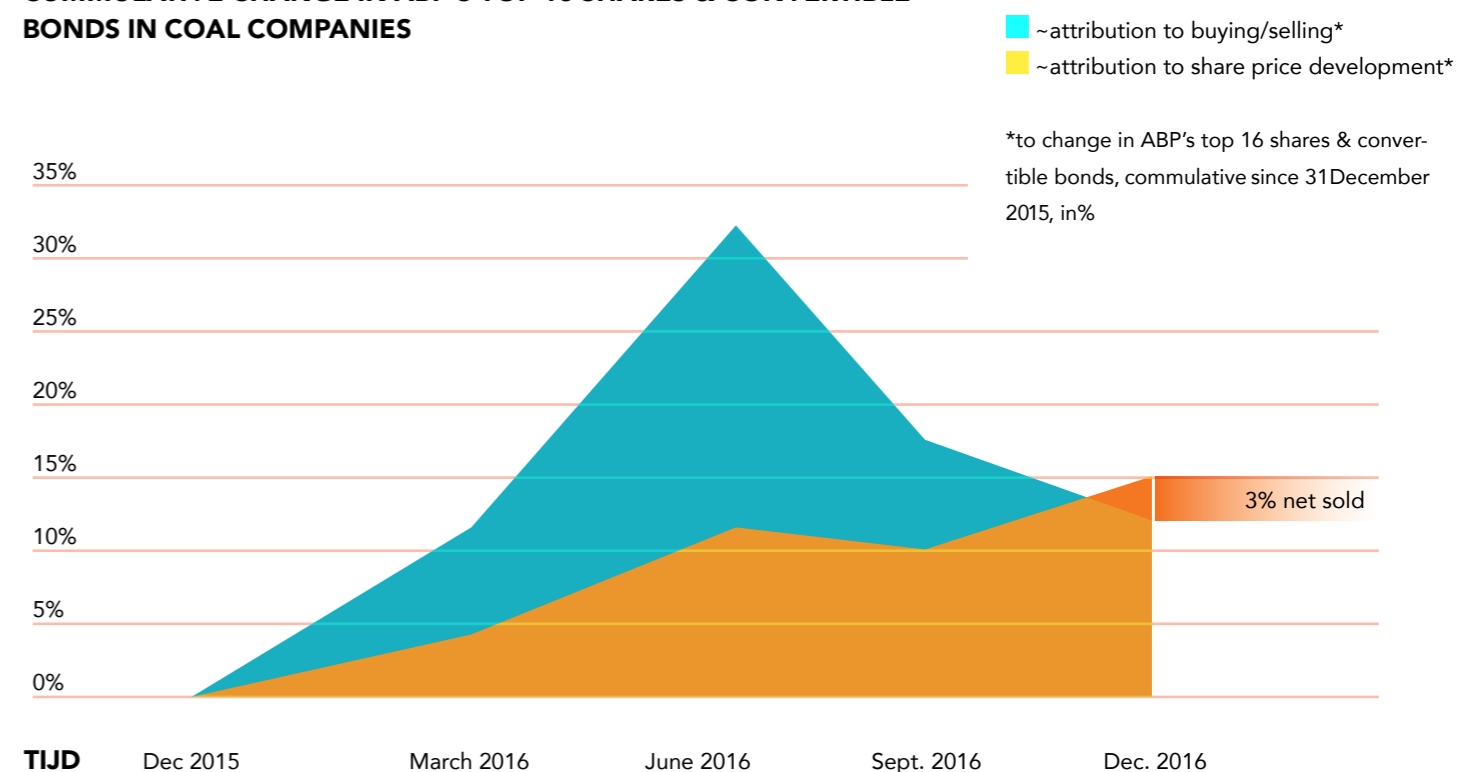
However, we can make an estimation of the influence of share price development in the following way. For both coal and oil & gas investments, we take a representative selection of companies. For this selection, we look up the share price development of the listing with highest market capitalization, also taking into account changes in currency prices. Using this, we calculate the development of ABPs share & convertible bonds

in these companies for the case ABP wouldn't have sold or bought any. Finally, we contrast this 'autonomous' development with the actual development of the shares.

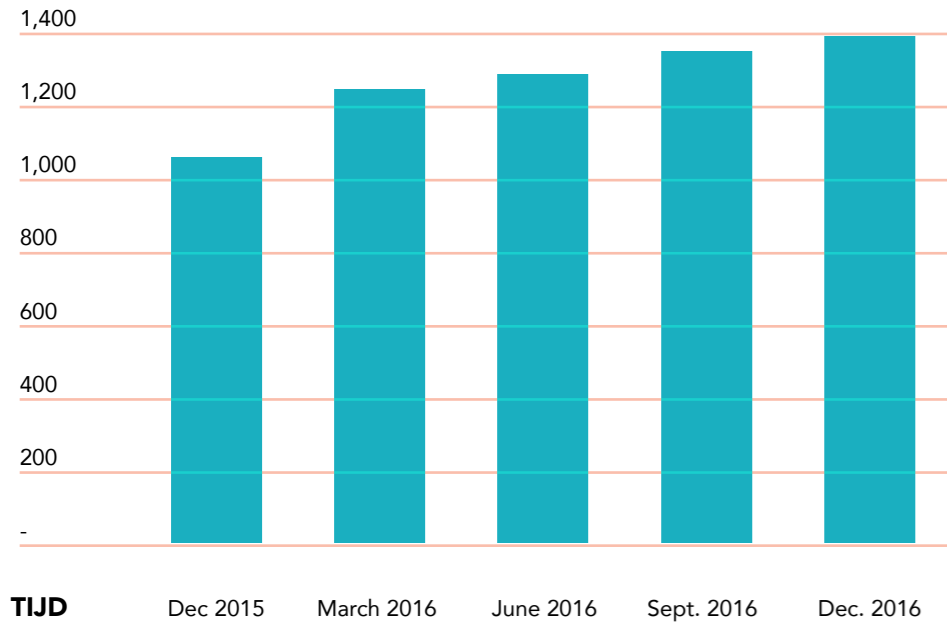
COAL

For coal, we limit ourselves to the major 16 companies that make up 66% of ABPs total shares & convertible bonds in coal companies. Based on the share price developments, we estimate that the value of this selection of holdings would have raised with 15% autonomously. However, the total value of these holdings raised with 13% over 2016. This indicates that ABP has net sold 3% of these holdings over 2016.

CUMMULATIVE CHANGE IN ABP'S TOP 16 SHARES & CONVERTIBLE BONDS IN COAL COMPANIES



COAL, CORPORATE BONDS, X MLN

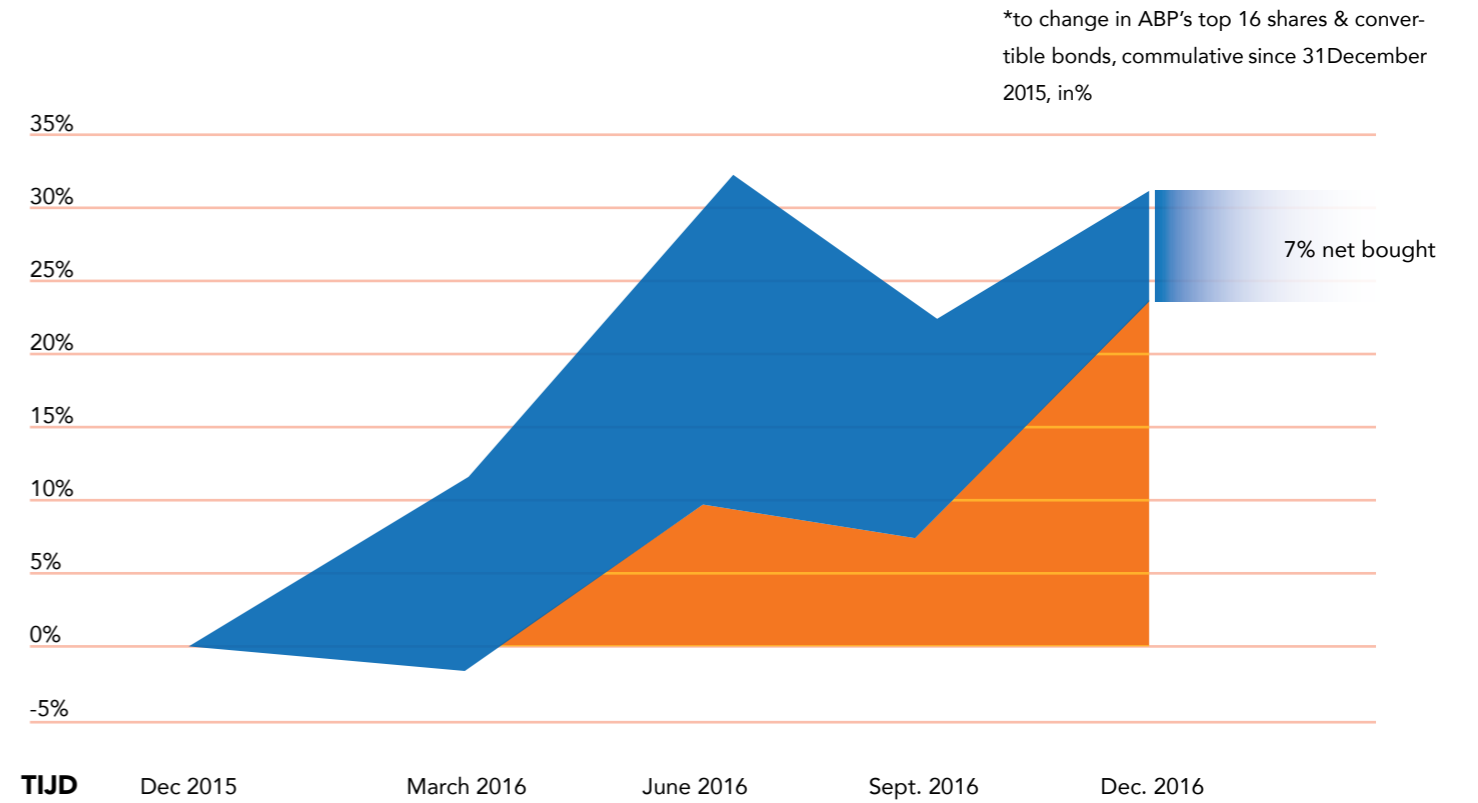


Extrapolating this estimation from the top 16 to all coal companies in ABPs portfolio, we estimate that a €77 million decrease in value of shares & convertible bonds in coal companies can be attributed to net selling. However, at the same time, corporate bond holdings in coal companies went up with 28% (€304 million). As corporate bonds are generally much less volatile, the combination of the development of the two types of holdings still indicates net buying.

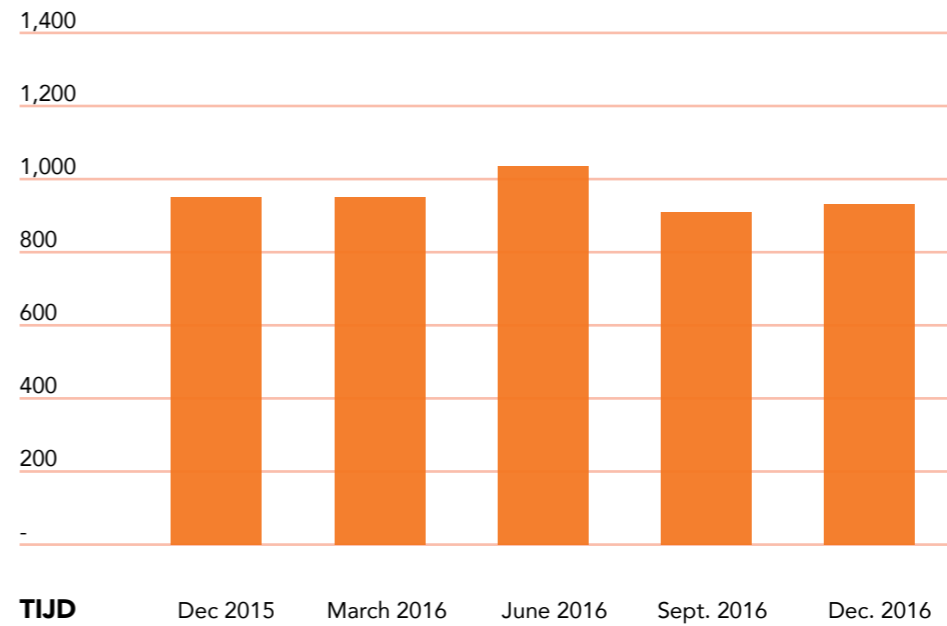
OIL AND GAS

For oil & gas, we limit ourselves to the major 19 companies that make up 67% of ABPs total shares & convertible bonds in oil & gas companies. Based on the share price developments, we estimate that the value of this selection of holdings would have raised with 23%, autonomously. However, the total value of these holdings raised with 31% over 2016. This indicates that ABP has net bought 7% of these holdings over 2016.

CUMMULATIVE CHANGE IN ABP'S TOP 19 SHARES & CONVERTIBLE BONDS IN OIL GAS COMPANIES



OIL & GAS, CORPORATE BONDS, X MLN



Extrapolating from this top 19 to all oil & gas companies in ABPs portfolio, we estimate that a €334 million increase in value of shares & convertible bonds in oil & gas companies can be attributed to net buying. However, at the same time, corporate bond holdings in oil & gas companies went down with 10% (€99 million). As corporate bonds are generally much less volatile, it seems unlikely that the amount of corporate bonds ABP sold compensates for the amount of shares and convertible bonds ABP bought; **therefore this indicates that for oil & gas, just as for coal, ABP has net bought shares and bonds.**

5

CALCULATION OF GHG EMISSIONS USA

This appendix provides more information on how the emissions data cited in case study 3.1.5 was calculated.

The data on the emissions associated with the US companies comes from the US Environmental Protection Agency, which requires details from sites releasing at least 25,000 metric tons of CO₂e per year. For each of the companies that ABP is invested in, we calculated emissions associated with their power plants or underground mining projects. Natural gas units were disregarded, but it should still be noted that this not a picture of solely coal emissions.

Emissions calculated are based off on CO₂e, excluding biogenic emissions. It calculates Carbon Dioxide (CO₂) Nitrous Oxide (N₂O) Methane (CH₄) Perfluorocarbons (PFCs) Hydrofluorocarbons (HFCs) Sulfur Hexafluoride (SF₆). See EPA¹²⁹ site for more information. Data was extracted on 20 March 2017 and referred to emissions reported for 2015.



