

ABP's fossil fuel investments 2018

in million of Euros

	dec 2018			dec 2017		
	<i>Shares & Conv. Bonds</i>	<i>Corporate Bonds</i>	<i>Total</i>	<i>Shares & Conv. Bonds</i>	<i>Corporate Bonds</i>	<i>Total</i>
Oil and Gas	5.965	954	6.919	6.341	1.015	7.356
Coal	2.910	1349	4.259	3.319	1497	4.816
<u>Combined companies*</u>	<u>1055</u>	<u>101</u>	<u>1156</u>	<u>747</u>	<u>191</u>	<u>938</u>
			10.022			11.234

* Companies diversified in coal, oil and gas will appear in both the Global Coal Exit List and Carbon Underground 200 lists so the double counting is eliminated from the Total. Those companies include BHP Billiton LTD; China Petroleum & Chemical Corp. (SINOPEC); CNOOC Ltd; ENGIE and Sasol Ltd.

Oil and Gas

mIn Euros

	<i>Shares & Conv. Bonds</i>	<i>Corporate Bonds</i>	<i>Total</i>
2018	5.965	954	6.919
2017	6.341	1.015	7.356

Coal

mIn Euros

	<i>Shares & Conv. Bonds</i>	<i>Corporate Bonds</i>	<i>Total</i>
2018	2.910	1349	4.259
2017	3.319	1497	4.816

ABP INVESTMENTS IN OIL AND GAS (in Euros millions)

This analysis makes use of the Carbon Underground 200TM developed by Fossil Free Indexes (July 2017) to identify the oil and gas content of ABP's investment portfolio.

Company	Shares & convertible bonds December 2018	Shares & convertible bonds December 2017	Corporate bonds December 2018	Corporate bonds December 2017	Total December 2018	Total december 2017
Gazprom	61	30	0	0	61	30
Rosneft	71	26	0	0	71	26
PetroChina	0	0	0	0	0	0
ExxonMobil	413	1.130	0	0	413	1.130
Lukoil	272	167	0	0	272	167
BP	327	294	28	94	355	388
Royal Dutch Shell	553	633	29	66	582	699
Petrobras (Petroleo Brasileiro SA)	205	167	0	7	205	174
Chevron	315	347	0	0	315	347
Novatek	125	98	0	0	125	98
Total	196	174	132	122	328	296
Tatneft	67	39	0	0	67	39
ENI	228	26	0	0	228	26
ConocoPhillips	320	214	0	0	320	214
ONGC - Oil & Natural Gas Corp Ltd (India)	8	8	0	0	8	8
Statoil	264	113	18	0	282	113
CNOOC	301	190	0	0	301	190
China Petroleum & Chemical Corp = SINOP	177	135	0	0	177	135
Canadian Natural Resources	8	43	0	0	8	43
Bashneft	2	0	0	0	2	0
Repsol	156	186	20	38	176	224
Inpex	16	46	0	0	16	46
Occidental	30	28	0	0	30	28
EOG Resources	58	88	0	0	58	88
Suncor Energy	194	215	18	14	212	229
Anadarko Petroleum	33	35	58	66	91	101
Ecopetrol	44	35	0	0	44	35
Antero Resources	0	0	75	8	75	8
BHP Billiton (UK + Aus)	345	148	55	51	400	199
Marathon Oil	8	14	50	36	58	50
Devon Energy	15	29	0	0	15	29
Imperial Oil	8	20	0	0	8	20
BASF	87	127	0	0	87	127

Company	Shares & convertible bonds December 2018	Shares & convertible bonds December 2017	Corporate bonds December 2018	Corporate bonds December 2017	Total December 2018	Total december 2017
Apache	4	105	16	25	20	130
EQT	0	2	9	23	9	25
Range Resources	0	1	8	9	8	10
Chesapeake Energy	0	0	51	19	51	19
Noble Energy	0	3	20	11	20	14
Continental Resources	2	3	0	27	2	30
Cabot Oil & Gas	10	6	0	0	10	6
YPF	0	18	0	0	0	18
Hess	56	59	11	12	67	71
OMV	52	128	17	14	69	142
Cenovus Energy	0	3	57	53	57	56
Encana	2	0	42	17	44	17
Woodside Petroleum	83	85	0	0	83	85
Southwestern Energy	0	0	19	11	19	11
KazMunaiGas EP	0	0	0	0	0	0
Whiting Petroleum	11	7	25	6	36	13
Husky Energy	4	18	0	0	4	18
CONSOL Energy	0	0	0	0	0	0
PTT PLC	112	123	0	0	112	123
Murphy Oil	0	0	10	9	10	9
SK Innovation	65	110	0	0	65	110
Linn Energy	0	0	0	0	0	0
California Resources	0	0	8	5	8	5
Sasol	97	84	0	0	97	84
Pioneer Natural Resources	25	11	0	0	25	11
Concho Resources	22	5	40	0	62	5
QEP Resources	0	0	5	6	5	6
Crescent Point Energy	0	2	0	0	0	2
EP Energy	0	0	16	8	16	8
WPX Energy	0	0	0	4	0	4
Tourmaline Oil	0	0	0	0	0	0
Newfield Exploration	4	8	0	29	4	37
Mitsui	38	55	0	0	38	55
MEG Energy	0	0	0	8	0	8
Cimarex Energy	3	76	0	0	3	76
SM Energy Company	0	0	33	10	33	10
Lundin Petroleum	15	6	0	0	15	6

Company	Shares & convertible bonds December 2018	Shares & convertible bonds December 2017	Corporate bonds December 2018	Corporate bonds December 2017	Total December 2018	Total december 2017
Det Norske	0	0	0	0	0	0
Santos	12	9	0	0	12	9
Memorial Resource	0	0	0	0	0	0
Oil India	0	1	0	0	0	1
Ultra Petroleum	0	0	0	3	0	3
Maersk	43	54	0	0	43	54
ENGIE/GDF SUEZ	135	190	46	140	181	330
Energen	0	0	0	0	0	0
Seven Generations Energy	0	25	0	3	0	28
National Fuel Gas	2	20	26	26	28	46
MOL	15	11	0	0	15	11
JX Holdings	93	148	0	0	93	148
Denbury Resources	0	0	5	4	5	4
Polish Oil & Gas = Polskie Gornictwo Gazow	11	14	0	0	11	14
ARC Resources	0	0	0	0	0	0
Oando Energy	0	0	0	0	0	0
Galp Energia	3	7	0	0	3	7
SandRidge Energy	0	1	0	0	0	1
Peyto E&D	0	0	0	0	0	0
Centrica	93	67	0	0	93	67
Birchcliff Energy	0	0	0	0	0	0
TAQA	0	0	0	0	0	0
DNO International	0	7	0	0	0	7
Xcite Energy	0	0	0	0	0	0
Freeport-McMoRan	0	17	0	24	0	41
Oil Search	3	5	0	0	3	5
PDC Energy	0	0	3	3	3	3
Painted Pony Petroleum	0	0	0	0	0	0
Great Eastern	0	0	0	0	0	0
Gulfport Energy	0	0	4	4	4	4
TransCanada	43	42	0	0	43	42
TOTAL	5.965	6.341	954	1.015	6.919	7.356

ABP INVESTMENTS IN COAL (in Euros millions)

This analysis makes use of the "Global Coal Exit List" as of April 2019 developed by urgewald to determine the coal content of ABP's investment portfolio.

Company	Country	Shares & convertible bonds December 2018	Shares & convertible bonds 31-12-2017	Corporate bonds December 2018	Corporate bonds 31-12-2017	Total 2018	Total 2017	Installed Coal Capacity in MW	Coal Power Expansion Plans in MW
AGL Energy Ltd	Australia	4	23	0		4	23	6850	
Aurizon Holdings Ltd	Australia	15	4	28	32	43	36		
BHP Billiton Ltd, Australia (BHP Billiton Group)	Australia, UK	345	148	55	51	400	199		
Origin Energy Ltd	Australia	1	30	26	26	27	56		
South32 Ltd	Australia	9	15	0		9	15		
Whitehaven	Australia	39	21	0		39	21		
Fortis Inc/Canada	Canada	4	13	0		4	13	1515	
Teck Resources Ltd	Canada	42	42	16	14	58	56		
AES Gener SA	Chile	1	1	0		1	1		
Beijing Enterprises (Beikong) Holdings	China	17	1	0		17	1		
China Coal Energy Co Ltd	China	0	0	0		0	0		
China Power International Development Ltd (CPI)	China	0	0	0		0	0	71998	30397
China Resources Power Holdings Co Ltd	China	7	15	0		7	15	29746	10700
China Shenhua Energy Co Ltd	China	45	89	0		45	89	40907	26041
Datang International Power Generation Co Ltd	China	1	1	0		1	1	31278	28945
Huaneng Power International Inc	China	2	3	0		2	3	71944	20750
Shanghai Electric Group	China	1	1	0		1	1		7127
Sinopec Engineering Group Co Ltd	China	5	5	0		5	5		
Yanzhou Coal Mining Co Ltd	China	1	1	0		1	1		
China Petroleum & Chemical Corp. (SINOPEC)	China	177	135	0		177	135	4485	
CNOOC Ltd	China	301	190	0		301	190		
CEZ AS	Czech Republic	15	1	0		15	1	6462	1410
EDF (Électricité de France)	France	19	0	170	159	189	159	10600	
ENGIE (GDF Suez & International Power)	France	135	190	46	140	181	330	7645	950
EnBW	Germany	0	0	106	39	106	39	5651	
RWE AG	Germany	1	1	137	108	138	109		1475
Uniper	Germany	0	0	0		0	0	9132	1100
CLP Holdings Ltd	Hong Kong	113	90	0		113	90	11397	3670
HK Electric Investments Ltd	Hong Kong	1	0	0		1	0	2500	
Adani Ports & Special Economic Zone Ltd	India	13	21	0		13	21		
Bharat Heavy Electricals Ltd (BHEL)	India	0	1	0		0	1		1480
Coal India Ltd	India	20	1	0		20	1		1600
NTPC Ltd	India	4	1	0		4	1	44004	38372
Power Finance Corporation	India	5	10	0		5	10		12000
Tata Power Co Ltd	India	0	1	0		0	1	14600	3170
Reliance Infrastructure	India	1	0	0		1	0	500	
Steel Authority of India	India	0	0	0		0	0	557	200
Adaro Energy Tbk PT	Indonesia	0	17	0		0	17	60	1033
PT AKR Corporindo Tbk	Indonesia	4	6	0		4	6		660
Enel SpA	Italy	175	174	69	133	244	307	16103	110
Chubu Electric Power	Japan	2	0	0		2	0	4133	2378
Chugoku Electric Power Co Inc/The	Japan	0	0	0		0	0	2371	1801
Electric Power Development Co Ltd (J-Power)	Japan	0	0	0		0	0	9400	3158

Company	Country	Shares & convertible bonds December 2018	Shares & convertible bonds 31-12-2017	Corporate bonds December 2018	Corporate bonds 31-12-2017	Total 2018	Total 2017	Installed Coal Capacity in MW	Coal Power Expansion Plans in MW
Hokkaido Electric Power Co Inc	Japan	0	0	0		0	0	2500	
Hokuriku Electric Power Co	Japan	0	0	0		0	0	2900	
Idemitsu Kosan Company	Japan	2	5	0		2	5		667
JGC Corporation (Japan Gasoline Co)	Japan	1	3	0		1	3		1050
KANSAI ELECTRIC POWER CO	Japan	6	12	0		6	12	1800	1817
Marubeni	Japan	0	43	0		0	43	1231	5865
Shikoku Electric Power Co Inc	Japan	0	0	0		0	0	1106	500
Tohoku Electric Power Co Inc (TEPCO)	Japan	2	0	0		2	0	3200	933
Tenaga Nasional Bhd (TNB)	Malaysia	33	50	0		33	50	4780	3260
Aboitiz Power Corp	Philippines	0	2	0		0	2	300	899
DMCI Holdings Inc	Philippines	6	7	0		6	7	900	350
JG Summit Holdings	Philippines	1	8	0		1	8		600
Manila Electric Co (MERALCO)	Philippines	5	1	0		5	1	288	2090
PGE Polska Grupa Energetyczna SA	Poland	0	6	0		0	6	9724	5260
Tauron Polska Energia SA	Poland	2	3	0		2	3	4922	910
Sembcorp	Singapore	0	2	0		0	2	660	330
African Rainbow Minerals Ltd	South Africa	7	9	0		7	9		
Exxaro Resources Ltd	South Africa	29	33	0		29	33		315
Sasol Ltd	South Africa	97	84	0		97	84		
Korea Electric Power Corp (KEPCO)	South Korea	13	18	0		13	18	27327	10480
Endesa SA	Spain	81	59	0		81	59	497	
Vattenfall	Sweden	0	0	0	49	0	49	11283	
Banpu Public Co Ltd	Thailand	2	2	0		2	2	926	
Glow Energy PCL	Thailand	16	7	0		16	7	1258	
Anglo American PLC	UK	62	34	20	42	82	76		
Glencore PLC	UK, Switzerland	49	92	50	90	99	182		
Rio Tinto	UK,Australia	344	372	0		344	372		
AES Corp/VA	USA	1	1	70	24	71	25	9056	641
Ameren Corp	USA	44	204	0		44	204	5109	
American Electric Power Co Inc	USA	12	193	56	71	68	264	14318	
CMS Energy Corp	USA	17	23	0		17	23	2154	
CONSOL Energy Inc	USA	0	0	0		0	0		
Dominion Resources Inc/VA	USA	68	53	21	38	89	91	4971	
DTE Energy Co	USA	2	19	0		2	19	6259	
Duke Energy Corp	USA	78	71	85	55	163	126	17958	
Dynegy Inc	USA	0	0	0	17	0	17	11200	
FirstEnergy Corp	USA	27	90	110	118	137	208	9249	
NRG Energy Inc	USA	11	0	15	17	26	17	13184	
OGE Energy Corp	USA	28	1	0		28	1	2852	
Pinnacle West Capital Corp	USA	10	12	0		10	12	2475	
PPL Corporation	USA	10	21	41	50	51	71	11682	
SCANA CORP	USA	0	5	0		0	5	1819	
Southern Co/The	USA	37	63	179	191	216	254	19141	582
WEC Energy Group Inc	USA	24	103	0		24	103	5044	
Westar	USA	0	14	0	23	0	37	2759	
Xcel Energy Inc	USA	5	89	40	10	45	99	8487	
Vale SA	Brazil, Mozambique, Aust.	254	256	9	0	263	256	8487	
Total		2.910	3.319	1349	1497	4.259	4.816		