



CO2 push market analysis

ConsenCUS deliverable 8.1

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WP	WP8 - CO2 clusters and value chain design
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Table of contents

1 Introduction..... 4

1.1 Background 4

1.1 Methodology 5

2 Push markets..... 6

3 Conclusion..... 18

1- Introduction

1.1 Background

The main objective of WP8 'CO2 clusters and value chain design' is to develop a temporal and spatially optimal design of CCUS clusters and networks, and a roadmap for when to construct parts of those clusters.

The following tasks are identified with respect to this main objective:

1. Two CO2 clusters (Southeast Europe/Northwest Europe) will be defined and analysed for optimal CCUS value chain design.
2. A value chain optimisation framework will be developed to analyse how location, size and timing of investments are affected by alternative technologies and infrastructures using, amongst other techniques, mixed integer linear programming models.
3. Minimal cost net-zero CO2 configurations will be determined using the novel technologies developed in WP2 and WP3 as components of the optimisation framework.

Deliverable 8.1 contributes to the first task with an analysis of the push market for CO2. The main aim is to outline a database of large CO2 emitters in the two cluster regions: Northwest Europe (NL, the UK, and Denmark) and Southeast Europe (Greece, Bulgaria, and Romania). These emitters will be used as inputs for the cluster framework model (second and third tasks) to analyse different configurations and assess the potential of these industries to contribute to a CO2 cluster.

1.2 Methodology

A database of CO₂ emitters has been prepared for use in cluster configurations. This database is based on the European Pollutant Release and Transfer Register (E-PRTR, https://www.eea.europa.eu/ds_resolveuid/9d55e39efe954e998a1dca7689207482) of April 2021. This database registers industrial emitters whose CO₂ emissions exceed one hundred kilotons annually.

Within the E-PRTR, we select emitters from the six countries that make-up the Northwest and Southeast clusters. We found that in some cases the E-PRTR emission records were not up to date with other available sources of information (e.g., national government datasets, company websites, or data provided by ConsenCUS partners). In those cases, we updated the relevant records using the more recent sources.

For the Netherlands, records were matched with data from the Dutch Emission Authority (<https://data.overheid.nl/en/dataset/4f302470-e41d-4ad6-b3af-f6d7a58fc3da>). For the other countries, ConsenCUS partners were asked to check the E-PRTR data. These checks resulted in several additional records. A few of the additional records have emissions below one hundred kilotons annually. In addition to adding several new records, records from companies that publicly stated to cease operations in the near future were removed from the database.

2- Push markets

The data below follows the E-PRTR database format. For each emitter total CO2 emissions from the latest available reporting year is presented, along with identifying information including company and facility names, geographical location, industrial sector and type of business activity.

ParentCompanyName	FacilityName	CountryName	Latitude	Longitude	MainSectorName	MainActivityName	TotalQuantity (kg/year)	Reporting year
DEVEN	"Deven" AD	Bulgaria	43,2028	27,613583	Energy sector	Thermal power station	1368518000	2018
TETS MARITSA 3	TETs "Maritsa" AD Dimitrovgrad	Bulgaria	42,051971	25,62324	Energy sector	Thermal power station	480000000	2014
SVILOZA	Instalatsia za proizvodstvo na sulfa	Bulgaria	43,639465	25,305538	Paper and wood pro	Industrial plants for th	474699220	2019
SVILOZA	Instalatsia za proizvodstvo na sulfa	Bulgaria	43,639465	25,305538	Paper and wood pro	Industrial plants for th	474699220	2019
BRIKEL	Gorivna instalatsia s nominalna top	Bulgaria	42,154472	25,90614	Energy sector	Thermal power station	285721000	2020
VIDAHIM	TETs kam	Bulgaria	43,947945	22,850779	Energy sector	Thermal power station	303000000	2014
AGROPOLIHIM	Agropolihim AD	Bulgaria	43,20079	27,660154	Chemical industry	Chemical installations	242827800	2018
HOLSIM BULGARIA	Ploshtadka Beli Izvor	Bulgaria	43,28318	23,463966	Mineral industry	Installations for the pr	220000000	2008
HOLSIM BULGARIA	zavod Pleven	Bulgaria	43,43723	24,556396	Mineral industry	Installations for the pr	220000000	2008
VULKAN TSIMENT	VULKAN	Bulgaria	42,069168	25,544722	Mineral industry	Installations for the pr	180000000	2011
BULGARTRANGAZ	Kompresorna stantsia Kardam	Bulgaria	43,77921	28,124077	Energy sector	Thermal power station	111000000	2007
BULGARTRANGAZ	Kompresorna stantsia "Lozenets"	Bulgaria	42,649044	26,731417	Energy sector	Thermal power station	110000000	2007
BULGARTRANGAZ	Kompresorna stantsia "Provadia"	Bulgaria	43,2148	27,3885	Energy sector	Thermal power station	104000000	2007
KALTSIT	Kaltsit AD	Bulgaria	42,026443	24,864027	Mineral industry	Installations for the pr	100000000	2011
Lukoil	Lukoil Neftohim Burgas AD	Bulgaria	42,54544	27,336508	Energy sector	Mineral oil and gas ref	2057729000	2019
"Девня Цимент" АД	Cement company Devnia cement	Bulgaria	43.235.107	27.594.131	Mineral industry	Installations for the pr	718694000	2020
"ХОЛСИМ БЪЛГАРИЯ" АД	Cement company Holcim BG	Bulgaria	43,28318	23,463966	Mineral industry	Installations for the pr	432706410	2020
Златна Панега Цимент АД	Cement company Zlatna Panega Ci	Bulgaria	43,088184	24,170937	Mineral industry	Installations for the pr	420317000	2020
Aalborg Portland A/S	Aalborg Portland A/S	Denmark	57,06253861	9,976490263	Mineral industry	Installations for the pr	2189152000	2019
VATTENFALL A/S	Vattenfall A/S Fynsværket	Denmark	55,42941166	10,41021168	Energy sector	Thermal power station	1250000000	2014
FJERNVARME FYN PRODUK	Fjernvarme Fyn Produktion A/S	Denmark	55,42781567	10,40520847	Energy sector	Thermal power station	559517000	2019
Equinor Refining Denmark	Equinor Refining Denmark A/S	Denmark	55,6542359	11,0970341	Energy sector	Mineral oil and gas ref	540361000	2019
A/S DANSK SHELL	A/S DANSK SHELL	Denmark	55,58978046	9,748466911	Energy sector	Mineral oil and gas ref	432999000	2019
FJERNVARME FYN AFFALD	FJERNVARME FYN AFFALDSENERG	Denmark	55,42781585	10,40519267	Waste and waste wa	Installations for the in	315600946	2019
DONG Energy A/S	DONG ENERGY POWER A/S, Avedø	Denmark	55,603214	12,48041861	Energy sector	Thermal power station	225000000	2012
DONG Energy A/S	DONG Energy A/S - Svanemøllevej	Denmark	55,71359411	12,58838279	Energy sector	Thermal power station	37697593	2019
I/S RENO-NORD	RENO NORD I/S	Denmark	57,02436257	10,0164087	Waste and waste wa	Installations for the in	223913000	2019
Energist Esbjerg	Energist Esbjerg	Denmark	55,46145341	8,509077828	Waste and waste wa	Installations for the in	222564000	2019

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I/S VESTFORBRÆNDING	I/S VESTFORBRÆNDING, GLOSTRU	Denmark	55,70705604	12,42130672	Waste and waste wa	Installations for the in	194000000	2016
Hess Denmark ApS	Hess Denmark ApS	Denmark	47,9460179	9,300294928	Energy sector	Thermal power station	171000000	2013
VATTENFALL A/S	VATTENFALL A/S Helsingør Kraftva	Denmark	56,02010815	12,55748668	Energy sector	Thermal power station	161000000	2010
VATTENFALL A/S	VATTENFALL A/S Hillerød Kraftvar	Denmark	55,90749895	12,3114323	Energy sector	Thermal power station	161000000	2010
I/S Amager Ressourcecentel	I/S AMAGERFORBRÆNDINGEN	Denmark	55,66308599	12,57117189	Waste and waste wa	Installations for the in	153606000	2018
Fortum Waste Solutions A/	Fortum Waste Solutions A/S	Denmark	55,30223828	10,81519296	Waste and waste wa	Installations for the re	149000000	2019
ENERGI VIBORG KRAFTVARENERGI	VIBORG KRAFTVARME A/S	Denmark	56,47376057	9,414804539	Energy sector	Thermal power station	129474000	2019
SILKEBORG VARME A/S	Kraftvarmeværket	Denmark	56,20073273	9,559878753	Energy sector	Thermal power station	123532865	2019
Novo Nordisk A/S	Novo Nordisk A/S - Kalundborg	Denmark	55,67118938	11,12144591	Chemical industry	Installations using a ch	115000000	2007
Leca Danmark A/S	Leca Danmark A/S	Denmark	56,37517306	10,04209829	Mineral industry	Installations for the m	110889000	2019
AFFALDSSELSKABET VENDSAVV	I/S Forbrændingsanlægget	Denmark	57,45306505	10,0320236	Waste and waste wa	Installations for the in	108000000	2019
Cheminova A/S	Cheminova A/S	Denmark	56,632522	8,200516	Chemical industry	Biocides and explosive	104000000	2008
Mærsk Olie og Gas A/S	Mærsk Olie og Gas A/S	Denmark	47,60787687	9,715710822	Energy sector	Thermal power station	101000000	2013
DONG Energy Power A/S	DONG Energy A/S - Esbjergværket	Denmark	55,45520109	8,458381765	Energy sector	Thermal power station	100000000	2015
Nordic Sugar	Nordic Sugar Nykøbing A/S	Denmark	54,76300545	11,87420674	Animal and vegetab	Treatment and proces	89317000	2019
Sønderborg Kraftvarmeværk	Sønderborg Kraftvarmeværk I/S	Denmark	54,92994968	9,781688233	Waste and waste wa	Installations for the in	80471511	2019
Nordic Sugar	Nordic Sugar Nakskov A/S	Denmark	54,83041778	11,14835096	Animal and vegetab	Treatment and proces	72316000	2019
Verdo Produktion A/S	Verdo Produktion A/S	Denmark	56,4584721	10,04744513	Energy sector	Thermal power station	2220000	2019
Elsam A/S	Elsam Kraft A/S Grenaa Kraftvarme	Denmark	56,423812	10,903802	Energy industries	Combustion installatio	122000000	2019
Elsam A/S	Herningværket	Denmark	56,12160303	9,006363181	Energy industries	Combustion installatio	218000000	2019
Aalborg Forsyning	Nordjyllandsværket	Denmark	57,074972	10,039389	Waste and waste w	ter management	1270 000 000	2015
Ørsted - Asnæsværket	Asnæsværket	Denmark	55,65972473	11,07961002	Energy sector	Thermal power station	169269203	2019
Ørsted - H.C. Ørsted værke	H. C. Ørsted Power Station	Denmark	55,65735552	12,55763974	Energy sector	Thermal power station	173861606	2019
Ørsted - Herningværket	Ørsted A/S, Herningværket	Denmark	56,121389	9,008889	Energy sector	Thermal power station	4 931 000	2019
Ørsted - Kyndbyværket	Kyndbyværket	Denmark	55,80980452	11,87895136	Energy sector	Thermal power station	14532387	2018
Ørsted - Skærbækværket	Skærbækværket	Denmark	55,51252633	9,618162284	Energy sector	Thermal power station	103636067	2019
Ørsted - Strudstrupværket	Ørsted Bioenergy & Thermal Powe	Denmark	56,25139188	10,34353597	Energy sector	Thermal power station	343293516	2019
HOFOR Energiproduktion A	Hofor Amagerværket	Denmark	55,68459742	12,62610688	Energy sector	Thermal power station	517870	2019
AffaldsCenter Aarhus	Lisbjerg, Aarhus	Denmark	56,22763598	10,15738083	Waste and waste w	ter management	319000000	2008
I/S REFA		Denmark	54,78008912	11,88390922	Waste and waste wa	Installations for the in	108000000	2009
PPC S.A.	PPC S.A. SES AGIOY DHMHTRIOY	Greece	40,392099	21,929411	Energy sector	Thermal power station	3870000000	2020
PPC S.A.	PPC S.A. SES KARDIAS	Greece	40,407152	21,788378	Energy sector	Thermal power station	2870000000	2020
PPC S.A.	PPC S.A. SES PTOLEMAIDAS	Greece	40,479278	21,728032	Energy sector	Thermal power station	2540000000	2014
TITAN CEMENT S.A.	TITAN CEMENT S.A. - KAMARI PLANG	Greece	38,130175	23,524575	Mineral industry	Installations for the pr	1330000000	2020
PPC S.A.	PPC S.A. SES MELITIS	Greece	40,814022	21,598292	Energy sector	Thermal power station	1410000000	2020
PPC S.A.	PPC S.A. SES KERATEAS-LAYRIOY	Greece	37,746954	24,066333	Energy sector	Thermal power station	1060000000	2020
LAFARGEHOLCIM GROUP OHERACLES	G.C.Co, MILAKI PLANT	Greece	38,374882	24,063928	Mineral industry	Installations for the pr	858000000	2020
KORINTHOS POWER S.A.	KORINTHOS POWER S.A.	Greece	37,923611	23,071666	Energy sector	Thermal power station	836000000	2020

G.M.M.S.A. LARCO	LARYMNA METALLURGIC PLANT	Greece	38,565389	23,29475	Production and pro	Installations:	805000000	2014
PPC S.A.	PPC S.A. SES ATHERINOLAKKOY	Greece	35,004906	26,138036	Energy sector	Thermal power station	790000000	2020
TITAN CEMENT S.A.	TITAN CEMENT S.A. - DREPANO PL	Greece	38,3353	21,845428	Mineral industry	Installations for the pr	569000000	2020
PROTERGIA S.A.	AGIOS NIKOLAOS 444,48MW POW	Greece	38,35722	22,688615	Energy sector	Thermal power station	758000000	2019
MYTILINEOS S.A.	444,48MW POWER PLANT FUELLE	Greece	38,357388	22,688591	Energy sector	Thermal power station	758000000	2019
TITAN CEMENT S.A.	TITAN CEMENT S.A. - THESSALONIK	Greece	40,699361	22,952417	Mineral industry	Installations for the pr	603000000	2020
PPC S.A.	PPC S.A. SES LINOPERAMATON	Greece	35,341181	25,051166	Energy sector	Thermal power station	662000000	2020
GEK TERNA GROUP, ENGIE	HERON II VIOTIA S.A.	Greece	38,279486	23,329455	Energy sector	Thermal power station	454000000	2020
PPC S.A.	PPC S.A. SES KOMOTINIS	Greece	41,064468	25,489605	Energy sector	Thermal power station	602000000	2020
ELPEDISON POWER S.A.	THISVI 421,6 MW POWER PLANT	Greece	38,238797	22,95	Energy sector	Thermal power station	741000000	2020
CIMENT FRANCAIS	HALYPS BUILDING MATERIALS S.A.	Greece	38,041906	23,582415	Mineral Industry	Cement, lime, glass, m	245000000	2020
PPC S.A.	PPC S.A. AES KOS	Greece	36,504198	27,04526	Energy industries	Combustion installatio	146000000	2020
PPC S.A.	PPC S.A. AES LESVOS	Greece	39,118565	26,549128	Energy sector	Thermal power station	164000000	2020
LAFARGE GROUP OF COMP	HERACLES G.C.Co, HALKIS PLANT	Greece	38,4411	23,597	Mineral industry	Installations for the pr	164000000	2011
LAFARGE GROUP OF COMP	HERACLES G.C.Co, VOLOS PLANT	Greece	39,3544	22,9859	Mineral industry	Installations for the pr	1098000000	2020
PPC S.A.	PPC S.A. AES THIRA	Greece	36,413093	25,477891	Energy sector	Thermal power station	161000000	2020
PPC S.A.	PPC S.A., SES ALIVERIOU - EVOIA	Greece	38,389944	24,051778	Energy industries	Thermal power station	664000000	2020
PPC S.A.	PPC S.A. AES CHIOS	Greece	38,331262	26,154079	Energy sector	Thermal power station	123000000	2020
PPC S.A.	PPC S.A. SES CHANION	Greece	35,488121	24,038341	Energy sector	Thermal power station	505000000	2020
	K. RAIKOS S.A.	Greece	38,094594	23,543103	Mineral Industry	Cement, lime, glass, m	115000000	2007
PPC S.A.	PPC S.A. SES MEGALOPOLIS Unit III	Greece	37,418129	22,108283	Energy sector	Thermal power station	2060000000	2020
HELLENIC PETROLEUM S.A	INDUSTRIAL DIVISION OF ASPROPY	Greece	38,03236	23,60276	Energy sector	Mineral oil and gas ref	1070000000	2020
HELLENIC PETROLEUM S.A	SOUTH REFINERIES COMPLEX – ELE	Greece	38,04222	23,51083	Energy sector	Mineral oil and gas ref	1920000000	2020
HELLENIC PETROLEUM S.A	THESSALONIKI INDUSTRIAL COMPL	Greece	40,67952	22,87819	Energy sector	Mineral oil and gas ref	292000000	2020
MOTOR OIL (HELLAS)	CORINTHOS REFINERIES S.A.	Greece	37,91778	23,07361	Energy sector	Mineral oil and gas ref	1970000000	2020
PPC S.A.	PPC S.A., SES RODOU	Greece	36,250139	28,023333	Energy industries	Thermal power station	373000000	2020
PPC S.A.	PPC S.A., SOUTHERN RHODES TPP	Greece	36,250139	28,023333	Energy industries	Thermal power station	184000000	2020
RWE AG	RWE Eemshaven Holding II B.V.	Netherlands	53,44777	6,85915	Energy sector	Thermal power station	2528618000	2020
Tata Steel Group	Tata Steel IJmuiden BV	Netherlands	52,47656	4,59217	Energy sector	Thermal power station	5711530000	2020
Uniper Benelux NV (Maasv	Uniper Benelux NV (Maasvlakte)	Netherlands	51,95906	4,02657	Energy sector	Thermal power station	3416313000	2020
Chemelot	Chemelot Site Permit BV	Netherlands	50,98058	5,79633	Energy sector	Thermal power station	4651593000	2020
Shell Nederland Raffinader	Shell Nederland Raffinaderij BV	Netherlands	51,88013	4,33533	Energy sector	Mineral oil and gas ref	4128285000	2020
Vattenfall Power Velsen	Vattenfall Power Generation Nethe	Netherlands	52,473309	4,630993	Energy industries	Combustion installatio	5143992000	2020
Vattenfall Centrale Hemwe	Vattenfall Power Generation Nethe	Netherlands	52,405281	4,846563	Energy industries	Combustion installatio	860704000	2020
Vattenfall Magnum Centra	Vattenfall Power Generation Nethe	Netherlands	53,44777	6,85915	Energy sector	Thermal power station	2246606000	2020

YARA Sluiskil BV	YARA Sluiskil BV	Netherlands	51,278557	3,850198	Chemical industry	Basic inorganic chem	3297569000	2020
Shell Nederland Chemie B.	Shell Nederland Chemie B.V.	Netherlands	51,685117	4,566804	Chemical industry	Basic organic chemica	2457043000	2020
DOW Benelux B.V.	DOW Benelux B.V.	Netherlands	51,34504	3,779775	Chemical industry	Basic organic chemica	3896511000	2020
BP Nederland Holdings B.V.	BP Raffinaderij Rotterdam B.V.	Netherlands	51,94499	4,1078	Energy sector	Mineral oil and gas ref	2027330000	2020
Esso Nederland BV	ESSO Raffinaderij Rotterdam	Netherlands	51,874252	4,291062	Energy industries	Mineral oil and gas ref	2646659000	2020
ENGIE Energie Nederland	Centrale Rotterdam	Netherlands	51,94482	4,07205	Energy sector	Thermal power station	1770000000	2018
AVR-Afvalverwerking B.V.	AVR	Netherlands	51,89704	4,27639	Waste and waste wa	Installations for the in	1710000000	2018
Zeeland Refinery N.V.	Zeeland Refinery N.V.	Netherlands	51,44562	3,72704	Energy sector	Mineral oil and gas ref	1166864000	2020
ENECOGEN V.O.F.	ENECOGEN V.O.F.	Netherlands	51,95838	4,09409	Energy sector	Thermal power station	1903268000	2020
Afval Energie Bedrijf (Amst	Afval Energie Bedrijf (Amsterdam)	Netherlands	52,406316	4,79967	Waste management	Disposal/recovery of h	1480000000	2018
Sloe Centrale B.V.	Sloe Centrale BV (Vlissingen)	Netherlands	51,44882	3,69338	Energy sector	Thermal power station	1798500000	2020
Vattenfall Centrale Diemen	Vattenfall Power Generation Nethe	Netherlands	52,340064	5,019921	Energy industries	Combustion installatio	1320706000	2020
HVC	HVC N.V.	Netherlands	52,60978	4,76269	Waste and waste wa	Installations for the in	1050000000	2018
Attero	BV Afvalverbranding Zuid Nederlan	Netherlands	51,68326	4,58162	Waste and waste wa	Installations for the in	888000000	2018
Attero BV	Attero Noord BV	Netherlands	52,79126	6,51497	Waste and waste wa	Installations for the in	888000000	2018
Rijnmond Power Holding B	Rijnmond Power Plant	Netherlands	51,89084	4,3518	Energy sector	Thermal power station	1103148000	2020
Castleton Commodities Int	MaasStroom Energie CV	Netherlands	51,88984	4,35214	Energy sector	Thermal power station	831852000	2020
Alco Energy Rotterdam	Alco Energy Rotterdam	Netherlands	51,92637	4,18356	Energy sector	Thermal power station	311689000	2020
Air Liquide	Air Liquide Industrie BV	Netherlands	51,88524	4,25626	Chemical industry	Chemical installations	1039904000	2020
ENGIE Energie Nerderland	Centrale Bergum	Netherlands	53,20955	6,02977	Energy sector	Thermal power station	3599000	2020
Eneco Warmteproductie U	Eneco Lage Weide	Netherlands	52,10302	5,07229	Energy sector	Thermal power station	483241000	2020
AVR Afvalverwerking B.V.	vAVR Afvalverwerking BV (Duiven)	Netherlands	51,97054	6,00036	Energy sector	Thermal power station	562000000	2018
RWE Generation NL BV	WKC Moerdijk	Netherlands	51,6849	4,58079	Energy sector	Thermal power station	540879000	2020
RWE Generation NL BV	Clauscentrale	Netherlands	51,15446	5,90718	Energy sector	Thermal power station	2153734000	2020
EEW AG	EEW Energy from Waste Delfzijl B.	Netherlands	53,30972	6,98764	Waste and waste wa	Installations for the in	487000000	2018
Delesto B.V.	Delesto B.V.	Netherlands	53,319326	6,955389	Energy industries	Combustion installatio	318719000	2020
ExxonMobil Chemical Holla	ExxonMobil Chemical Holland BV	Netherlands	51,873318	4,296894	Chemical industry	Basic organic chemica	122187000	2020
SITA ReEnergy Roosendaal	SUEZ ReEnergy	Netherlands	51,54762	4,44361	Waste and waste wa	Installations for the in	397000000	2018
Gunvor Petroleum Rotterd	Gunvor Petroleum Rotterdam B.V.	Netherlands	51,93494	4,16573	Energy sector	Mineral oil and gas ref	135001000	2020
Eneco Holding NV	Eneco Bio Golden Raand C.V.	Netherlands	53,31022	6,98392	Waste and waste wa	Installations for the di	368000000	2018
HVCafvalcentrale	HVC AfvalEnergieCentrale Dordrec	Netherlands	51,81542	4,73767	Waste and waste wa	Installations for the in	341000000	2018
Lyondell Chemical Nederla	Lyondell Chemical Nederland Ltd. B	Netherlands	51,88203	4,252864	Chemical industry	Basic organic chemica	267294000	2018
AVR NV (Rotterdam)	AVR NV (Rotterdam)	Netherlands	51,895682	4,474343	Waste management	Disposal/recovery of h	2266000000	2020
Uniper Centrale RoCa	Uniper Centrale RoCa	Netherlands	51,95359	4,5611	Energy sector	Thermal power station	326393000	2020
ENGIE Energie Nederland	Maxima-centrale	Netherlands	52,57722	5,53022	Energy sector	Thermal power station	1789174000	2020

Eneco Warmteproductie U	Eneco Merwedekanaal	Netherlands	52,10093	5,07917	Energy sector	Thermal power station	200979000	2020
ARN B.V.	ARN B.V.	Netherlands	51,8463	5,79452	Energy sector	Thermal power station	320000000	2019
CNC Grondstoffen BV	CNC Grondstoffen BV	Netherlands	51,6748	4,60072	Animal and vegetab	Treatment and proces	277000000	2009
Cargill Benelux B.V.	Cargill Benelux BV Sas van Gent	Netherlands	51,23582	3,8026	Animal and vegetab	Treatment and proces	190720000	2020
Akzo Nobel Chemicals B.V.	Akzo Nobel Chemicals B.V.	Netherlands	52,247334	6,795068	Energy industries	Combustion installatio	255000000	2018
Cabot B.V.	Cabot BV	Netherlands	51,89141	4,26431	Chemical industry	Chemical installations	204626000	2020
Air Liquide Industrie B.V.	Eurogen CV	Netherlands	51,890922	4,257241	Energy industries	Combustion installatio	193708000	2020
Omrin B.V.	Reststoffen Energie Centrale (REC)	Netherlands	53,19045	5,4291	Waste and waste wa	Installations for the in	231000000	2018
Bio Methanol Chemie Ned	BioMethanol Chemie Nederland BV	Netherlands	53,31375	6,96243	Chemical industry	Chemical installations	409492000	2020
Afvalstoffen Terminal Moe	Afvalstoffen Terminal Moerdijk BV	Netherlands	51,694617	4,602072	Waste management	Disposal/recovery of h	212000000	2018
Havenbedrijf Rotterdam N	Depot Slufter	Netherlands	51,92595	4,004	Waste and waste wa	Landfills (see note in G	200000000	2008
Uniper Benelux N.V.	Uniper Centrale Den Haag De Con	Netherlands	52,07592	4,29056	Energy sector	Thermal power station	140740000	2020
Sappi Maastricht B.V.	Sappi Maastricht B.V.	Netherlands	50,858578	5,694576	Other Annex I activit	Pulp, paper or board p	129437000	2020
Coöperatie Koninklijke Cos	Suiker Unie, productielocatie Vier	Netherlands	53,21379	6,49511	Animal and vegetab	Treatment and proces	112426000	2020
Smurfit Kappa	Smurfit Kappa Parenco B.V.	Netherlands	51,96997	5,72846	Paper and wood pro	Industrial plants for th	101314000	2020
Emmtec Services B.V.	Emmtec Services BV	Netherlands	52,77499	6,90699	Energy sector	Thermal power station	144937000	2020
Uniper Centrale Leiden	Uniper Centrale Leiden	Netherlands	52,16398	4,49404	Energy sector	Thermal power station	127820000	2020
Rockwool B.V.	Rockwool B.V.	Netherlands	51,17061	6,04371	Mineral industry	Installations for meltin	137915000	2020
Cabot Norit Nederland B.V.	Cabot Norit Activated Carbon, Klaz	Netherlands	52,72845	6,99788	Energy sector	Thermal power station	61450000	2020
Aluminium & Chemie Rotte	Aluminium & Chemie Rotterdam B	Netherlands	51,872875	4,317236	Other Annex I activit	Production of carbon o	95413000	2020
Coöperatie Koninklijke Cos	Suiker Unie fabriek Dinteloord	Netherlands	51,61818	4,43437	Animal and vegetab	Treatment and proces	115201000	2020
Slibverwerking Noord-Brab	Slibverwerking Noord-Brabant NV	Netherlands	51,68962	4,58016	Waste and waste wa	Installations for the in	149000000	2018
DS Smith Packaging Nether	DS Smith Paper De Hoop Mill	Netherlands	52,09756	6,05477	Paper and wood pro	Industrial plants for th	178114000	2020
Archer Daniels Midland Eu	Archer Daniels Midland Europoort	Netherlands	51,962381	4,123753	Other Annex I activit	Slaughterhouses, milk	156981000	2020
REF-Processing GmbH	ESD-SIC BV	Netherlands	53,29719	6,96541	Chemical industry	Chemical installations	104449000	2020
Frisia Zout BV	Frisia Zout BV	Netherlands	53,1869	5,4263	Chemical industry	Chemical installations	7485000	2020
Crown van Gelder N.V.	Crown van Gelder N.V.	Netherlands	52,467953	4,636677	Other Annex I activit	Pulp, paper or board p	119088000	2020
Akzo Nobel Chemicals B.V.	Akzo Nobel Chemicals B.V. (Botle	Netherlands	51,874947	4,278846	Chemical industry	Basic inorganic chemic	116000000	2018
Vattenfall Power Generatio	HWC Hogering	Netherlands	52,38831	5,21568	Energy sector	Thermal power station	4460000	2020
Coöperatie AVEBE U.A.	Avebe u.a. (Ter Apelkanaal)	Netherlands	52,92103	7,04574	Animal and vegetab	Treatment and proces	95787000	2020
Tate & Lyle Netherlands B.	Tate & Lyle Netherlands BV	Netherlands	52,46475	4,81186	Animal and vegetab	Treatment and proces	69628000	2020
Air Products Nederland B.V.	Air Products Nederland B.V. (Botle	Netherlands	51,879887	4,259551	Chemical industry	Basic inorganic chemic	720023000	2020
Chemours Netherlands B.V.	Chemours Netherlands B.V.	Netherlands	51,81815	4,7273	Chemical industry	Chemical installations	56495000	2020
Veolia Industriediensten B	Veolia Industriediensten BV	Netherlands	51,96647	5,94187	Energy sector	Thermal power station	6783000	2020
FrieslandCampina	FrieslandCampina DMV B.V.	Netherlands	51,61507	5,52509	Animal and vegetab	Treatment and proces	86611000	2020

O-I Manufacturing Netherl	O-I Manufacturing Netherlands BV	Netherlands	51,88821	5,08588	Mineral industry	Installations for the m	87949000	2020
Vitol Refining Group B.V.	VPR Energy B.V.	Netherlands	51,91026	4,21727	Energy sector	Mineral oil and gas ref	129491000	2020
Shin-Etsu PVC B.V.	Shin-Etsu PVC BV (VCM Botlek)	Netherlands	51,87111	4,27797	Chemical industry	Chemical installations	102509000	2020
Nedmag B.V.	Nedmag	Netherlands	53,11432	6,89666	Productiona and pro	Metal ore (including s	54604000	2020
Indorama Ventures	Indorama Ventures Europe BV	Netherlands	51,96093	4,098	Chemical industry	Chemical installations	178056000	2020
ENGIE Energie Nederland	NENGIE Eemscentrale	Netherlands	53,435	6,878333	Energy sector	Thermal power station	1755764000	2020
Emerald Kalama Chemical	Emerald Kalama Chemical Rotterdam	Netherlands	51,88618	4,26066	Chemical industry	Chemical installations	80798000	2020
SC COMPLEXUL ENERGETIC	COMPLEXUL ENERGETIC ROVINAR	Romania	44,913425	23,1336749	Energy sector	Thermal power station	4630000000	2019
SOCIETATEA COMPLEXUL	ESOCIETATEA COMPLEXUL ENERGET	Romania	44,38568	23,71718	Energy sector	Thermal power station	881000000	2020
SC AZOMURES SA	SC AZOMURES SA	Romania	46,513361	24,505444	Chemical industry	Chemical installations	1660000000	2020
SOCIETATEA COMPLEXUL	ESOCIETATEA COMPLEXUL ENERGET	Romania	44,34735	23,81512	Energy sector	Thermal power station	9310000000	2020
SC OMV PETROM SA	SC OMV Petrom SA Brazi (cogenera	Romania	44,8800279	25,9987928	Energy sector	Thermal power station	1540000000	2020
OMV PETROM SA	COMPLEX EXPLOATARE OFFSHORE	Romania	44,52385833	29,56691388	Mineral industry	Underground mining a	1060000000	2019
OMV PETROM SA	OMV PETROM SA - Petrobraz	Romania	44,863889	26,019444	Energy sector	Mineral oil and gas ref	1050000000	2020
HOLCIM ROMANIA SA	HOLCIM ROMANIA SA - Ciment Cam	Romania	45,2901138	25,1110277	Mineral industry	Installations for the pr	1040000000	2019
SC CET GOVORA SA	SC CET GOVORA SA	Romania	45,0407777	24,2901111	Energy sector	Thermal power station	877000000	2020
SC ROMPETROL RAFINARE	SC ROMPETROL RAFINARE SA - pun	Romania	44,34132222	28,6497388	Energy sector	Mineral oil and gas ref	812000000	2020
SC ELECTROCENTRALE BUC	CET Bucuresti Sud	Romania	44,40582	26,15565	Energy sector	Thermal power station	572000000	2020
HEIDELBERGCEMENT ROM	HEIDELBERGCEMENT ROMANIA SA	Romania	46,898055	26,028611	Mineral industry	Installations for the pr	911000000	2020
HEIDELBERGCEMENT ROM	HEIDELBERGCEMENT ROMANIA SA	Romania	45,12266666	25,41758611	Mineral industry	Installations for the pr	714000000	2020
HEIDELBERGCEMENT ROM	FABRICA DE CIMENT CHISCADAGA	Romania	45,95431527	22,86870222	Mineral industry	Installations for the pr	616000000	2020
SC ELECTROCENTRALE BUC	CET Bucuresti Vest	Romania	44,4232699	25,9791316	Energy sector	Thermal power station	510000000	2020
PETROM SA MEMBRU OM	ARPECHIM	Romania	44,81319	24,931669	Energy sector	Mineral oil and gas ref	490000000	2008
SC ELECTROCENTRALE BUC	Societatea ELECTROCENTRALE CON	Romania	44,15704045	28,60973509	Energy sector	Thermal power station	435000000	2019
SC ELECTROCENTRALE BUC	CET Progresu	Romania	44,3728666	26,1073111	Energy sector	Thermal power station	435000000	2019
SC ELECTROCENTRALE OR	ASC ELECTROCENTRALE ORADEA SA	Romania	47,0841666	21,8927777	Energy sector	Thermal power station	426000000	2016
SC DONAU CHEM SRL	SC DONAU CHEM SRL	Romania	43,7166666	24,8929599	Chemical industry	Chemical installations	218000000	2020
SC ELECTROCENTRALE BUC	SGN ROMGAZ SA MEDIAS - Sucur	Romania	46,468499	24,185638	Energy sector	Thermal power station	532000000	2020
VEOLIA ENERGIE IA?I SA	VEOLIA ENERGIE IA?I SA - CET II	Romania	47,1472274	27,7177038	Energy sector	Thermal power station	254000000	2020
REGIA AUTONOMA PENTR	REGIA AUTONOMA PENTRU ACTIV	Romania	44,675444	22,688333	Energy sector	Thermal power station	261000000	2016
SC RAFO SA	SC RAFO SA	Romania	46,252456	26,8151218	Energy sector	Mineral oil and gas ref	260000000	2007
SC TERMoelectrica SA	Sucursala Electrocentrale Doicești	Romania	45,0018	25,39760277	Energy sector	Thermal power station	259000000	2007
SC TERMoelectrica SA	BUSUCURSALA ELECTROCENTRALE BOR	Romania	46,24843805	26,8371324	Energy sector	Thermal power station	259000000	2007
SC ALRO SA	SC ALUM SA	Romania	45,17985833	28,76814666	Chemical industry	Chemical installations	212000000	2020
SC ELECTROCENTRALE BUC	CET Grozavesti	Romania	44,4403783	26,0633366	Energy sector	Thermal power station	233000000	2020

S.C. CHEMGAS HOLDING C.S.C. CHEMGAS HOLDING CORPORATION	Romania	44,5331962	27,3884258	Chemical industry	Chemical installations	612000000	2020	
SC EGGER Romania SRL	SC EGGER ROMANIA SRL Radauti	Romania	47,854	25,976722	Paper and wood pro	Industrial plants for th	184000000	2020
CONSILIUL LOCAL SUCEAVASC TERMICA SA SUCEAVA		Romania	47,6518888	26,2986944	Energy sector	Thermal power station	166000000	2013
SC CARMEUSE HOLDING SRSC CARMEUSE HOLDING SRL		Romania	45,2951305	25,1092611	Mineral industry	Installations for the pr	177000000	2020
SC CET ARAD SA	SC CET Arad SA - pe lignit	Romania	46,22194166	21,3294388	Energy sector	Thermal power station	202000000	2020
SC COLTERM SA	CET TIMISOARA SUD	Romania	45,70805	21,197777	Energy sector	Thermal power station	211000000	2020
SC CET SA	SC CET SA	Romania	45,1891999	27,8975683	Energy sector	Thermal power station	152000000	2007
SC TERMoeLECTRICA SA	SUCURSALA ELECTROCENTRALE BR	Romania	45,1652366	27,9240649	Energy sector	Thermal power station	151000000	2018
SC INTERAGRO SA BUCURESC AMURCO SRL BACAU		Romania	46,5142777	26,9433055	Chemical industry	Chemical installations	149000000	2014
SC TERMOfICARE 2000 SA SC TERMOfICARE 2000 SA - Sud		Romania	44,8070194	24,9138472	Energy sector	Thermal power station	138000000	2008
SC TERMOfICARE 2000 SA SC TERMOfICARE 2000 SA - Nord		Romania	44,86925555	24,85288333	Energy sector	Thermal power station	138000000	2008
SC COLTERM SA	CET TIMISOARA CENTRU	Romania	45,755555	21,246944	Energy sector	Thermal power station	134000000	2011
SC GHCL UPSOM ROMANIASC GHCL UPSOM ROMANIA SA		Romania	46,3944277	23,86031111	Chemical industry	Chemical installations	133000000	2009
SC PETROM SA BUCURESTISC PETROM SA BUCURESTI - Comb		Romania	44,37709	23,72179	Chemical industry	Chemical installations	130000000	2010
SC UZINA TERMoeLECTRICSC UZINA TERMoeLECTRICA MIDIA		Romania	44,34649167	28,64671389	Energy sector	Thermal power station	128000000	2020
CIECH CHEMICAL GROUP	UZINELE SODICE GOVORA - CIECH	Romania	45,0364999	24,2918888	Chemical industry	Chemical installations	120000000	2019
SC PRESCON BV SA	SC PRESCON BV SA - Fabrica de var	Romania	45,6442999	25,55336166	Mineral industry	Installations for the pr	118000000	2007
PRIMARIA MUNICIPIULUI I CET I IASI		Romania	47,1497661	27,6072997	Energy sector	Thermal power station	117000000	2011
S.C. UZINA TERMoeLECTRIS.C. UZINA TERMoeLECTRICA GIUR		Romania	43,879555	25,928361	Energy sector	Thermal power station	113000000	2009
SC SAINT GOBAIN GLASS R SC SAINT GOBAIN STICLA ROMANI		Romania	44,21854	27,32805	Mineral industry	Installations for the m	111000000	2017
SC NITROPOROS SRL	SC NITROPOROS SRL	Romania	45,814258	24,974672	Chemical industry	Chemical installations	110000000	2013
ARCELORMITTAL	SC ARCELORMITTAL TUBULAR PRO	Romania	46,9653	26,890833	Production and pro	Installations for the pr	107000000	2008
SC CELCO SA	SC CELCO SA	Romania	44,356707	28,6435676	Mineral industry	Installations for the pr	105000000	2020
SC CENTRALA ELECTRICA DSC CENTRALA ELECTRICA DE TERM		Romania	45,662293	25,646728	Energy sector	Thermal power station	105000000	2011
SCSIMCOR VAR SA ORADEASC SIMCOR VAR SA ORADEA PUNC		Romania	45,0518083	23,2275805	Mineral industry	Installations for the pr	103000000	2007
SC TERMO CALOR CONFORCET GAVANA		Romania	44,86925555	24,85288333	Energy sector	Thermal power station	101000000	2011
HOLCIM ROMANIA SA	SC HOLCIM ROMANIA SA	Romania	45,2901138	25,1110277	Mineral industry	Installations for the pr	1050000000	2020
CRH CIMENT (ROMANIA).PUNCT DE LUCRU MEDGIDIA		Romania	44,241846	28,307913	Mineral industry	Installations for the pr	874000000	2020
COMPANIA PETROLIERA LUSC PETROTEL LUKOIL SA		Romania	44,946413	26,079463	Energy sector	Mineral oil and gas ref	400000000	2020
SC CRH CIMENT (ROMANIASC CRH CIMENT (ROMANIA) SA.		Romania	45,951652	25,281858	Mineral industry	Installations for the pr	810000000	2020
LIBERTY HOUSE GROUP	LIBERTY GALATI SA	Romania	45,44036	27,97219	Mineral industry	Installations for the pr	3900000000	2020
SC COMPLEXUL ENERGETICSUCURSALA ELECTROCENTRALE TU		Romania	44,67048	23,40922	Energy sector	Thermal power station	2240000000	2020
HOLCIM (Romania) SA	HOLCIM (Romania) SA - Ciment Al	Romania	47,03868	22,33188	Mineral industry	Installations for the pr	1040000000	2020
COMPANIA PETROLIERA LUSC PETROTEL LUKOIL SA- CET		Romania	44,94641	26,07946	Energy sector	Mineral oil and gas ref	341000000	2020
SC ALRO SA SLATINA	SC ALRO SA SLATINA - Sediul prima	Romania	44,44581	24,39025	Mineral industry	Installation for the pro	3720000000	2020

LUKOIL MOSCOVA	SC Lukoil Energy & Gas Romania SRRomania	44,95005	26,07831 Energy sector	Thermal power station	344000000	2019
SC VEOLIA ENERGIE PRAH	SC VEOLIA ENERGIE PRAHOVA SRLRomania	44,88267	26,00917 Energy sector	Thermal power station	264000000	2020
TERMOFICARE ORADEA	SATERMOFICARE ORADEA SA Romania	47,08251	21,89583 Energy sector	Thermal power station	275000000	2020
SC ELECTROCENTRALE BUC	SC ELECTROCENTRALE BUCURESTI Romania	44,44038	26,06334 Energy sector	Thermal power station	518000000	2020
SC ELECTROCENTRALE BUC	Societatea ELECTROCENTRALE CONRomania	44,15823	28,60772 Energy sector	Thermal power station	152000000	2020
SOCIETATEA COMPLEXUL ESUCURSALA	ELECTROCENTRALE PARomania	45,36441	23,26134 Energy sector	Thermal power station	125000000	2020
SC BIO ELECTRICA TRANSILSC	BIO ELECTRICA TRANSILVANIA SRomania	45,84862	25,94805 Energy sector	Thermal power station	171000000	2020
Drax Power Limited	Drax Power Station EPR/VP3530LS United Kingdom	53,736715	-0,996528 Energy sector	Thermal power station	12992850000	2019
Tata Steel UK Limited	Port Talbot Steelworks Tata Steel United Kingdom	51,55608	-3,76471 Production and procMetal ore (including s		6430000000	2019
Longs Steel UK Limited	Scunthorpe Iron & Steel Works EPRUnited Kingdom	53,581236	-0,62002078 Energy sector	Thermal power station	4530000000	2019
RWE Generation UK plc	Pembroke Power Station United Kingdom	51,6838	-5,0002 Energy sector	Thermal power station	4280000000	2019
RWE Generation UK Plc	Staythorpe C Power Station EPR/VPUnited Kingdom	53,077899	-0,86486931 Energy sector	Thermal power station	3423908000	2019
VPI Immingham LLP	Immingham CHP Power Station EP United Kingdom	53,636561	-0,23947463 Energy sector	Thermal power station	3361712000	2019
Esso Petroleum Company L	Fawley Refinery EPR/BR6996IC United Kingdom	50,836449	-1,3552246 Energy sector	Mineral oil and gas ref	3196718000	2019
Saltend Cogeneration Com	Saltend Cogeneration Plant EPR/QPUnited Kingdom	53,524674	-0,41534129 Energy sector	Thermal power station	2772619000	2019
Uniper Uk Limited	Grain Power Station EPR/EP3533RYUnited Kingdom	51,444375	0,71282154 Energy sector	Thermal power station	2438547000	2019
RWE Generation UK Plc	Didcot B Power Station EPR/YP393United Kingdom	51,623643	-1,2690166 Energy sector	Thermal power station	2394970000	2019
EDF Energy (West Burton P	West Burton CCGT Power Station EUnited Kingdom	53,363927	-0,79927458 Energy sector	Thermal power station	2380000000	2019
Lynemouth Power Limited	Lynemouth Power Station United Kingdom	55,20069	-1,5390161 Energy sector	Thermal power station	2365486500	2019
Valero Energy Ltd	Pembroke Refinery United Kingdom	51,68669	-5,02788 Energy sector	Mineral oil and gas ref	2160000000	2019
Essar Oil (UK) Limited	Stanlow Manufacturing Complex United Kingdom	53,273513	-2,8412063 Energy sector	Mineral oil and gas ref	2120263550	2019
Phillips 66 Limited	Humber Oil Refinery EPR/UP3230LUnited Kingdom	53,631684	-0,24406367 Energy sector	Thermal power station	2075000000	2019
EP SHB Ltd	South Humber Bank Power StationUnited Kingdom	53,6016	-0,14480713 Energy sector	Thermal power station	1991961000	2019
SPALDING ENERGY CO LTD	Spalding Power Station EPR/BK070United Kingdom	52,807839	-0,1321921 Energy sector	Thermal power station	1708853000	2019
Sothorn And Scottish Elect	Peterhead Power Station United Kingdom	57,4779	-1,78838 Energy sector	Thermal power station	1580000000	2019
Marchwood Power Ltd	Marchwood Power Station EPR/BL United Kingdom	50,897365	-1,4314543 Energy sector	Thermal power station	1560532000	2019
Carrington Power Limited	Carrington Power Station EPR/RP3 United Kingdom	53,43667	-2,4109007 Energy sector	Thermal power station	1488961000	2019
EDF Energy (West Burton P	Cottam Power Station EPR/SP3535United Kingdom	53,303342	-0,78176602 Energy sector	Thermal power station	1380000000	2019
Petroineos Manufacturing	Grangemouth Refinery United Kingdom	56,02005	-3,68694 Energy sector	Mineral oil and gas ref	1340000000	2019
Rocksavage Power Compan	Rocksavage Power Station EPR/BS5United Kingdom	53,315352	-2,7255485 Energy sector	Thermal power station	1283098000	2019
Total Lindsey Oil Refinery L	Total Lindsey Oil Refinery EPR/TP3 United Kingdom	53,639874	-0,25703528 Energy sector	Thermal power station	1230000000	2019
Keadby Generations LTD	Fiddlers Ferry Power Station EPR/BUUnited Kingdom	53,373371	-2,6883565 Energy sector	Thermal power station	1192609000	2019
Cemex UK Cement Ltd	Rugby Cement Plant United Kingdom	52,377094	-1,2863181 Mineral industry	Installations for the pr	1180000000	2019
EP Ballylumford Ltd	AES Ballylumford United Kingdom	54,845	-5,7864 Energy sector	Thermal power station	1140000000	2019
Seabank Power Ltd	Seabank Power Station EPR/BV300United Kingdom	51,528968	-2,6534001 Energy sector	Thermal power station	1125210000	2019

Breedon Cement Limited	Hope Cement Works	United Kingdom	53,3387	-1,7538125	Mineral industry	Installations for the pr	1084184000	2019
RWE Generation UK Plc	Little Barford Power Station EPR/A	United Kingdom	52,204796	-0,26734612	Energy sector	Thermal power station	1079405800	2019
Sabir UK Petrochemicals	LiWilton Olefins Installation	United Kingdom	54,582661	-1,1010294	Chemical industry	Chemical installations	1024000000	2019
EP Kilroot Ltd	Kilroot Power Ltd	United Kingdom	54,7258	-5,7661	Energy sector	Thermal power station	1010000000	2019
Ferrybridge MFE Limited	Ferrybridge Multifuel Plant EPR/SP	United Kingdom	53,71674	-1,2817283	Waste and wastewa	Installations for the in	1002130900	2019
Viridor Waste Managemen	Runcorn Energy From Waste Facilit	United Kingdom	53,329105	-2,754611	Waste and wastewa	Installations for the in	989609000	2019
Coryton Energy Company LC	Coryton Power Station EPR/EP3833	United Kingdom	51,51231	0,50526849	Energy sector	Thermal power station	934000000	2019
Uniper UK Limited	Cottam CDC Power Station EPR/NP	United Kingdom	53,307967	-0,78568665	Energy sector	Thermal power station	903829500	2019
Uniper UK Limited	Connah's Quay Power Station	United Kingdom	53,22697	-3,07414	Energy sector	Thermal power station	886000000	2019
RWE Generation UK Plc	Great Yarmouth Power Station EPR	United Kingdom	52,585022	1,7314323	Energy sector	Thermal power station	885062000	2019
Keadby Generation Ltd	Keadby Power Station EPR/YP3133	United Kingdom	53,594445	-0,75044205	Energy sector	Thermal power station	803106880	2019
ScottishPower Generation	Damhead Creek Power Station EPR	United Kingdom	51,428059	0,61157746	Energy sector	Thermal power station	799366000	2019
EDF Energy (West Burton P	West Burton Power Station EPR/SP	United Kingdom	53,360724	-0,81153637	Energy sector	Thermal power station	791000000	2019
Sutton Bridge Power Gene	Sutton Bridge Power Station EPR/F	United Kingdom	52,757342	0,1916851	Energy sector	Thermal power station	776554500	2019
Riverside Resource Recover	RIVERSIDE RESOURCE RECOVERY	United Kingdom	51,505144	0,15542173	Waste and wastewa	Installations for the in	747457600	2019
EP Langage Ltd	Langage Energy Centre EPR/AP363	United Kingdom	50,387758	-4,0102612	Energy sector	Thermal power station	746455000	2019
Uniper UK Limited	Ratcliffe-On-Soar Power Station EP	United Kingdom	52,866039	-1,2542591	Energy sector	Thermal power station	728543000	2019
Siemens plc	Severn Power Station	United Kingdom	51,54796	-2,97543	Energy sector	Thermal power station	716000000	2019
Castle Cement Limited	Ketton Works	United Kingdom	52,636704	-0,54633668	Mineral industry	Installations for the pr	713500000	2019
Coolkeeragh ESB Ltd	Coolkeeragh ESB Ltd	United Kingdom	55,0441	-7,2456	Energy sector	Thermal power station	685000000	2019
Exxonmobil Chemical Limit	Fife Ethylene Plant	United Kingdom	56,09354	-3,31055	Energy sector	Thermal power station	680000000	2019
Medway Power Limited	Medway Power Station EPR/HP393	United Kingdom	51,437727	0,68911546	Energy sector	Thermal power station	680000000	2019
CF Fertilisers UK Limited	Billingham Fertiliser Works EPR/BX	United Kingdom	54,581893	-1,2670638	Chemical industry	Chemical installations	678000000	2019
RWE Generation UK plc	Aberthaw Power Station	United Kingdom	51,39005	-3,39504	Energy sector	Thermal power station	660000000	2019
SUEZ Recycling and Recove	Bolton Thermal Recovery Facility	United Kingdom	53,566718	-2,407665	Waste and wastewa	Installations for the in	654003000	2019
Uniper UK Limited	Enfield Power Station EPR/NP3833	United Kingdom	51,66144	-0,023550721	Energy sector	Thermal power station	644990000	2019
Grangemouth CHP Limited	Grangemouth CHP Plant	United Kingdom	56,01201	-3,69854	Energy sector	Thermal power station	641000000	2019
CF Fertilisers UK Limited	Ince Fertiliser Manufacturing Site E	United Kingdom	53,281007	-2,7971083	Chemical industry	Chemical installations	627116000	2019
Lafarge Caudon Limited	Caudon Cement Plant	United Kingdom	53,043603	-1,8746695	Mineral industry	Installations for the pr	585887500	2019
Tarmac Cement And Lime L	Dunbar Works, East Lothian	United Kingdom	55,97901	-2,4715	Mineral industry	Installations for the pr	559000000	2019
INEOS Chemicals Grangem	INEOS Chemicals Grangemouth Ltd	United Kingdom	56,00704	-3,68727	Chemical industry	Chemical installations	522000000	2019
Hydrocarbon Resources Ltd	Barrow Gas Terminals EPR/BX1675	United Kingdom	54,102414	-3,1841082	Energy sector	Mineral oil and gas ref	494475000	2019
Castle Cement Limited	Padeswood Cement Works	United Kingdom	53,15499	-3,06202	Mineral industry	Installations for the pr	490000000	2019
RWE Markinch Limited	Markinch Biomass CHP	United Kingdom	56,20153	-3,16208	Waste and wastewa	Installations for the in	487000000	2019
Castle Cement Limited	Ribblesdale Cement Works	United Kingdom	53,888327	-2,3844346	Mineral industry	Installations for the pr	463738000	2019

INEOS Manufacturing Scot	INEOS Infrastructure (Grangemout)	United Kingdom	56,01847	-3,69158	Energy sector	Thermal power station	429000000	2019
EPR Thetford Limited	Thetford Power Station	United Kingdom	52,447764	0,72374753	Energy sector	Thermal power station	426643120	2019
Kent Enviropower Ltd	Allington Incinerator - EPR/BR4551	United Kingdom	51,293685	0,49650163	Waste and wastewa	Installations for the di	395000000	2019
Steetley Dolomite Limited	Whitwell Works	United Kingdom	53,270735	-1,1986549	Mineral industry	Installations for the pr	393635000	2019
E.ON UK CHP Limited	Kemsley Paper Mill CHP Plant EPR/	United Kingdom	51,362175	0,75120261	Energy sector	Thermal power station	380599000	2019
Lafarge Tarmac Cement an	Aberthaw Works	United Kingdom	51,39407	-3,3897	Mineral industry	Installations for the pr	371000000	2019
E.ON UK Renewables Limit	Steven's Croft Power Station	United Kingdom	55,1519	-3,37996	Waste and wastewa	Installations for the in	371000000	2019
Viridor Waste Managemen	Cardiff Energy Recovery Facility	United Kingdom	51,47094	-3,14958	Waste and wastewa	Installations for the in	364000000	2019
South East London Combin	SELCHP Energy Recovery Facility	United Kingdom	51,485479	-0,046436737	Waste and wastewa	Installations for the in	361665000	2019
Winnington CHP Limited	Winnington Sodium Carbonate Ma	United Kingdom	52,84339	-2,5261278	Energy sector	Thermal power station	355487000	2019
INEOS FPS Limited	Kinneil Terminal, Forties Pipeline S	United Kingdom	56,00597	-3,67143	Energy sector	Mineral oil and gas ref	345000000	2019
Cemex UK Cement Ltd	South Ferriby Cement Plant EPR/BL	United Kingdom	53,67552	-0,52852895	Mineral industry	Installations for the pr	342240000	2019
BP Chemicals Limited	Hull Chemical Industry EPR/BJ8162	United Kingdom	53,738822	-0,2368711	Chemical industry	Chemical installations	339852000	2019
Baglan Operations Limited	Baglan Power Station	United Kingdom	51,61582	-3,83413	Energy sector	Thermal power station	339000000	2019
British Sugar Plc	Wissington Sugar Factory EPR/BX2	United Kingdom	52,551275	0,45208327	Animal and vegetab	Treatment and proces	330610000	2019
SUEZ Recycling and Recove	Severnside Energy Recovery Centre	United Kingdom	51,528968	-2,6534001	Waste and wastewa	Installations for the in	329987000	2019
BWSC Generation Services	Brigg Renewable Energy Plant	United Kingdom	53,542543	-0,51171439	Energy sector	Thermal power station	329963000	2019
SUEZ Recycling and Recove	Suffolk EfW Facility EPR/WP3438H	United Kingdom	52,103972	1,0985239	Waste and wastewa	Installations for the in	322540000	2019
Lakeside Energy From Was	Lakeside EfW Facility EPR/BT7116I	United Kingdom	51,485136	-0,50648114	Waste and wastewa	Installations for the in	322443000	2019
Lafarge Cement (Ireland) L	Lafarge Tarmac Cement & Lime Ltd	United Kingdom	54,6178	-6,7661	Mineral industry	Installations for the pr	313000000	2019
Veolia ES Birmingham Limi	Tyseley Energy from Waste Plant	United Kingdom	52,458434	-1,8417493	Waste and wastewa	Installations for the in	308485000	2019
Veolia ES Staffordshire Lim	Staffordshire Energy Recovery Faci	United Kingdom	52,672711	-2,1145704	Waste and wastewa	Installations for the in	303625000	2019
Shell UK Limited	Shell North Sea Gas Terminal	United Kingdom	57,58006	-1,84334	Energy sector	Mineral oil and gas ref	303000000	2019
Conocophillips (U.K.) Tees	Teesside Crude Oil Stabilisation Te	United Kingdom	54,620021	-1,1729941	Energy sector	Mineral oil and gas ref	297285000	2019
UPM-Kymmene (UK) Limit	Caledonian Paper Mill	United Kingdom	55,57964	-4,63957	Paper and wood pro	Industrial plants for th	284000000	2019
British Sugar Plc	Bury St Edmunds Sugar Factory EPR	United Kingdom	52,253717	0,72693145	Animal and vegetab	Treatment and proces	280217000	2019
Viridor Waste Managemen	Dunbar Energy Recovery Facility	United Kingdom	55,97522	-2,46306	Waste and wastewa	Installations for the in	274000000	2019
Viridor Waste Managemen	Ardley EfW Plant EPR/FP3134GU	United Kingdom	51,932956	-1,2154238	Waste and wastewa	Installations for the in	268980768	2019
Singleton Birch Limited	Melton Ross Lime Works EPR/BL88	United Kingdom	53,587303	-0,37976187	Mineral industry	Installations for the pr	265859000	2019
Viridor Waste Managemen	Beddington Energy Recovery Facili	United Kingdom	51,379235	-0,14350636	Waste and wastewa	Installations for the re	263396464	2019
SELLAFIELD LIMITED	Sellafield Site EPR/BM4317IX	United Kingdom	54,41913	-3,5008405	Chemical industry	Chemical installations	262000000	2019
E.ON Climate & Renewable	Blackburn Meadows Renewable En	United Kingdom	53,419079	-1,403064	Energy sector	Thermal power station	261758000	2019
Scottish Power Generation	Rye House Power Station EPR/RP3	United Kingdom	51,761606	0,008789124	Energy sector	Thermal power station	261678496	2019
EPR Ely Limited	Elean Power Station EPR/AP3130LY	United Kingdom	52,397888	0,1311985	Energy sector	Thermal power station	258696160	2019
Shell UK Limited	Fife NGL Plant	United Kingdom	56,09746	-3,29872	Energy sector	Mineral oil and gas ref	250000000	2019

The Coventry & Solihull Waste Incinerator EPR/NP3739P	United Kingdom	52,395955	-1,4914687	Waste and wastewater installations for the in	249013000	2019
Grep1 Limited Sleaford Renewable Energy Plant E	United Kingdom	52,999517	-0,38367314	Energy sector Thermal power station	248426190	2019
South Hook LNG Terminal SOUTH HOOK LIQUEFIED NATURAL	United Kingdom	51,71922	-5,08436	Energy sector Thermal power station	237000000	2019
FCC Recycling (UK) Limited Greatmoor EfW EPR/UP3734HT	United Kingdom	51,895724	-0,97976911	Waste and wastewater installations for the in	228660000	2019
SUEZ Recycling and Recovery Cornwall Energy Recovery Centre E	United Kingdom	50,376648	-4,8912823	Waste and wastewater installations for the in	226475600	2019
BOC Limited BOC Hydrogen Plant	United Kingdom	54,599271	-1,1878099	Chemical industry Chemical installations	219000000	2019
Norbord Europe Limited Pulp and Board Plant, Cowie	United Kingdom	56,07711	-3,86979	Paper and wood products Industrial plants for th	210000000	2019
Total Exploration & Production Shetland Gas Plant	United Kingdom	60,46839	-1,25986	Energy sector Thermal power station	208000000	2019
Veolia ES Sheffield Limited SHEFFIELD ENERGY RECOVERY FAC	United Kingdom	53,387031	-1,4492198	Waste and wastewater installations for the in	207592160	2019
MES Environmental Limited Stoke EfW Facility	United Kingdom	52,987885	-2,1827354	Waste and wastewater installations for the in	207495000	2019
INEOS Nitriles (UK) Ltd Seal Sands Acrylonitrile Production	United Kingdom	54,575826	-1,2450507	Chemical industry Chemical installations	206000000	2019
MVV Environment Devon Devonport Energy from Waste CHP	United Kingdom	50,395913	-4,1863485	Waste and wastewater installations for the in	205266944	2019
Veolia ES South Downs Limited NEWHAVEN INCINERATOR	United Kingdom	50,802043	0,04919386	Waste and wastewater installations for the in	200391000	2019
Encirc Encirc UK	United Kingdom	53,280942	-2,815975	Mineral industry Installations for the m	200000000	2019
Tata Steel UK Limited Shapfell Lime Works	United Kingdom	54,512993	-2,6649095	Mineral industry Installations for the pr	194548400	2019
FCC Environment (Lincoln) Lincolnshire EfW Facility	United Kingdom	53,199438	-0,59503681	Waste and wastewater installations for the in	191256000	2019
Veolia ES Hampshire Intera South West Energy Recovery	United Kingdom	50,897365	-1,4314543	Waste and wastewater installations for the re	190082000	2019
Veolia ES Hampshire Limited Integra South East Energy Recover	United Kingdom	50,82181	-1,0544553	Waste and wastewater installations for the in	190082000	2019
ENGIE FM Limited Sullom Voe Terminal CHP, Shetland	United Kingdom	60,45741	-1,27183	Energy sector Thermal power station	181000000	2019
Ferrybridge MFE2 Ltd Ferrybridge Multifuel Plant 2 EPR/X	United Kingdom	53,722154	-1,2852732	Waste and wastewater installations for the in	179474000	2019
Tarmac Cement and Lime Limited Hindlow Quarry Lime Works	United Kingdom	53,210776	-1,8554665	Mineral industry Installations for the pr	171915000	2019
Huntsman P&A UK Limited Greatham Works EPR/TP3532PK	United Kingdom	54,631729	-1,2035841	Chemical industry Chemical installations	168000000	2019
MVV Environment Ridham Ridham Biomass Power Plant	United Kingdom	51,380464	0,76135415	Energy sector Thermal power station	165427360	2019
William Grant & Sons Distillers The Girvan Distillery, Grangeston	United Kingdom	55,26071	-4,8334	Animal and vegetable Treatment and proces	165000000	2019
Lucite International UK Limited Cassel Works	United Kingdom	54,586979	-1,2759475	Chemical industry Chemical installations	161520704	2019
SAICA Paper UK Limited Partington Paper Mill EPR/ZP3736X	United Kingdom	53,425585	-2,4193716	Paper and wood products Industrial plants for th	159606000	2019
INEOS Nitriles (UK) Limited INEOS Nitriles CHP Plant - EPR/HP3	United Kingdom	54,575826	-1,2450507	Energy sector Thermal power station	159000000	2019
EPR Glanford Limited Glanford Power Station EPR/UP323	United Kingdom	53,622685	-0,70122447	Energy sector Thermal power station	157510000	2019
Veolia ES Leeds Ltd Veolia Leeds Recycling and Energy	United Kingdom	53,787525	-1,5042477	Waste and wastewater installations for the in	156516000	2019
Ardagh Glass Limited Ardagh Glass Barnsley	United Kingdom	53,5704	-1,43893	Mineral industry Installations for the m	154000000	2019
WasteNotts (Reclamation) Eastcroft EfW Plant	United Kingdom	52,945958	-1,1351676	Waste and wastewater installations for the in	152755000	2019
Centrica KL Limited Kings Lynn Power Station EPR/BP3	United Kingdom	52,727186	0,380041	Energy sector Thermal power station	150735140	2019
O-I Manufacturing UK Limited Alloa Glass Factory	United Kingdom	56,11113	-3,80083	Mineral industry Installations for the m	149000000	2019
Lhoist UK Limited Brierlow Lime Works	United Kingdom	53,218973	-1,8707148	Mineral industry Installations for the pr	148728000	2019
EPR Eye Limited Eye Power Station EPR/BP3635LA	United Kingdom	52,335662	1,128652	Waste and wastewater installations for the in	148166000	2019

Templeborough Biomass P	Templeborough Biomass Power PI	United Kingdom	53,422347	-1,3742767	Waste and wastewa	Installations for the in	147944320	2019
E.ON UK CHP Limited	Port Of Liverpool CHP Plant EPR/BK	United Kingdom	53,451998	-3,0081171	Energy sector	Thermal power station	146545000	2019
Cargill Plc	Trafford Park Wheat Milling Plant	United Kingdom	53,476834	-2,3288724	Animal and vegetab	Treatment and proces	145780000	2019
Ancillary Components Limi	Goosey Lodge EPR/NP3338SZ	United Kingdom	52,263499	-0,59095616	Waste and wastewa	Installations for the in	144065000	2019
Mersey Bioenergy Ltd	Widnes Biomass Facility EPR/JP313	United Kingdom	53,354564	-2,7513047	Energy sector	Thermal power station	141716310	2019
Guardian Industries UK Ltd	Guardian Industries UK Ltd	United Kingdom	53,6978	-0,90936	Mineral industry	Installations for the m	141000000	2019
FCC Waste Services (UK) Li	BROGBOROUGH LANDFILL	United Kingdom	52,048097	-0,58549139	Waste and wastewa	Landfills (excluding lan	140380000	2019
Palm Paper Limited	Saddlebow Paper Mill	United Kingdom	52,733809	0,38603075	Paper and wood pro	Industrial plants for th	138604400	2019
CROWN Packaging UK PLC	CROWN Packaging UK PLC	United Kingdom	54,8886	-2,9085	Other activities	Installations for the su	135000000	2019
Slough Heat & Power Limit	Slough Heat and Power	United Kingdom	51,523818	-0,6254345	Waste and wastewa	Installations for the in	134107000	2019
SUEZ Recycling and Recove	Kirklees EfW EPR/BJ6178IX	United Kingdom	53,655139	-1,7775451	Waste and wastewa	Installations for the in	133943000	2019
LondonEnergy Ltd	Edmonton EfW Facility EPR/YP303	United Kingdom	51,616222	-0,040538506	Waste and wastewa	Installations for the in	133750310	2019
FCC Environment Limited	Millerhill Recycling & Energy Recov	United Kingdom	55,92507	-3,08594	Waste and wastewa	Installations for the in	132000000	2019
Dow Silicones UK Limited	Barry CHP	United Kingdom	51,40625	-3,24155	Energy sector	Thermal power station	131000000	2019
Severn Waste Services Lim	Mercia EnviRecover EPR/XP3935TX	United Kingdom	52,326472	-2,2074329	Waste and wastewa	Installations for the in	129766000	2019
Bluewater Lancaster Produ	Aoka Mizu	United Kingdom	60,18051	3,86811	Energy sector	Thermal power station	129000000	2019
Tilbury Green Power Limite	Tilbury Green Power EPR/KP3936Z	United Kingdom	51,469679	0,33100218	Waste and wastewa	Installations for the in	128880610	2019
3C Waste Limited	Arpley Landfill	United Kingdom	53,376451	-2,6183583	Waste and wastewa	Landfills (excluding lan	128390000	2019
Pilkington Glass Ltd	Greengate Works	United Kingdom	53,4423	-2,74354	Mineral industry	Installations for the m	128000000	2019
Perenco UK Limited	Dimlington Terminal	United Kingdom	53,660152	0,11369477	Energy sector	Mineral oil and gas ref	127006000	2019
MES Environmental Limite	Wolverhampton EfW Facility	United Kingdom	52,597637	-2,1245608	Waste and wastewa	Installations for the in	126518000	2019
Biffa Waste Services Ltd	Poplars Landfill & AD Facility	United Kingdom	52,682295	-2,0117909	Waste and wastewa	Landfills (excluding lan	115160600	2019
Cristal Pigment UK Ltd	Stallingborough Titanium Dioxide	United Kingdom	53,614694	-0,16025843	Chemical industry	Chemical installations	113527000	2019
Repsol Sinopec Resources	Flotta North Sea Terminal, Orkney	United Kingdom	58,83599	-3,12212	Energy sector	Mineral oil and gas ref	112000000	2019
MES Environmental Limite	Dudley Energy from Waste Facility	United Kingdom	52,499145	-2,082889	Waste and wastewa	Installations for the in	111352000	2019
Ardagh Group	Ardagh Glass Doncaster	United Kingdom	53,552344	-1,085694	Mineral industry	Installations for the m	110000000	2019
Thames Water Utilities Lim	BECKTON STW	United Kingdom	51,51523	0,095074261	Waste and wastewa	Urban waste-water tre	106607848	2019
The Lycra Company	The Lycra Company	United Kingdom	55,0325	-7,2394	Chemical industry	Chemical installations	104000000	2019
MVV Environmental Baldo	Dundee Energy Recycling Ltd	United Kingdom	56,48585	-2,90211	Waste and wastewa	Installations for the in	102000000	2019
Perenco UK Limited	Central Bacton Gas Terminal EPR/PU	United Kingdom	52,858539	1,4649647	Energy sector	Mineral oil and gas ref	101816000	2019
British Sugar Plc	Newark Sugar Factory EPR/BK9385	United Kingdom	53,088135	-0,81741601	Animal and vegetab	Treatment and proces	101459000	2019

3- Conclusions

This task has contributed to the identification of large CO2 emitters in the Southeast and Northwest clusters. The emitters listed here have been identified from the E-PRTR database, and updated using data from various national and company sources, and further extended using inputs from ConsenCUS partners. This emitters database, together with the database of CO2 end users and storage sites (Deliverable 8.2), will provide the necessary input for assessing future cluster configurations using the value chain optimisation framework.