



Bruksela, dnia 19 maja 2014 r.

KANCELARIA SENATU

Przedstawiciel Kancelarii Senatu
przy Unii Europejskiej

Sprawozdanie nr 50/2014

Sprawozdanie nt. uruchomienia pierwszej transzy finansowania (750 milionów euro) dla projektów na transeuropejską infrastrukturę energetyczną

Bruksela, 12 maja 2014 r.

Pierwsze wezwanie do składania ofert na dofinansowanie projektów infrastruktury energetycznej w ramach instrumentu „Łącząc Europę” – Connecting Europe Facility (CEF) zostało otwarte. W puli znalazło się 750 mln euro dla priorytetowych projektów, głównie z sektorów gazowego i elektroenergetycznego. Mają zmniejszyć izolację krajów Unii Europejskiej niepowiązanych z wspólnym rynkiem i pozwolić na pogłębienie integracji Odnawialnych Źródeł Energii z siecią elektroenergetyczną. To pierwsze 750 mln euro z puli 5,85 mld euro na projekty z zakresu transeuropejskiej infrastruktury energetycznej na lata 2014-2020.

Instrument „Łącząc Europę” powołano w październiku 2011 roku na mocy rozporządzenia Rady i **Parlamentu Europejskiego**. Jego cel, to realizacja projektów dotyczących rozwoju, budowy lub **modernizacji** istniejącej infrastruktury, w dziedzinie transportu, **energetyki** i telekomunikacji. Budowanie wspólnego rynku energii, niezależnie również od planów premiera Donalda Tuska, trwa w UE od dłuższego czasu, a CEF z założenia ma w tym pomóc.

- **Pewna energia**

Łącznie 750 mln euro przeznaczono w ramach CEF na pierwsze projekty priorytetowe, głównie w sektorach **gazu** i **energii elektrycznej**. Projekty te będą dotyczyły zagadnień związanych z **bezpieczeństwem dostaw** i mają pomóc położyć kres **izolacji energetycznej**

w niektórych państwach członkowskich. Jednocześnie mają przyczynić się do zakończenia budowania w UE wewnętrznego **ryнку energii** i integracji **odnawialnych źródeł energii** z **siecią energetyczną**. Fundusz UE ma przyspieszyć inwestycje w brakujące **połączenia transgraniczne**, wykorzystując niezbędne finansowanie prywatne i publiczne.

„To kluczowy krok” – zauważył unijny komisarz ds. energii **Günther Oettinger**, który podkreślił, że to znacząca kwota: „Tak duże wsparcie finansowe Unii Europejskiej zrobi poważną różnicę. Obecny kryzys ukraiński podkreśla wagę **modernizacji infrastruktury energetycznej** oraz uzupełniania brakujących połączeń między poszczególnymi krajami członkowskimi w celu zwiększenia **bezpieczeństwa energetycznego** Wspólnoty – powiedział komisarz ds. energii Unii Europejskiej. „Generalnie kraje te mogą sobie nawzajem pomagać dostawami surowców tylko, gdy będą dobrze połączone **infrastrukturą energetyczną**. Ponadto modernizacja jej jest warunkiem wstępnym do ukończenia budowy wspólnego rynku energii dla dobra klientów i przedsięwzięć biznesowych w Unii Europejskiej” – komentował uruchomienie środków komisarz.

- **Komu dotacje?**

Dla „Łącząc Europę” przeznaczono 5,85 mld euro na projekty z zakresu transeuropejskiej infrastruktury energetycznej na lata 2014-2020. Projekty, które mogą otrzymać **dofinansowanie**, najpierw muszą trafić na listę „projektów będących przedmiotem wspólnego zainteresowania” (PCI). Należy podkreślić, że projekty naftowe są wyłączone z pomocy. Do otrzymania grantu niezbędne jest także przeprowadzenie analizy kosztów i zysków (CBA), która powinna wykazać znaczące korzyści dla bezpieczeństwa dostaw, solidarności energetycznej czy innowacyjności płynące z realizacji danej inwestycji. Decyzję o alokacji środków podejmuje Agencja Współpracy Regulatorów Energetycznych (ACER). Pierwszą taką listę KE przyjęła w październiku 2013 roku i składa się z około 250 kluczowych projektów infrastruktury energetycznej. Każdy z nich ma zapewnić korzyści dla co najmniej **dwóch państw członkowskich**; zwiększyć **bezpieczeństwo dostaw**, przyczynić się do dalszej **integracji rynku** i konkurencji, a także zmniejszyć **emisję CO2**.

Projekt musi być także ekonomicznie nieopłacalny w swoim biznes planie, przez co uzasadnione będzie jego dofinansowanie. Kwota wsparcia przez UE nie może przekroczyć 50 procent **kosztów kwalifikowanych**. W wyjątkowych wypadkach, gdy projekt znacząco

przyczynia się do bezpieczeństwa dostaw energii i zwiększenia solidarności między państwami członkowskimi, wsparcie UE może wynosić do 75 procent kosztów. Termin składania wniosków to **19 sierpnia 2014 roku**. Ostateczna decyzja, które projekty otrzymają **finansowanie CEF**, zostanie podjęta w listopadzie 2014 roku.

Opracowała:

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Załącznik:

- **Komunikat ze strony Komisji Europejskiej (brak polskiej wersji)**

Energy: Commission releases €750 million for infrastructure projects

The first call for proposals under the Connecting Europe Facility (CEF) to help finance key trans-European energy infrastructure projects is open. A total of €750 million will be made available for first priority projects mainly in the gas and electricity sectors. These projects will address security of supply issues and help bring an end to the energy isolation of some Member States. They will also contribute to the completion of the EU-wide internal energy market and to the integration of renewables to the energy grid. The EU funding will accelerate investment in missing cross-border links by leveraging the necessary private and public funding.

European Energy Commissioner **Günther Oettinger** said: *"This is a crucial step. Such a huge amount of EU financial support will make a solid difference. The current Ukraine crisis underlines the importance of upgrading energy infrastructure and building missing interconnections between Member States in order to enhance the energy security in the EU. In general Member States can only help each other with energy supplies, if they are well connected. Moreover, improving the energy infrastructure is a prerequisite for completing the internal energy market for the benefit of consumers and businesses in the EU."*

¹ Na podstawie informacji Komisji Europejskiej w języku angielskim.

Under the Connecting Europe Facility a total of €5.85 billion has been allocated to trans-European energy infrastructure for the period of 2014-2020.

In order to apply for a grant, a project has to be included in the list of 'projects of common interest'. The first list was adopted by the European Commission in October 2013. It consists of some 250 key energy infrastructure projects which, when completed, would each ensure significant benefits for at least two Member States; enhance security of supply, contribute to market integration and further competition as well as reduce CO2 emissions.

The grant money will be available to finance studies and construction works. Whereas oil infrastructure projects are excluded from any form of financial assistance, grants for studies are available to all other projects of common interest. This is also the case for grants for construction works (except hydro-pumped storage projects). However, to be eligible for grants for construction works a project has to fulfil strict criteria: its cost-benefit analysis (CBA) has to show significant benefits for security of supply, solidarity, or technological innovation. The project must have received a cross-border cost allocation decision issued by the competent national regulatory authorities or – in case they disagree – by the Agency for the Cooperation of Energy Regulators (ACER). According to its business plan the project has to be commercially not viable and therefore reliant on EU funding to go ahead.

In general, the amount of EU support cannot exceed 50 per cent of the eligible costs. In exceptional cases, when a project will contribute significantly to the security of supply or boost energy solidarity between Member States, the EU support can amount to 75 per cent of the costs.

The application deadline for proposals is 19 August 2014. The final decision on which projects will get the CEF funding from the Commission will be taken by November 2014.

- **Background**

The legislative basis for this call for proposals is the Connecting Europe Facility [Regulation](#) which is in force since December 2013 and the rules on how this financial aid is granted are laid down in the [Regulation](#) on guidelines for trans-European energy infrastructure which entered into force in May 2013. From an overall budget of €33.2 billion covering three sectors – transport, energy, telecommunications – energy accounts for €5.85 billion in the period of 2014-2020. The bulk of these funds are available for grants whereas a maximum of 10% is set aside for financial instruments.

In a properly functioning internal market investments should be driven by the market itself. Sometimes the bulk of an investment needs to be made by companies in one Member State while there are benefits across the border in another Member State. In this case a decision on sharing the costs needs to be taken by the competent regulatory authorities. This cross-border cost allocation is, together with an adequate cost-benefit analysis of the project, one of the key documents project promoters have to present when applying for grants for works.

In addition to this call for proposals for grants the Commission will, after a thorough assessment later this year, identify the conditions under which money will be made available to help set up innovative financial instruments like project bonds for infrastructure projects. This will be done in cooperation with the European Investment Bank.

- **More information**

Detailed information on the call for proposals:

http://inea.ec.europa.eu/en/cef/cef_energy/apply_for_funding/cef_energy_call_for_proposals_2014.htm

Full list of projects of common interest by country:

http://ec.europa.eu/energy/infrastructure/pci/doc/2013_pci_projects_country.pdf

Memo on projects of common interest [MEMO/13/880](#)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
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EU Member States			
AUSTRIA (AT)	2.1. PCI Austria internal line between Westtirol and Zell-Ziller (AT) to increase capacity at the AT/DE border	Upgrade of the existing 220 kV AC line (OHL) of 104 km between Westtirol (AT) and Zell/Ziller (AT) (onshore) and erection of additional 380/220kV transformers in both substations.	Electricity WEST
	2.11. Cluster Germany – Austria - Switzerland capacity increase in Lake Constance area including the following PCIs: 2.11.1. Interconnection between border area (DE), Meiningen (AT) and Rüthi (CH) 2.11.2. Internal line in the region of point Rommelsbach to Herbertingen, Herbertingen to Tiengen, point Wullenstetten to point Niederwangen (DE) and the border area DE-AT	2.11.1. (description refers to all projects in cluster): Construction of new 400 kV AC lines (OHL) and extension of existing ones on approximately 380 km and with a total capacity of 3500 MVA (tbd), and erection of a 400/220/110kV-substation. Transmission routes include: Herbertingen - Tiengen, Herbertingen - Pkt. Rommelsbach, Herbertingen - Meiningen (AT) – Rüthi (CH), Pkt. Wullenstetten - Pkt. Niederwangen (onshore).	Electricity WEST
	2.18. PCI capacity increase of hydro-pumped storage in Austria - Kaunertal, Tyrol	“Ausbau Kraftwerk Kaunertal” is a Hydro pumped storage plant project (upper stage) with a capacity of 400 MW and a hydro storage plant project (lower stage) with a capacity of 500 MW in the Austrian area of the Ötztaler Alps. It consists of 4 water intakes with a diversion gallery to the existing basin Gepatsch and the new reservoir Platzertal as upper basin for the new pump storage power station. Additional is planned to construct a new peak load power station at Prutz sharing a new waterway with the existing power plant Kaunertal. The affected water body is Inn-Danube.	Electricity WEST
	2.19. PCI hydro-pumped storage in Austria - Obervermuntwerk II, Vorarlberg province	The plant is designed as an underground power plant, situated in the rock mass consisting Silvretta crystallin between the reservoir Silvretta (2030 a.s.l.) and the reservoir Vermunt (1745 a.s.l) and functioning as a pumped storage with 2 ternary units (turbine, generator, pump) with an annual capacity of approximately 800 GWh, incl. 47,4 GWh based on water inflow.	Electricity WEST
	2.20. PCI capacity increase of hydro-pumped storage in Austria - Limberg III, Salzburg	The pumped hydro storage power plant Limberg III will generate an additional capacity of 480 MW (500-850 GWh annually). Two variable-speed Francis pump-turbines with asynchronous motor-generator use the head between the two existing annual storage reservoirs for the production of additional backup and balancing energy. All facilities of the new power plant will be built below surface. Power transmission (energy outlet and intake) is ensured by an existing 380 kV double line linking the tension	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>3.1. Cluster Austria - Germany between St. Peter and Isar including the following PCIs:</p> <ul style="list-style-type: none"> 3.1.1. Interconnection between St. Peter (AT) and Isar (DE) 3.1.2. Internal line between St. Peter and Tauern (AT) 3.1.3. Internal line between St. Peter and Ernsthofen (AT) 	<p>insulator portal to the substation Kaprun/main stage.</p> <p>3.1.1.: 380 kV AC OHL between Isar and St. Peter with a total capacity of 4.100 MVA, including 110 km of new line in DE (including Pirach), 61 km of new circuit on an existing line, new 380 kV switchgears in Altheim, Simbach, Pirach and St. Peter and one new 380/220 kV transformer in the substations Altheim and St. Peter and fourth circuit on the line between Isar and Ottenhofen (onshore).</p> <p>3.1.2.: Completion of the 380 kV AC line (OHL) with a length of approximately 174km and a capacity of approximately 2 x 2400 MVA between St.Peter and Tauern (as an important part of the 380 kV Ring) and namely: the upgrade of the existing 380 kV line between St.Peter and Salzburg from 220 kV operation to 380 kV operation and the erection of a new internal double circuit 380 kV line connecting Salzburg and Tauern, replacing the existing 220-kV-line on an optimized route (onshore). Moreover, the erection of the new substation Wagenham and Pongau and the integration of the existing substations Salzburg and Kaprun is planned.</p> <p>3.1.3.: Upgrade from 220 kV operation to 380 kV of the 112 km AC OHL with a capacity of approximately 3000 MVA between Ernsthofen and St.Peter (onshore) and erection of a 380 kV substation.</p>	<p>Electricity EAST</p>
	<p>3.2. Cluster Austria - Italy between Lienz and Veneto region including the following PCIs:</p> <ul style="list-style-type: none"> 3.2.1 Interconnection between Lienz (AT) and Veneto region (IT) 3.2.2 Internal line between Lienz and Obersielach (AT) 3.2.3 Internal line between Volpago and North Venezia (IT) 	<p>3.2.1.: The reconstruction of the existing 220 kV interconnection line between Soverzene and Lienz as a 400 kV AC insulated tie-line of about 100-150 km (approximately 35 km on AT and the rest on IT side) and with a capacity of 1500 MVA between Lienz and Veneto region substations, along an optimized route, which minimizes the environmental impact (onshore).</p> <p>3.2.2.: A 380kV AC line (OHL) with a length of approximately 190 km and a capacity of approximately 3000 MVA connecting the substation of Lienz and Obersielach to close the Austrian 380kV Ring in the southern gird area (onshore). New upgrade technologies which are under investigation may allow earlier commissioning than 2023.</p>	<p>Electricity EAST</p>

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	3.3. PCI Austria - Italy interconnection between Nauders (AT) and Milan region (IT)	New 400 kV AC/DC interconnection line (OHL) of about 200 km and with a capacity of 1000 MW/1500 MVA between Nauders (AT) and Milan Area (IT) (onshore). The project will be realized in two different phases: - phase1) realization of the first part of the line connecting Nauders (AT) and Curon (IT); regarding phase1) Terna is in contact with the Austrian TSO (Austrian Power Grid AG) discussing technical options; - phase2) prosecution of realization of the line until Milan area.	Electricity EAST
	3.4. PCI Austria – Italy interconnection between Wurmlach (AT) and Somplago (IT)	A new 220 kV AC OHL of 40 km and with a capacity of 300 MVA from Somplago substation to Wurmlach substation (onshore).	Electricity EAST
	6.4. PCI Bidirectional Austrian – Czech interconnection (BACI) between Baumgarten (AT) – Reinthal (CZ/AT) – Brečlav (CZ)	New onshore bidirectional AT-CZ Interconnection (formerly LBL project) with a length of approximately 12 km on the CZ side and of approximately 46 km on the AT side and with a daily capacity of 18-22.8 MCM/day. The power of the compressor station in AT is of 24 MW.	Gas EAST
	6.16. PCI Tauerngasleitung (TGL) pipeline between Haiming (AT)/Überackern (DE) – Tarvisio (IT)	New onshore pipeline with a total length of approximately 290 km crossing the Alps via 10 tunnels with an approximate length of 25 km. The daily capacity in both flow directions will be of maximum 31.2 MCM/day. The power of the compressor station(s) in Auerbach and Feistritz will be of approximately 2 x 33 MW.	Gas EAST
	6.17. PCI Connection to Oberkappel (AT) from the southern branch of the Czech transmission system	New onshore pipeline of approximately 110 km and with a daily capacity of up to approximately 5 -10 MCM/day. The power of the compressor station(s) will be of approximately 2-5 MW.	Gas EAST
	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs: 7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of	7.1.5. New onshore pipeline with a length of 1318 km and with the following daily delivery capacity of 6.1 MCM/day in Bulgaria, 6.1 in Romania, 6.1 in Hungary and 52 in Austria. Initial throughput capacity of 23 BCM/year. The power of the compressor station(s) amount to a total of 345 MW.	Southern Gas Corridor (SGC)

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	<p>the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p> <p>9.2. PCI Bratislava-Schwechat-Pipeline: pipeline linking Schwechat (Austria) and Bratislava (Slovak Republic)</p> <p>9.6. PCI TAL Plus: capacity expansion of the TAL Pipeline between Trieste (Italy) and Ingolstadt (Germany)</p>	<p>A pipeline of 80 km length linking Schwechat (AT) and Bratislava (SK) and with a diameter of 400 mm and the maximal throughput capacity of 5.0 million tonnes per year.</p> <p>Increasing capacity of the TAL pipeline in its first section between Trieste and Ingolstadt to allow for full diversification of oil supply to the Czech Republic.</p>	<p>Oil Supply Connections in Central Eastern Europe (OSC)</p> <p>Oil Supply Connections in Central Eastern Europe (OSC)</p>
BELGIUM (BE)	<p>1.1. Cluster Belgium – United Kingdom between Zeebrugge and Canterbury [currently known as the NEMO project] including the following PCIs:</p> <p>1.1.1. Interconnection between Zeebrugge (BE) and the vicinity of Richborough (UK)</p> <p>1.1.2. Internal line between the vicinity of Richborough and Canterbury (UK)</p> <p>1.1.3. Internal line between Dungeness to Sellindge and Sellindge to Canterbury (UK)</p> <p>1.2. PCI Belgium – two grid-ready offshore hubs connected to the onshore substation Zeebrugge (BE) with anticipatory investments enabling future interconnections with France and/or UK</p> <p>2.2. Cluster Belgium - Germany between Lixhe and Oberzier [currently known as the ALEGrO project] including the following PCIs:</p> <p>2.2.1. Interconnection between Lixhe (BE) and Oberzier (DE)</p> <p>2.2.2. Internal line between Lixhe and Herderen (BE)</p> <p>2.2.3. New substation in Zutendaal (BE)</p>	<p>1.1.1. New DC sea link including 135 km of DC subsea cable with 1000 MW capacity between Richborough and Zeebrugge (offshore).</p> <p>Two offshore hubs connecting offshore wind farms and connected to each other and to the AC onshore grid with underground cables, including compensation (offshore).</p> <p>2.2.1.: Connection between Lixhe (BE) and Oberzier (DE) including a new 100 km HVDC underground cable (voltage under investigation) and the extension of existing 380 kV substations.</p> <p>2.2.2.: A new 380 kV AC circuit between Lixhe and Herderen (BE), a second 380 kV OHL in/out from Herderen to Lixhe (10 km).</p> <p>2.2.3.: The addition of 2 transformers 380/150 kV in Lixhe and in</p>	<p>Electricity Northern Seas Offshore Grid (NSOG)</p> <p>Electricity Northern Seas Offshore Grid (NSOG)</p> <p>Electricity WEST</p>

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		Zutendaal, leading to new substations in these locations (onshore).	
	2.3. Cluster Belgium - Luxembourg capacity increase at the BE/LU border including the following PCIs: 2.3.1. Coordinated installation and operation of a phase-shift transformer in Schiffflange (LU) 2.3.2. Interconnection between Aubange (BE) and Bascharage/Schiffflange (LU)	2.3.2.: One new interconnection between Creos grid in LU and ELIA grid in BE via a 16 km AC double circuit 225 kV underground cable with a capacity of 1000 MVA (onshore).	Electricity WEST
	5.12. PCI Reverse flow interconnection on TENP pipeline to Eynatten interconnection point (Germany)	Reverse flow interconnection at Eynatten on TENP pipeline (on a distance of 11 km), determining an additional daily capacity of 5.5 to 22.8 MCM/day from DE to BE and that of 5.5 to 41 MCM/day from BE to DE (onshore). The power of the compressor station(s) will be between 12 and 36 MW, depending on the chosen alternative.	Gas WEST
	5.13. PCI New interconnection between Pitgam (France) and Maldegem (Belgium)	New pipeline between Pitgam (FR) and Maldegem (BE) with a daily capacity of 24 MCM/day (onshore). The power of the compressor station is yet to be determined.	Gas WEST
	5.16. PCI Extension of the Zeebrugge LNG terminal.	LNG/ CNG terminal with an annual send-out capacity/additional send-out capacity of 3 BCM/year, a storage capacity/ additional storage tank of 180000 CM and a maximum ship size of 266000 CM. The new LNG tank, send-out and the new jetty will increase the capacity of LNG supply to Belgium (and to NW Europe) by about 25%.	Gas WEST
	5.17. Cluster between Luxembourg, France and Belgium including one or more of the following PCIs: 5.17.1. Interconnection between France and Luxembourg 5.17.2. Reinforcement of the interconnection between Belgium and Luxembourg	5.17.2.: Upgrade of existing interconnection point (IP) Pétange with the construction of 50 km pipeline in BE.	Gas WEST
BULGARIA (BG)	3.6. Cluster Bulgaria capacity increase with Greece and Romania including the following PCIs: 3.6.1 Internal line between Vetren and Blagoevgrad (BG) 3.6.2 Internal line between Tsarevets and Plovdiv (BG)	The cluster consists in the construction of 2 AC new high-voltage transmission lines with a total capacity of 1700 MVA, as follows: 400kV OHL of 100 km between Vetren and Blagoevgrad and 400 kV OHL of 150 km between Tsarevets and Plovdiv (onshore).	Electricity EAST
	3.7. Cluster Bulgaria - Greece between Maritsa East 1 and N. Santa including the following PCIs: 3.7.1 Interconnection between Maritsa East 1 (BG) and N.	3.7.1.: Construction of a new AC 400 kV single-circuit interconnector (OHL) with a length of 130 km and a capacity of 2000 MVA between Maritsa East 1 (BG) and Nea Santa (EL)	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	Santa (EL) 3.7.2 Internal line between Maritsa East 1 and Plovdiv (BG) 3.7.3 Internal line between Maritsa East 1 and Maritsa East 3 (BG) 3.7.4 Internal line between Maritsa East 1 and Burgas (BG)	(onshore). 3.7.2.: A new AC 400kV line (OHL) between Maritsa East and Plovdiv with a length of 94 km and a capacity of 1700 MVA (onshore). 3.7.3.: Construction of a new 400 kV AC line (OHL) of 13 km and with a capacity of 1700 MVA between Maritsa East 1 and Maritsa East 3 (onshore). 3.7.4.: Construction of a new 400 kV AC line (OHL) of 150 km and with a capacity of 1700 MVA between Maritsa East 1 and Bourgas (onshore).	
	3.8. Cluster Bulgaria – Romania capacity increase including the following PCIs: 3.8.1 Internal line between Dobrudja and Burgas (BG) 3.8.2 Internal line between Vidno and Svoboda (BG) 3.8.3 Internal line between Svoboda (BG) and the splitting point of the interconnection Varna (BG) - Stupina (RO) in BG 3.8.4 Internal line between Cernavoda and Stalpu (RO) 3.8.5 Internal line between Gutinas and Smardan (RO) 3.8.6 Internal line between Gadalin and Suceava (RO)	3.8.1.: Construction of a new 400kV AC single-circuit line (OHL) of 140 km and with a capacity of 1700 MVA connecting Dobrudja and Bourgas (onshore). 3.8.2.: Construction of a new 400 kV AC power line (OHL) of 80 km and with a capacity of 1700 MVA between the 400/110kV substations Vidno and Svoboda (onshore). This project also includes the construction of two new 400/110kV substations in Svoboda (Krushari) and in Vidno to connect around 1800 MW of RES, transform the corresponding renewable output to a higher voltage level and transfer that energy to demand centres. 3.8.3. Construction of a new 400/110kV power line breaking up the existing 400kV Saedinenie OHL and connecting 400/110kV Svoboda substation. Length of 10 km, capacity of 1700 MVA (onshore).	Electricity EAST
	3.23. PCI hydro-pumped storage in Bulgaria - Yadenitsa	Chaira PSHPP with its 788 MW pumping capacity is the most significant regulating capacity in the Bulgarian EPS. In the existing situation the four hydro units in Chaira PSHPP during a pumping mode transfer waters from the lower reservoir Chaira to the upper reservoir Belmeken for 8,5 hours, which is not enough for the purposes of the EPS control and for balancing the night minimal load of the power system when there is wind. The reason for that comes from the small volume of the lower reservoir Chaira - 5.6 mln m3. This problem can be solved by increasing the production potential of Chaira PSHPP by the	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		construction of Yadenitsa Dam at the level of Chaira Dam and their connecting by pressure derivation. This system of connected vessels will allow transfer of waters in a gravity way from one reservoir to the other, which will mean volume increase of the lower reservoir of Chaira PSHP by 9 mln m ³ .	
	6.8. Cluster Interconnection between Greece and Bulgaria and necessary reinforcements in Bulgaria, including the following PCIs: 6.8.1 Interconnection Greece – Bulgaria [currently known as IGB] between Komotini (EL) – Stara Zagora (BG) 6.8.2 Necessary rehabilitation, modernization and expansion of the Bulgarian transmission system	6.8.1.: New onshore pipeline with a length of 185 km and a daily capacity of approximately 13.7 MCM/day. The power of the compressor station(s) is of approximately 20 MW. 6.8.2.: Upgrade and extension of onshore pipelines in Bulgaria, including projects for rehabilitation, modernization and expansion of the existing national transmission system (modernization and rehabilitation of compressor stations, intelligent pig inspections, expansion and replacement of some sections of the existing transmission system).	Gas EAST
	6.10. PCI Gas Interconnection Bulgaria – Serbia [currently known as IBS]	New onshore pipeline with a length of 150 km and a daily capacity of 4.93 MCM/day interconnecting Bulgarian and Serbian gas systems between Sofia (BG) and Nis (RS).	Gas EAST
	6.11. PCI Permanent reverse flow at Greek – Bulgarian border between Kula (BG) – Sidirokastro (EL)	The project consists in interventions on the already existing transmission pipelines and above ground installations in BG and EL and, in addition, construction of new above ground installations.	Gas EAST
	6.12. PCI Increase the transmission capacity of the existing pipeline from Bulgaria to Greece	The project consists of interventions on the already existing transmission gas pipeline and above ground installations in BG.	Gas EAST
	6.20. Cluster increase storage capacity in South-East Europe, including one or more of the following PCIs: 6.20.1 Construction of new storage facility on the territory of Bulgaria 6.20.2 Chiren UGS expansion 6.20.3 South Kavala storage in Greece 6.20.4 Depomures storage in Romania	6.20.1.: Extension of depleted gas field storage facility in Bulgaria, with a projected working gas volume of between 720 MCM and 1000 MCM; Projected withdrawal capacity maximum 10 MCM/day; Projected injection capacity 10 MCM/day. 6.20.2.: New gas storage facility interconnected with the existing gas transmission system on the territory of BG.	Gas EAST
	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and	7.1.5. New onshore pipeline with a length of 1318 km and with the following daily delivery capacity of 6.1 MCM/day in Bulgaria, 6.1 in Romania, 6.1 in Hungary and 52 in Austria. Initial throughput capacity of 23 BCM/year. The power of the compressor station(s) amount to a total of 345 MW.	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>		
	<p>7.4. Cluster of interconnections with Turkey, including the following PCIs:</p> <p>7.4.1 Gas compression station at Kipi (EL) with a minimum capacity of 3bcm/a</p> <p>7.4.2 Interconnector between Turkey and Bulgaria with a minimum capacity of 3 bcm/a [currently known as "ITB"]</p>	<p>7.4.2.: New onshore pipeline of up to 200 km (approx. 75 km Bulgarian section and approx. 130 km Turkish section) and with a daily capacity of 9-15 MCM/day in a first phase.</p>	Southern Gas Corridor (SGC)
CROATIA (HR)	<p>3.5. Cluster Bosnia and Herzegovina - Croatia between Banja Luka and Lika including the following PCIs:</p> <p>3.5.1 Interconnection between Banja Luka (BA) and Lika (HR)</p> <p>3.5.2 Internal lines between Brinje, Lika, Velebit and Konjsko (HR)</p>	<p>3.5.1.: New 400 kV AC interconnection line (OHL) of 155 km (45 km in Croatia) and with a capacity of 1320 MVA between Banja Luka and Lika (onshore).</p> <p>3.5.2.: New 400 kV AC line (OHL) of 215 km and with a capacity of 1320 MVA between Brinje and Konjsko (HR) replacing/upgrading aging 220 kV OHL, with extension and upgrade of the substation Brinje, extension of the existing substation Konjsko and new intermediate substations in the area of Lika and North Dalmatia (onshore).</p>	Electricity EAST
	<p>3.9. Cluster Croatia – Hungary - Slovenia between Žerjavenc /Heviz and Cirkovce including the following PCIs:</p> <p>3.9.1 Interconnection between Žerjavenc (HR)/Heviz (HU) and Cirkovce (SI)</p>	<p>3.9.1.: The existing substation of Cirkovce (SI) will be connected to one circuit of the existing Heviz (HU)-Zerjavinec (HR) double circuit 400kV OHL by erecting a new AC 80 km double circuit 400 kV OHL with a capacity of 2x1330 MVA in Slovenia. The project</p>	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	3.9.2 Internal line between Divača and Beričevo (SI) 3.9.3 Internal line between Beričevo and Podlog (SI) 3.9.4 Internal line between Podlog and Cirkovce (SI)	will result in two new cross-border circuits: Heviz (HU) - Cirkovce (SI) and Cirkovce (SI) - Žerjavenec (HR) (onshore).	
	6.5. Cluster Krk LNG Regasification Vessel and evacuation pipelines towards Hungary, Slovenia and Italy, including the following PCIs: 6.5.1 LNG Regasification vessel in Krk (HR) 6.5.2 Gas pipeline Zlobin – Bosiljevo – Sisak – Kozarac – Slobodnica (HR) 6.5.3 LNG evacuation pipeline Omišalj – Zlobin (HR) – Rupa (HR) / Jelšane (SI) – Kalce (SI) or 6.5.4 Gas pipeline Omišalj (HR) – Casal Borsetti (IT)	6.5.1: LNG terminal based on a migration concept: 1st Phase: - LNG RV – installation of receipt of LNGRV, with the correspondent annual send-out capacity of 1-2 BCM/year; 2nd Phase: - FSU – storing LNG on a vessel - onshore regasification – a segment of the future LNG terminal, with a correspondent annual send-out capacity of 2-3 BCM/year; 3rd Phase: LNG terminal onshore, with a correspondent annual send-out capacity of 4-6 BCM/year. 6.5.2: Construction of new, upgrade and extension of existing pipelines with a total distance of 308 km, namely: Zlobin – Bosiljevo pipeline – 58 km; Bosiljevo – Sisak pipeline - 100 km; Sisak – Kozarac pipeline – 22 km; Kozarac – Slobodnica pipeline – 128 km. The daily capacity is of 30 MCM/day. 6.5.3: Onshore and offshore pipeline with a total length of 103 km and a daily capacity of 46 MCM/day. 6.5.4: New onshore pipeline with a total length of 220 km (146 km to the epicontinental zone border – HR part and 74 km on IT side) and a daily capacity of 46 MCM/day.	Gas EAST
	6.6. PCI Interconnection Croatia – Slovenia (Bosiljevo – Karlovac – Lučko – Zabok – Rogatec (SI))	Construction of new sections, upgrade and extension of the pipeline interconnection between HR and SI on a distance of 150 km (onshore) and with a daily capacity of 15 MCM/day.	Gas EAST
	6.21. PCI Ionian Adriatic Pipeline (Fieri (AB) – Split (HR))	New pipeline mainly onshore, but also partly offshore with a total length of 540 km (250 km in HR, 110 in ME, and 180 in AB) and with a daily capacity of 14 MCM/day.	Gas EAST
	9.3. PCI JANAF-Adria pipelines: reconstruction, upgrading, maintenance and capacity increase of the existing JANAF and Adria pipelines linking the Croatian Omisalj seaport to the Southern Druzhba (Croatia, Hungary, Slovak Republic)	Increasing capacity and operation security of oil pipelines from Omisalj (HR) through Hungary to the Southern Druzhba pipeline in Slovakia.	Oil Supply Connections in Central Eastern Europe (OSC)
CYPRUS (CY)	3.10. Cluster Israel - Cyprus – Greece between Hadera and Attica region [currently known as the Euro Asia Interconnector] including the	3.10.1., 3.10.2. (description refers to all projects in cluster): The project consists of a 600 kV DC underwater electric cable and any	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>following PCIs:</p> <p>3.10.1 Interconnection between Hadera (IL) and Vasilikos (CY)</p> <p>3.10.2 Interconnection between Vasilikos (CY) and Korakia, Crete (EL)</p> <p>3.10.3 Internal line between Korakia, Crete and Attica region (EL)</p>	<p>essential equipment and/or installation for interconnecting the Cypriot, Israeli and the Greek transmission networks (offshore). The project will have a capacity of 2000 MW and a total length of around 820 nautical miles/around 1518 km (329 km between CY and IL, 879 km between CY and Crete and 310 km between Crete and Athens) and allow for reverse transmission of electricity. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY and will exceed the 2500 m under the sea in some areas between CY and EL.</p>	
	<p>7.3. Cluster of gas infrastructures and associated equipment for the transportation of new sources of gas from the offshore fields in the East Mediterranean including one or more of the following PCIs:</p> <p>7.3.1 Pipeline from offshore Cyprus to Greece mainland via Crete</p> <p>7.3.2 LNG storage located in Cyprus [currently known as the "Mediterranean Gas Storage"]</p>	<p>7.3.1.: New onshore and offshore pipeline linking the newly discovered fields in Levantine Basin (CY, IL) via Crete to Greece Mainland with 2 routing options: the first is a pipeline of approximately 1700 km (1200 km offshore, 500 km onshore), while the second proposes a pipeline with the length of approximately 1550 km (1530 km offshore, 20 km onshore). The pipeline will have a throughput capacity of 24.5 MCM/day, with a delivery capacity of 2.5 to Cyprus and 22 to Greece Mainland. The total power for the options will be around 390 MW.</p> <p>7.3.2.: LNG storage facility associated with the LNG terminal in Vassilikos aiming at the storage of gas from the Levantine Basin (Israel and Cyprus) in liquefied form onshore Cyprus, for further transport namely to LNG Receiving and Regasification Terminals located in the Mediterranean Sea. The storage will have a working gas volume of approximately 109 MCM/day and withdrawal/injection capacity of 18.1 MCM/day at initial capacity.</p>	Southern Gas Corridor (SGC)
CZECH REPUBLIC (CZ)	<p>3.11. Cluster Czech Republic internal lines to increase capacity at North-Western and Southern borders including the following PCIs:</p> <p>3.11.1. Internal line between Vernerov and Vitkov (CZ)</p> <p>3.11.2. Internal line between Vitkov and Prestice (CZ)</p> <p>3.11.3. Internal line between Prestice and Kocin (CZ)</p> <p>3.11.4. Internal line between Kocin and Mirovka (CZ)</p>	<p>3.11.1.: Building new 400 kV substation in Vítkov with 400/110kV and 350 MVA transformer as addition to existing 220 kV substation.</p> <p>Building new 400 kV substation in Vernerov with two 400/110kV and 350 MVA transformers.</p> <p>Building new 400 kV AC double circuit OHL of 75 km and with a</p>	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	3.11.5. Internal line between Mirovka and Cebin (CZ)	<p>capacity of 2x1730 MVA between Vernerov and Vitkov (onshore).</p> <p>3.11.2.: Building new 400kV AC double circuit OHL of 86 km and with a capacity of 2x1730 MVA between Vitkov and Prestice (onshore).</p> <p>3.11.3.: Extension and upgrade of the existing substation 400/110kV in Kocin that will enable connection of 5 new OHL. Reinforcement of existing 400 kV AC OHL of 115.8 km between Kocin and Prestice from single circuit with a capacity of 1360 MVA to double circuit with a capacity of 2x1730 MVA (onshore).</p> <p>3.11.4.: Extension and upgrade of the existing substation 400/110kV in Mirovka with two transformers of 2x250 MVA that will enable the connection of a new OHL.</p> <p>New 400 kV AC OHL with a length of 120.5 km and a capacity of 2x1730 MVA between Kocin and Mirovka (onshore).</p> <p>New 400kV AC OHL of 26.5 km and with a capacity of 2x1730 MVA between V413 and Mirovka (onshore).</p> <p>3.11.5.: Reinforcement of existing 400 kV AC OHL of 88,5 km between Mirovka and Cebin from single circuit with a capacity of 1360 MVA to double circuit OHL with a capacity of 2x1730 MVA (onshore).</p>	
	<p>6.1. Cluster Czech – Polish interconnection upgrade (Stork II) and related internal reinforcements in Western Poland, including the following PCIs:</p> <p>6.1.1 Poland - Czech Republic Interconnection [currently known as Stork II] between Libhošť – Hať (CZ/PL) – Kędzierzyn (PL)</p> <p>6.1.2 Lwówek-Odolanow pipeline</p> <p>6.1.3 Odolanow compressor station</p> <p>6.1.4 Czeszów-Wierzchowice pipeline</p> <p>6.1.5 Czeszów-Kiełczów pipeline</p> <p>6.1.6 Zdieszowice-Wrocław pipeline</p> <p>6.1.7 Zdieszowice-Kędzierzyn pipeline</p> <p>6.1.8 Tworog-Tworzen pipeline</p> <p>6.1.9 Tworóg-Kędzierzyn pipeline</p>	6.1.1: New onshore pipeline with a length of 107.6 km and a maximum daily capacity of 13.7 MCM/day in the direction PL-CZ and that of 19.6 MCM/day in the direction CZ-PL (Stage I) and 30.1 MCM/day (Stage II).	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	6.1.10 Pogorska Wola-Tworzen pipeline 6.1.11 Strachocina – Pogórska Wola pipeline		
	6.4. PCI Bidirectional Austrian – Czech interconnection (BACI) between Baumgarten (AT) – Reinthal (CZ/AT) – Brečlav (CZ)	New onshore bidirectional AT-CZ Interconnection (formerly LBL project) with a length of approximately 12 km on the CZ side and of approximately 46 km on the AT side and with a daily capacity of 18-22.8 MCM/day. The power of the compressor station in AT is of 24 MW.	Gas EAST
	6.17. PCI Connection to Oberkappel (AT) from the southern branch of the Czech transmission system	New onshore pipeline of approximately 110 km and with a daily capacity of up to approximately 5-10 MCM/day. The power of the compressor station(s) will be of approximately 2-5 MW.	Gas EAST
	9.4. PCI Litvinov (Czech Republic)-Spergau (Germany) pipeline: the extension project of the Družba crude oil pipeline to the refinery TRM Spergau	A pipeline between Litvinov (CZ) and Spergau (DE) with a diameter of 700 mm and a length of 160 km.	Oil Supply Connections in Central Eastern Europe (OSC)
DENMARK (DK)	1.3. Cluster Denmark - Germany between Endrup and Brunsbüttel including the following PCIs: 1.3.1 Interconnection between Endrup (DK) and Niebüll (DE) 1.3.2 Internal line between Brunsbüttel and Niebüll (DE)	1.3.1. (description refers to all projects in cluster): New 380 kV AC lines (OHL) of about 200 km and with 3000 MVA capacity in Germany and about 80 km in Denmark (onshore) and new transformers for integration of onshore wind in Schleswig-Holstein, including lines: - Brunsbüttel – Barlt (Süderdonn) – Heide – Husum - Niebüll-border of Denmark Endrup.	Electricity Northern Seas Offshore Grid (NSOG)
	1.4. Cluster Denmark - Germany between Kassø and Dollern including the following PCIs: 1.4.1 Interconnection between Kassø (DK) and Audorf (DE) 1.4.2 Internal line between Audorf and Hamburg/Nord (DE) 1.4.3 Internal line between Hamburg/Nord and Dollern (DE)	1.4.1.: Upgrade of existing 400kV AC line and building a new 400kV route in Denmark with a total length of 40 km.	Electricity Northern Seas Offshore Grid (NSOG)
	1.5. PCI Denmark - Netherlands interconnection between Endrup (DK) and Eemshaven (NL)	An HVDC 320 kV link of approximately 350 km and with a capacity of 700 MW between Denmark West and the Netherlands (offshore) to connect new offshore wind farms to the cable as a first step towards a meshed North Sea offshore grid.	Electricity Northern Seas Offshore Grid (NSOG)
	4.1. PCI Denmark – Germany interconnection between Ishøj/Bjæverskov (DK) and Bentwisch/Güstrow (DE) via offshore windparks Kriegers Flak (DK) and Baltic 2 (DE) [currently known as	The Kriegers Flak Combined Grid Solution is the new offshore multi-terminal connection between Denmark and Germany used for both grid connection of offshore wind farms Kriegers Flak and	Electricity Baltic Energy Market

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	Kriegers Flak Combined Grid Solution]	interconnection. Exact technical features still have to be determined, but the project envisages 270 km of mainly offshore and partially onshore HVDC cables with a voltage of ± 320 kV and a capacity around 600 MW.	Interconnection Plan (BEMIP)
	8.3. PCI Poland–Denmark interconnection "Baltic Pipe"	New bi-directional pipeline with a total length of 324 km (Baltic Pipe, offshore section of 280 km and pipeline of 44 km between Niechorze and Ploty) and a daily capacity of min. 8.21 MCM/day. The power of the Avedore compressor station is to be determined at a later stage.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	8.4. PCI Capacity expansion on DK-DE border	Extension of onshore pipeline with a length of approximately 63.5 km. The power of the compressor station is (2+1) x 7.69 MW.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
ESTONIA (EE)	4.2. Cluster Estonia – Latvia between Kilingi-Nõmme and Riga [currently known as 3rd interconnection] including the following PCIs: 4.2.1. Interconnection between Kilingi-Nõmme (EE) and Riga CHP2 substation (LV) 4.2.2. Internal line between Harku and Sindi (EE)	4.2.1.: Estonia – Latvia third interconnection will consist of 211 km of 330 kV AC OHL with a capacity of 1143 MVA, constructed mostly on the existing transmission line routes between Kilingi-Nõmme and RigaCHP2 substations (onshore). 4.2.2.: New double circuit AC OHL with 2 different voltages 330 kV and 110 kV, with a capacity of 1143 MVA/240 MVA and a length of 140 km. Major part of new internal connection will be established on existing lines on the Western part of Estonian mainland (onshore).	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	4.3. PCI Estonia / Latvia / Lithuania synchronous interconnection with the Continental European networks	The Lithuania – Latvia – Estonia power system and market integration: Synchronous interconnection of Lithuania, Latvia and Estonia with the Continental European networks project is aimed at infrastructure development for deeper market integration and synchronous interconnection of the power systems of the Baltic States with the Continental European networks. Lithuanian, Latvian and Estonian TSOs are currently implementing the Feasibility Study "Interconnection Variants for the Integration of the Baltic States to the EU Internal Electricity Market. Further E194 project development, including notably further studies on synchronisation, will be subject to the result of the Feasibility Study "Interconnection Variants for the	Electricity Baltic Energy Market Interconnection Plan (BEMIP)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		Integration of the Baltic States to the EU Internal Electricity Market".	
	4.6. PCI hydro-pumped storage in Estonia - Muuga	Muuga HPSP uses seawater and has an installed capacity of 500 MW. Maximum volumetric flow rate by generation and in the pumping mode is 120 m ³ /s. Normal static head is 500 m. Lower reservoir is on the level -500 m in Muuga granite massif. Energy rating of storage is 12 hours. The excavated granite will be used for road construction.	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	<p>8.1. Cluster LNG supply in the Eastern Baltic Sea region, including the following PCIs:</p> <p>8.1.1 Interconnector between Estonia and Finland "Balticconnector", and</p> <p>8.1.2. One of the following LNG terminals:</p> <p>8.1.2.1 Finngulf LNG</p> <p>8.1.2.2 Paldiski LNG</p> <p>8.1.2.3 Tallinn LNG</p> <p>8.1.2.4 Latvian LNG</p>	<p>8.1.1.: New bidirectional offshore pipeline (Inkoo-Paldiski, DN500, 80 bar) of 80 km, plus 50 km onshore pipeline in EE (Kiili-Paldiski pipeline, DN 700, 55 bar) and 20 km onshore pipeline in FI (Siuntio-Inkoo pipeline, DN500, 80 bar) including metering and compressor stations at both ends with a daily nominal capacity of 7.2 MCM/day. Capacity can be increased to 11 MCM/day if network capacity in EE and Fi is increased. The power of each compressor station is about 10 MW. Estimated share of offshore pipeline is expected to be 50 km as a part of Finnish transmission system and 30 km as a part of Estonian transmission system.</p> <p>8.1.2.2: New onshore LNG terminal near Paldiski (including a reloading facility for bunkering or small scale distribution) with an annual send-out capacity of 2.5 BCM/year. The LNG storage capacity is of about 180.000 – 320.000 CM LNG and the maximum ship size of 165.000 CM LNG (or any standard LNG tanker capable to pass through the Danish Straits).</p> <p>8.1.2.3.: New conventional onshore LNG terminal near Tallinn, at Muuga harbour (including reloading facilities: ships, barges, bio-methane and/or methane rich gas receiving, network injection facility trucks), with an annual send-out capacity of 4 - with further potential up to 8 BCM/year. The LNG storage capacity is of up to 320.000 CM LNG and the maximum ship size is of 280 m (LOA).</p>	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	<p>8.2. Cluster infrastructure upgrade in the Eastern Baltic Sea region, including the following PCIs:</p> <p>8.2.1 Enhancement of Latvia-Lithuania interconnection</p> <p>8.2.2 Enhancement of Estonia-Latvia interconnection</p>	8.2.2.: Upgrade of onshore pipeline to a daily capacity of 10 MCM/day. The power of the compressor station(s) is of 35 MW.	Gas Baltic Energy Market Interconnection Plan (BEMIP)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	8.2.3 Capacity enhancement of Klaipeda-Kiemenai pipeline in Lithuania 8.2.4 Modernization and expansion of Incukalns Underground Gas Storage		
FINLAND (FI)	8.1. Cluster LNG supply in the Eastern Baltic Sea region, including the following PCIs: 8.1.1 Interconnector between Estonia and Finland "Balticconnector", and 8.1.2. One of the following LNG terminals: 8.1.2.1 Finngulf LNG 8.1.2.2 Paldiski LNG 8.1.2.3 Tallinn LNG 8.1.2.4 Latvian LNG	8.1.1.: New bidirectional offshore pipeline (Inkoo-Paldiski, DN500, 80 bar) of 80 km, plus 50 km onshore pipeline in EE (Kiili-Paldiski pipeline, DN 700, 55 bar) and 20 km onshore pipeline in FI (Siuntio-Inkoo pipeline, DN500, 80 bar) including metering and compressor stations at both ends with a daily nominal capacity of 7.2 MCM/day. Capacity can be increased to 11 MCM/day if network capacity in EE and Fi is increased. The power of each compressor station is about 10 MW. Estimated share of offshore pipeline is expected to be 50 km as a part of Finnish transmission system and 30 km as a part of Estonian transmission system. 8.1.2.1.: New LNG terminal in Inkoo with an annual send-out capacity of 8 BCM/year at full utilisation rate. Development in stages: first part includes conventional on-shore storage tank of 165.000 m ³ storage capacity (working volume 150.000 m ³), connection to Finnish and Estonian (via Balticconnector) transmission pipelines, process equipment for pipeline send-out, reloading facility for bunker use and truck loading. Second stage includes enlargement of storage capacity to total of 330.000 m ³ (working volume 300.000 m ³). Possible to enlarge to 495.000 m ³ storage capacity. The maximum ship size is about 150.000 m ³ . The pipeline connecting the LNG terminal to the Finnish gas transmission grid from Inkoo is of a length of about 20 km and with a daily capacity 19.2 MCM/day (includes 7.2 MCM/day to EE via Balticconnector). Connecting pipelines, metering and compressor stations are included as a part of Balticconnector project.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
FRANCE (FR)	1.2. PCI Belgium – two grid-ready offshore hubs connected to the onshore substation Zeebrugge (BE) with anticipatory investments enabling future interconnections with France and/or UK 1.6. PCI France – Ireland interconnection between La Martyre (FR) and	Two offshore hubs connecting offshore wind farms and connected to each other and to the AC onshore grid with underground cables, including compensation (offshore) A new 320 kV – 500 kV (depending on the technology, to be fixed	Electricity Northern Seas Offshore Grid (NSOG) Electricity

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	Great Island or Knockraha (IE)	at a later stage in detailed design studies) HVDC subsea connection of approximately 600 km and with a capacity of around 700 MW between Ireland and France (offshore).	Northern Seas Offshore Grid (NSOG)
	<p>1.7. Cluster France-United Kingdom interconnections, including one or more of the following Projects of Common Interest:</p> <p>1.7.1 PCI France – United Kingdom interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as FAB project]</p> <p>1.7.2 PCI France - United Kingdom interconnection between Tourbe (FR) and Chilling (UK) [currently known as the IFA2 project]</p> <p>1.7.3 PCI France - United Kingdom interconnection between Coquelles (FR) and Folkestone (UK) [currently known as the ElecLink project]</p>	<p>1.7.1: A 225 km HVDC link between France and Great Britain via the island of Alderney, with a capacity between 1000 and 1400 MW - exact value still to be determined (onshore and offshore).</p> <p>1.7.2.: New subsea 320 kV HVDC link with a capacity of 1000 MW between the UK and France (offshore).</p> <p>1.7.3.: A new 51 km 320 kV DC electricity interconnector with a capacity of 1000 MW between Coquelles and Folkestone, via the Channel Tunnel (onshore and offshore).</p>	Electricity Northern Seas Offshore Grid (NSOG)
	2.4. PCI France - Italy interconnection between Codrongianos (IT), Lucciana (Corsica, FR) and Suvereto (IT) [currently known as the SA.CO.I. 3 project]	Repowering of existing tri-terminal HVDC interconnection between Sardinia, Corsica and mainland Italy via a 358 km DC subsea cable (onshore and offshore).	Electricity WEST
	<p>2.5. Cluster France - Italy between Grande Ile and Piosasco, including the following PCIs:</p> <p>2.5.1. Interconnection between Grande Ile (FR) and Piosasco (IT) [currently known as Savoie-Piemont project]</p> <p>2.5.2. Internal line between Trino and Lacchiarella (IT)</p>	2.5.1.: New 190 km HVDC (VSC) interconnection between Grande Ile (FR) and Piosasco (IT) via an approximately 320 kV underground cable and converter stations at both ends (two poles, each of them for a maximum of 600 MW power capacity). The cables will be laid in the security gallery of the Frejus motorway tunnel and along the existing motorways (onshore).	Electricity WEST
	2.7. PCI France - Spain interconnection between Aquitaine (FR) and the Basque country (ES)	New 320 kV or 500 kV (voltage tbd) HVDC subsea cable interconnection of approximately 360 km and with a capacity of 2000 MW (tbc) between Aquitaine and the Basque country, via the the Biscay Gulf (offshore).	Electricity WEST
	5.5. PCI Eastern Axis Spain-France - interconnection point between Iberian Peninsula and France at Le Perthus– currently known as Midcat	New onshore pipeline of 184 km interconnecting Spain and France at Le Perthus Interconnection point. The power of the compressor stations is of 46 MW for LE PERTHUS IP and of 30 MW for GRTGAZ SOUTH-TIGF subproject. The planned capacity is 230 GWh/d.	Gas WEST
	5.6. PCI Reinforcement of the French network from South to North – Reverse flow from France to Germany at Obergailbach/Medelsheim Interconnection point (France)	Removing existing odourisation stations and setting up new ones at the entry of regional one-way pipelines in the French gas network and setting up additional compression stations in 3	Gas WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		locations in France. The pipeline section is deemed to be developed in relationship with the pipe between Morelmaison and Laneuvelotte (FR). Change of the metering facility in Medelsheim and reverse gas flow from FR to DE via MEGAL pipeline. The planned capacity from FR to DE is 150 GWh/d.	
	5.7. PCI Reinforcement of the French network from South to North on the Bourgogne pipeline between Etrez and Voisines (France)	New onshore pipeline of 190 km between Etrez (FR) and Voisines (FR) and new compressor station of 9 MW at Etrez (FR).	Gas WEST
	5.8. PCI Reinforcement of the French network from South to North on the east Lyonnais pipeline between Saint-Avit and Etrez (France)	Upgrade of the pipeline between Saint-Avit and Etrez on a distance of 170 km. Capacity and the power of the compressor station in Saint-Avit are still to be assessed.	Gas WEST
	5.9. PCI Reverse flow interconnection between Switzerland and France	New pipeline section built on a distance of 87 km between Morelmaison and Voisines and with a daily capacity of 9 MCM/day, as part of the South North Reverse Flow project, from IT to FR, DE and BE via CH (onshore).	Gas WEST
	5.13. PCI New interconnection between Pitgam (France) and Maldegem (Belgium)	New pipeline Pitgam (FR) and Maldegem (BE) with a daily capacity of 24 MCM/day (onshore). The power of the compressor station is yet to be determined.	Gas WEST
	5.14. PCI Reinforcement of the French network from South to North on the Arc de Dierrey pipeline between Cuvilly, Dierrey and Voisines (France)	Reinforcement of the French network from South to North on the Arc de Dierrey pipeline between Cuvilly, Dierrey and Voisines on a distance of 308 km (onshore).	Gas WEST
	5.17. Cluster between Luxembourg, France and Belgium including one or more of the following PCIs: 5.17.1 Interconnection between France and Luxembourg. 5.17.2 Reinforcement of the interconnection between Belgium and Luxembourg	5.17.1: New pipeline of 15 or 56 km in FR and 2 km in LU with a daily capacity of 0.8 or 3.5 MCM/day (onshore).	Gas WEST
	5.20. PCI Gas Pipeline connecting Algeria to Italy (Sardinia) and France (Corsica) [currently known as Galsi & Cyréné pipelines]	New transcontinental gas pipeline project between Algeria to Italian via Sardinia island and Italian mainland. The project can be divided into 2 sections: international section (288 km offshore pipeline from Algeria to Sardinia) and a national section (overall 563 km pipeline of which: 285 km onshore pipeline crossing Sardinia + 275 km offshore pipeline from Sardinia to Tuscany + 3 km onshore pipeline in Tuscany). The capacity of the project is 8 x 10 ⁹ Sm ³ /year (equal to 7.6 BCM/year) and the power of the compressor station in Algeria (Kouthie Draouche) is of 3x33 MW	Gas WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		and of that one in Sardinia (Olbia) of 2x26 MW. New pipeline of 300 km (220 km onshore and 100 km offshore) and with a daily capacity of 3.15 MCM/day that would plug Corsica to the Galsi project, laying an offshore pipeline between Sardinia and Corsica and building onshore connection to the two main cities of Corsica, Bastia and Ajaccio.	
	10.2. Green-Me (France, Italy): Enhance RES integration by implementing automation, control and monitoring systems in HV and HV/MV substations, advanced communicating with the renewable generators and storage in primary substations	Through the implementation of “smart technologies” together with innovative system tools, the RES generation (in particular PV) will be made more observable, predictable and controllable, improving: - the load and generation forecast at primary distribution level - the hosting capacity of further RES maintaining quality and system reliability. - the communication between TSO and DSO automation systems.	Smart Grids
GERMANY (DE)	1.3. Cluster Denmark - Germany between Endrup and Brunsbüttel including the following PCIs: 1.3.1. Interconnection between Endrup (DK) and Niebüll (DE) 1.3.2. Internal line between Brunsbüttel and Niebüll (DE)	New 380 kV AC lines (OHL) of about 200 km and with 3000 MVA capacity in Germany and about 80 km in Denmark (onshore) and new transformers for integration of onshore wind in Schleswig-Holstein, including lines: - Brunsbüttel – Barlt (Süderdonn) – Heide – Husum - Niebüll-border of Denmark Endrup.	Electricity Northern Seas Offshore Grid (NSOG)
	1.4. Cluster Denmark - Germany between Kassø and Dollern including the following PCIs: 1.4.1. Interconnection between Kassø (DK) and Audorf (DE) 1.4.2. Internal line between Audorf and Hamburg/Nord (DE) 1.4.3. Internal line between Hamburg/Nord and Dollern (DE)	1.4.1.: Upgrade of existing 400kV AC line and building a new 400kV route in Denmark with a total length of 40 km. 1.4.2.: New 400kV AC double circuit line (OHL) mainly in the trace of an existing 220kV line between Audorf and Hamburg/Nord, including 2 new 400/230kV transformers in substation Audorf. 1.4.3.:New 400kV AC double circuit line (OHL) between Dollern and Hamburg/Nord, including 1 new 400/230kV transformer in substation Hamburg/Nord and new 400kV switchgear in Kummerfeld. The total length of German lines amounts to 195 km and a 4100 MVA capacity (onshore).	Electricity Northern Seas Offshore Grid (NSOG)
	1.8. PCI Germany - Norway interconnection between Wilster (DE) and Tonstad (NO) [currently known as the NORD.LINK project]	A new HVDC subsea cable of minimum 500 kV, approximately 520-600 km and with a capacity of 1400 MW between Southern Norway and Northern Germany (onshore and offshore).	Electricity Northern Seas Offshore Grid (NSOG)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	2.2. Cluster Belgium - Germany between Lixhe and Oberzier [currently known as the ALEGrO project] including the following PCIs: 2.2.1 Interconnection between Lixhe (BE) and Oberzier (DE) 2.2.2 Internal line between Lixhe and Herderen (BE) 2.2.3 New substation in Zutendaal (BE)	2.2.1.: Connection between Lixhe (BE) and Oberzier (DE) including a new 100 km HVDC underground cable (voltage under investigation) and the extension of existing 380 kV substations.	Electricity WEST
	2.9. PCI Germany internal line between Osterath and Philippsburg (DE) to increase capacity at Western borders	New +/- 400 HVDC lines (OHL) with a length of 40 km and 300 km of existing routes with new technology and with a total capacity of 2000 MW from Osterath to Philippsburg to integrate new wind generation especially from North/Baltic Sea towards Central-South for consumption and storage (onshore).	Electricity WEST
	2.10. PCI Germany internal line between Brunsbüttel-Großgartach and Wilster-Grafenrheinfeld (DE) to increase capacity at Northern and Southern borders	New DC lines (OHL) with a total capacity of 3.9 GW, with every line having a length between 670 and 770 km (voltage tbd), to integrate new wind generation from northern Germany towards southern Germany and southern Europe for consumption and storage (onshore).	Electricity WEST
	2.11. Cluster Germany – Austria - Switzerland capacity increase in Lake Constance area including the following PCIs: 2.11.1. Interconnection between border area (DE), Meiningen (AT) and Rüthi (CH) 2.11.2. Internal line in the region of point Rommelsbach to Herbertingen, Herbertingen to Tiengen, point Wullenstetten to point Niederwangen (DE) and the border area DE-AT	Construction of new 400 kV AC lines (OHL) and extension of existing ones on approximately 380 km and with a total capacity of 3500 MVA (tbd), and erection of a 400/220/110kV-substation. Transmission routes include: Herbertingen - Tiengen, Herbertingen - Pkt. Rommelsbach, Herbertingen - Meiningen (AT) – Rüthi (CH), Pkt. Wullenstetten - Pkt. Niederwangen (onshore).	Electricity WEST
	2.12. PCI Germany – Netherlands interconnection between Niederrhein (DE) and Doetinchem (NL)	New 380 kV AC double circuit (OHL) of approximately 60 km and with a capacity of 2x2360 MVA between Niederrhein and Doetinchem (onshore).	Electricity WEST
	2.21. PCI hydro-pumped storage in Germany - Riedl	A pumped storage power plant with 300 MW installed capacity and an annual capacity of 330-462 GWh is planned upstream from Jochenstein HPP at the Danube. Drawdown and return of water will be ensured via Danube and a storage lake to be created southwest of Gottsdorf town, approx. 350 m above the live storage of Jochenstein. The upstream water conduit is designed as an inclined shaft. The downstream water conduit joins the intake/outlet structure on the Danube underground.	Electricity WEST
	3.1. Cluster Austria - Germany between St. Peter and Isar including the following PCIs:	3.1.1.: 380 kV AC OHL between Isar and St. Peter with a total capacity of 4.100 MVA, including 110 km of new line in DE	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>3.1.1 Interconnection between St. Peter (AT) and Isar (DE) 3.1.2 Internal line between St. Peter and Tauern (AT) 3.1.3 Internal line between St. Peter and Ernstshofen (AT)</p>	(including Pirach), 61 km of new circuit on an existing line, new 380 kV switchgears in Altheim, Simbach, Pirach and St. Peter and one new 380/220 kV transformer in the substations Altheim and St. Peter and fourth circuit on the line between Isar and Ottenhofen (onshore).	
	3.12. PCI internal line in Germany between Lauchstädt and Meitingen to increase capacity at Eastern borders	New HVDC line (voltage tbd) with a length of 450 km and a capacity of minimum 2000 MW to integrate especially new wind generation from Baltic Sea towards Central/South Europe for consumption and system stability improvement. The line type is planned as OHL (onshore).	Electricity EAST
	3.13. PCI internal line in Germany between Halle/Saale and Schweinfurt to increase capacity in the North-South Corridor East	New 380 kV AC OHL of 110 km and with a capacity of more than 3500 MVA between the substations Halle/Saale and Schweinfurt (onshore).	Electricity EAST
	3.14. Cluster Germany – Poland between Eisenhüttenstadt and Plewiska [currently known as the GerPol Power Bridge project] including the following PCIs: 3.14.1. Interconnection between Eisenhüttenstadt (DE) and Plewiska (PL) 3.14.2 Internal line between Krajnik and Baczyna (PL) 3.14.3 Internal line between Mikułowa and Świebodzice (PL)	3.14.1.: New AC 380 kV double circuit OHL of 252 km and with a capacity of approximately 3750 MVA between Eisenhüttenstadt and Plewiska (onshore) including the construction of new substations Plewiska Bis (PL) and Gubin (PL). In the final stage after 2022, also substation Zielona Góra between Gubin and Plewiska Bis is planned to connect with this line.	Electricity EAST
	3.15. Cluster Germany – Poland between Vierraden and Krajnik including the following PCIs: 3.15.1 Interconnection between Vierraden (DE) and Krajnik (PL) 3.15.2 Coordinated installation and operation of phase shifting transformers on the interconnection lines between Krajnik (PL) – Vierraden (DE) and Mikulowa (PL) – Hagenwerder (DE)	3.15.1.: Upgrade of existing 220 kV AC OHL between Vierraden and Krajnik to 380 kV double circuit OHL with a length of 26 km and a capacity of approximately 3500 MVA (onshore). The upgrade of the line is on condition that the line is equipped with a PST (PCI 3.15.2.) in order to ensure the system security and stability in case of high flows on the mentioned line. The PST has to be installed and operated by cooperation of Germany and Poland. 3.15.2.: Installation of Phase Shifting Transformers (PSTs) on the upgraded interconnection between Krajnik (PL) and Vierraden (DE) and phase shifting transformers (PSTs) on the existing interconnection between Mikułowa (PL) and Hagenwerder (DE).	Electricity EAST
	4.1. PCI Denmark – Germany interconnection between Ishøj/Bjæverskov (DK) and Bentwisch/Güstrow (DE) via offshore	The Kriegers Flak Combined Grid Solution is the new offshore multi-terminal connection between Denmark and Germany used	Electricity Baltic Energy

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	windparks Kriegers Flak (DK) and Baltic 2 (DE) [currently known as Kriegers Flak Combined Grid Solution]	for both grid connection of offshore wind farms Kriegers Flak and interconnection. Exact technical features still have to be determined, but the project envisages 270 km of mainly offshore and partially onshore HVDC cables with a voltage of ± 320 kV and a capacity around 600 MW.	Market Interconnection Plan (BEMIP)
	5.10. PCI Reverse flow interconnection on TENP pipeline in Germany	Reverse flow at the pipeline section between the interconnection point at Walbach and Bocholtz, with a daily capacity of 22 GWh and with a possible later expansion to 60 GWh (onshore).The power of the compressor station is 8 MW.	Gas WEST
	5.12. PCI Reverse flow interconnection on TENP pipeline to Eynatten interconnection point (Germany)	Reverse flow interconnection at Eynatten on TENP pipeline (on a distance of 11 km), determining an additional daily capacity of 5.5 to 22.8 MCM/day from DE to BE and that of 5.5 to 41 MCM/day from BE to DE (onshore). The power of the compressor station(s) will be between 12 and 36 MW, depending on the chosen alternative.	Gas WEST
	5.18. PCI Reinforcement of the German network to reinforce interconnection capacities with Austria [currently known as Monaco pipeline phase I (Haiming/Burghausen-Finsing)]	New pipeline of 90 km with a daily capacity of 52.8 MCM/day, including two steering and metering stations. Off-take points are located in Haiming, and Finsing have as annual volumes values 3.7 and 2.8 BCM/year respectively.	Gas WEST
	6.16. PCI Tauerngasleitung (TGL) pipeline between Haiming (AT)/Überackern (DE) – Tarvisio (IT)	New onshore pipeline with a total length of approximately 290 km crossing the Alps via 10 tunnels with an approximate length of 25 km. The daily capacity in both flow directions will be of maximum 31.2 MCM/day. The power of the compressor station(s) in Auerbach and Feistritz will be of approximately 2 x 33 MW.	Gas EAST
	8.4. PCI Capacity expansion on DK-DE border	Extension of onshore pipeline with a length of approximately 63.5 km. The power of the compressor station is (2+1) x 7.69 MW.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	9.4. PCI Litvinov (Czech Republic)-Spergau (Germany) pipeline: the extension project of the Druzhba crude oil pipeline to the refinery TRM Spergau	A pipeline between Litvinov (CZ) and Spergau (DE) with a diameter of 700 mm and a length of 160 km.	Oil Supply Connections in Central Eastern Europe (OSC)
	9.6. PCI TAL Plus: capacity expansion of the TAL Pipeline between Trieste (Italy) and Ingolstadt (Germany)	Increasing capacity of the TAL pipeline in its first section between Trieste and Ingolstadt to allow for full diversification of oil supply	Oil Supply Connections in

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		to the Czech Republic.	Central Eastern Europe (OSC)
GREECE (EL)	3.7. Cluster Bulgaria - Greece between Maritsa East 1 and N. Santa including the following PCIs: 3.7.1. Interconnection between Maritsa East 1 (BG) and N. Santa (EL) 3.7.2. Internal line between Maritsa East 1 and Plovdiv (BG) 3.7.3. Internal line between Maritsa East 1 and Maritsa East 3 (BG) 3.7.4. Internal line between Maritsa East 1 and Burgas (BG)	3.7.1.: Construction of a new AC 400 kV single-circuit interconnector (OHL) with a length of 130 km and a capacity of 2000 MVA between Maritsa East 1 (BG) and Nea Santa (EL) (onshore).	Electricity EAST
	3.10. Cluster Israel - Cyprus – Greece between Hadera and Attica region [currently known as the Euro Asia Interconnector] including the following PCIs: 3.10.1. Interconnection between Hadera (IL) and Vasilikos (CY) 3.10.2. Interconnection between Vasilikos (CY) and Korakia, Crete (EL) 3.10.3. Internal line between Korakia, Crete and Attica region (EL)	3.10.2., 3.10.3., considered together with 3.10.1.: The project consists of a 600 kV DC underwater electric cable and any essential equipment and/or installation for interconnecting the Cypriot, Israeli and the Greek transmission networks (offshore). The project will have a capacity of 2000 MW and a total length of around 820 nautical miles/around 1518 km (329 km between CY and IL, 879 km between CY and Crete and 310 km between Crete and Athens) and allow for reverse transmission of electricity. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY and will exceed the 2500 m under the sea in some areas between CY and EL.	Electricity EAST
	3.24. PCI hydro-pumped storage in Greece - Amfilochia	Pumped Storage Complex with two independent upper reservoirs: Agios Georgios and Pyrgos, using as lower reservoir the artificial reservoir of Kastraki (owner Public Power Corporation). The equipment for energy production and energy pumping will be installed in two independent power houses, near Kastraki reservoir.	Electricity EAST
	6.8. Cluster Interconnection between Greece and Bulgaria and necessary reinforcements in Bulgaria, including the following PCIs: 6.8.1. Interconnection Greece – Bulgaria [currently known as IGB] between Komotini (EL) – Stara Zagora (BG) 6.8.2. Necessary rehabilitation, modernization and expansion of the Bulgarian transmission system	6.8.1.: New onshore pipeline with a length of 185 km and a daily capacity of approximately 13.7 MCM/day. The power of the compressor station(s) is of approximately 20 MW.	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>6.9. Cluster LNG terminal in Greece, including one of the following PCIs:</p> <p>6.9.1 Independent Natural Gas System LNG Greece</p> <p>6.9.2 Aegean LNG import terminal</p>	<p>6.9.1.: New offshore LNG FSRU near Alexandroupolis (mooring position 17.6 km) and a system of subsea and onshore pipeline with a length of 29 km (4 km onshore and 25 km offshore), with a daily capacity of 16.8 MCM/day.</p> <p>6.9.2.: New floating LNG terminal in the Northern Greek region of Macedonia in the Bay of Kavala, with an annual send-out capacity of 3-5 BCM/year, a LNG storage capacity of 170.000 CM LNG).</p>	Gas EAST
	6.11. PCI Permanent reverse flow at Greek – Bulgarian border between Kula (BG) – Sidirokastro (EL)	The project consists in interventions on the already existing transmission pipelines and above ground installations in BG and EL and, in addition, construction of new above ground installations.	Gas EAST
	6.12. PCI Increase the transmission capacity of the existing pipeline from Bulgaria to Greece	The project consists of interventions on the already existing transmission gas pipeline and above ground installations in BG.	Gas EAST
	<p>6.20. Cluster increase storage capacity in South-East Europe, including one or more of the following PCIs:</p> <p>6.20.1 Construction of new storage facility on the territory of Bulgaria</p> <p>6.20.2 Chiren UGS expansion</p> <p>6.20.3 South Kavala storage in Greece</p> <p>6.20.4 Depomures storage in Romania</p>	<p>6.20.3: New underground storage facility in depleted gas field, connected via a 34 km pipeline (of which 32 km offshore) to the National Natural Gas System (NNGS) operated by DESFA. The facility is planned to have the following technical characteristics:</p> <p>Working Gas Volume 360 MCM;</p> <p>Withdraw capacity 4 MCM/day;</p> <p>Injection capacity 5 MCM/day;</p> <p>Cycling rate 2 times/year.</p>	Gas EAST
	<p>7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2. Gas compression station at Kipi (EL)</p>	<p>7.1.2.: Compression station to upgrade the capacity of the interconnector between Turkey and Greece up to 33.5 MCM/day. The power of the compressor station is 9.7 x 3 MW – layout: 2+1.</p> <p>7.1.3.: New onshore and offshore pipeline between Greece/Turkey and Italy with a total length of 871 km (766 km onshore and 105 km offshore), with a normal daily capacity of 27.1 MCM/day and a maximum daily capacity of 30.1 MCM/day. Initial throughput capacity of 10 BCM/year. The power of the compressor station(s) is 90 MW.</p> <p>7.1.4.: New onshore and offshore pipeline between Greece and Italy with a total length of 823 km (613 km onshore and 210 km offshore) with a daily delivery capacity of 2.2 MCM/day in</p>	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>7.1.3. Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4. Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5. Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	<p>Komotini (Greece), 0.55 in Western Greece and of 27.4 in Otranto (Italy). Initial throughput capacity of 10 BCM/year. The power values of the compressor stations are: Komotini: 9.7 x 3 MW – layout: 2+1; Near Messimvria: 9.7 x 3 MW – layout: 2+1; Thesprotia: 25 x 4 MW – layout: 3+1.</p>	
	<p>7.3. Cluster of gas infrastructures and associated equipment for the transportation of new sources of gas from the offshore fields in the East Mediterranean including one or more of the following PCIs:</p> <p>7.3.1 Pipeline from offshore Cyprus to Greece mainland via Crete</p> <p>7.3.2 LNG storage located in Cyprus [currently known as the "Mediterranean Gas Storage"]</p>	<p>7.3.1.: New onshore and offshore pipeline linking the newly discovered fields in Levantine Basin (CY, IL) via Crete to Greece Mainland with 2 routing options: the first is a pipeline of approximately 1700 km (1200 km offshore, 500 km onshore), while the second proposes a pipeline with the length of approximately 1550 km (1530 km offshore, 20 km onshore). The pipeline will have a throughput capacity of 24.5 MCM/day, with a delivery capacity of 2.5 to Cyprus and 22 to Greece Mainland. The total power for the options will be around 390 MW.</p>	Southern Gas Corridor (SGC)
	<p>7.4. Cluster of interconnections with Turkey, including the following PCIs:</p> <p>7.4.1 Gas compression station at Kipi (EL) with a minimum capacity of 3bcm/a</p> <p>7.4.2 Interconnector between Turkey and Bulgaria with a minimum capacity of 3 bcm/a [currently known as "ITB"]</p>	<p>7.4.1.: Compressor station to upgrade the capacity of the interconnector between Turkey and Greece to 3 BCM/year. The power of the compressor station in Kipi is estimated at 4.5 x 2 MW – layout: 1+1.</p>	Southern Gas Corridor (SGC)
HUNGARY (HU)	<p>3.9. Cluster Croatia – Hungary - Slovenia between Žerjavenec /Heviz and Cirkovce including the following PCIs:</p> <p>3.9.1. Interconnection between Žerjavenec (HR)/Heviz (HU) and Cirkovce (SI)</p> <p>3.9.2. Internal line between Divača and Beričevo (SI)</p> <p>3.9.3. Internal line between Beričevo and Podlog (SI)</p> <p>3.9.4. Internal line between Podlog and Cirkovce (SI)</p>	<p>3.9.1.: The existing substation of Cirkovce (SI) will be connected to one circuit of the existing Heviz (HU)-Zerjavinec (HR) double circuit 400kV OHL by erecting a new AC 80 km double circuit 400 kV OHL with a capacity of 2x1330 MVA in Slovenia. The project will result in two new cross-border circuits: Heviz (HU) - Cirkovce (SI) and Cirkovce (SI) - Žerjavenec (HR) (onshore).</p>	Electricity EAST
	<p>3.16. Cluster Hungary - Slovakia between Gőnyű and Gabčíkovo including the following PCIs:</p> <p>3.16.1. Interconnection between Gőnyű (HU) and Gabčíkovo (SK)</p>	<p>3.16.1.: New AC 400 kV double circuit interconnection with a total capacity of 2 772 MVA between Gabčíkovo and Gőnyű (13 km on Slovak side) and the erection of new switching station Gabčíkovo next to the existing one (onshore).</p>	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>3.16.2. Internal line between Velký Ďur and Gabčíkovo (SK)</p> <p>3.16.3. Extension of Győr substation (HU)</p>	<p>3.16.3.: Installation of a third 400/120 kV transformer and 70 Mvar shunt reactor in station Győr.</p> <p>Clusters 3.16 and 3.17 are co-dependent.</p>	
	<p>3.17. PCI Hungary - Slovakia interconnection between Sajóvánka (HU) and Rimavská Sobota (SK)</p>	<p>Installation of a second 400/120 kV transformer and 2x70 Mvar shunt reactors in station Sajóvánka.</p> <p>Connection of the two existing substations R. Sobota (SK) and Sajóvánka (HU) by the new 2x400 kV AC double circuit line (preliminary armed only with one circuit), with an approximate length of 25 km on SK side and a capacity of 2x1386 MVA, including the R. Sobota (SK) substation equipment (onshore).</p> <p>Clusters 3.16 and 3.17 are co-dependent.</p>	Electricity EAST
	<p>3.18. Cluster Hungary - Slovakia between Kisvárda area and Velké Kapušany including the following PCIs:</p> <p>3.18.1. Interconnection between Kisvárda area (HU) and Velké Kapušany (SK)</p> <p>3.18.2. Internal line between Lemešany and Velké Kapušany (SK)</p>	<p>3.18.1.: Erection of new 400 kV AC double circuit line (OHL) with a capacity of 2772 MVA between Velké Kapušany and a substation in the area of Kisvárda (exact location and length of the line to be defined) (onshore).</p>	Electricity EAST
	<p>6.3. PCI Slovakia – Hungary Gas Interconnection between Veľké Zlievce (SK) – Balassagyarmat border (SK/HU) - Vecsés (HU)</p>	<p>New onshore pipeline with a length of 115 km and a daily capacity of 11.375 MCM/day in the direction SK-HU and 4.55 MCM/day in the direction HU-SK. The power of the compressor station(s) is of 2 x 3.5 MW.</p>	Gas EAST
	<p>6.13. Cluster Romania – Hungary – Austria transmission corridor, including the following PCIs:</p> <p>6.13.1 Városföld-Ercsi– Győr pipeline + enlargement of Városföld Compressor station + modification of central odorization</p> <p>6.13.2 Ercsi-Százhalombatta pipeline</p> <p>6.13.3 Csanádpalota or Algyő compressor station</p>	<p>New onshore pipelines:</p> <ul style="list-style-type: none"> - 210 km of pipeline between Városföld-Ercsi and Győr (HU) and the enlargement of Városföld Compressor station with a power of 5.7 MW; - 6 km of pipeline between Ercsi and Százhalombatta and an increase of the power of the compressor station with 52 MW; - 188 km of pipeline between Győr, Mosonmagyaróvár and the HU/AT border and an increase of the power of the compressor station with 5.7 MW. <p>The daily capacity of the pipelines will be of 4.55-31.2 MCM/day.</p>	Gas EAST
	<p>6.14. PCI Romanian – Hungarian reverse flow at Csanádpalota or Algyő (HU)</p>	<p>New onshore pipeline of 6 km and with a daily capacity of 4.55 MCM/day.</p> <p>The power of the compressor station located in either Algyő or Csanádpalota will be of 17.1 MW.</p>	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>6.22. Cluster Azerbaijan–Georgia–Romania Interconnector project, including the following PCIs: 6.22.1. Gas pipeline Constanta (RO) – Arad – Csanádpalota (HU) [currently known as AGRI] 6.22.2. LNG terminal in Constanta (RO)</p>	6.22.1.: Upgrade and extension of the AGRI pipeline between Constanta, Arad (RO) and Csanádpalota (HU), with sections both onshore and offshore.	Gas EAST
	6.23. PCI Hungary – Slovenia interconnection (Nagykanizsa – Toronyiszentmiklós (HU) – Lendava (SI) – Kidričevo)	New onshore pipeline with a length of 113 km and a non-interruptible daily capacity of 1.14 MCM/day and an interruptible daily capacity of 2.28 MCM/day. The combined power of the compressor station will be of 8.1 MW (3.5 MW on the Slovenian side).	Gas EAST
	<p>7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	7.1.5.: New onshore pipeline with a length of 1318 km and with the following daily delivery capacity of 6.1 MCM/day in Bulgaria, 6.1 in Romania, 6.1 in Hungary and 52 in Austria. Initial throughput capacity of 23 BCM/year. The power of the compressor station(s) amount to a total of 345 MW.	Southern Gas Corridor (SGC)
	9.3. PCI JANAF-Adria pipelines: reconstruction, upgrading, maintenance and capacity increase of the existing JANAF and Adria pipelines linking the Croatian Omisalj seaport to the Southern Druzhba (Croatia, Hungary, Slovak Republic)	Increasing capacity and operation security of oil pipelines from Omisalj (HR) through Hungary to the Southern Druzhba pipeline in Slovakia.	Oil Supply Connections in Central Eastern Europe (OSC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
IRELAND (IE)	1.6. PCI France – Ireland interconnection between La Martyre (FR) and Great Island or Knockraha (IE)	A new 320 kV – 500 kV (depending on the technology, to be fixed at a later stage in detailed design studies) HVDC subsea connection of approximately 600 km and with a capacity of around 700 MW between Ireland and France (offshore).	Electricity Northern Seas Offshore Grid (NSOG)
	1.9. Cluster connecting generation from renewable energy sources in Ireland to United Kingdom, including one or more of the following PCIs: 1.9.1 PCI Ireland – United Kingdom interconnection between Co. Offaly (IE), Pembroke and Pentir (UK) 1.9.2 PCI Ireland – United Kingdom interconnection between Coolkeeragh - Coleraine hubs (IE) and Hunterston station, Islay, Argyll and Location C Offshore Wind Farms (UK) 1.9.3 PCI Ireland – United Kingdom interconnection between the Northern hub, Dublin and Codling Bank (IE) and Trawsfynydd and Pembroke (UK) 1.9.4 PCI Ireland – United Kingdom interconnection between the Irish midlands and Pembroke (UK) 1.9.5 PCI Ireland – United Kingdom interconnection between the Irish midlands and Alverdiscott, Devon (UK) 1.9.6 PCI Ireland – United Kingdom interconnection between the Irish coast and Pembroke (UK)	1.9.1.: Around 40 individual onshore wind farms, totalling 3GW, collected together through and underground private network in the midlands of Ireland, connected directly to the UK national grid via two 600 kV HVDC sub-sea cables of approximately 500 km and with a capacity of 5 GW in Wales (onshore and offshore). 1.9.2., 1.9.3.: An offshore interconnected electricity grid based on renewable resources (wind, wave and tidal, connecting 3200 MW) consisting of 850 km of HVDC interconnectors with a capacity of 500-1000MW in the northern area (offshore). 1.9.4., 1.9.5., 1.9.6.: Energy Bridge (EB) HVDC underground cable of +/- 320kV for the 1st circuit and +/- 500kV for 2 and 3, respectively, and with a total capacity of 5 GW. The length of the 3 circuits will be 290 km, 190 km and 129 km, respectively. The cable will route large amounts of renewable electricity generated in a series of interconnected Irish wind farms directly into the UK market (onshore and offshore).	Electricity Northern Seas Offshore Grid (NSOG)
	1.11. Cluster of electricity storage projects in Ireland and associated connections to United Kingdom, including one or more of the following PCIs: 1.11.1. Hydro-pumped storage in North West Ireland 1.11.2. Ireland – United Kingdom interconnection between North West Ireland (IE) and Midlands (UK) 1.11.3. Hydro-pumped (seawater) storage in Ireland – Glinsk 1.11.4. Ireland – United Kingdom interconnection between Glinsk, Mayo (IE) and Connah's Quay, Deeside (UK)	1.11.1.: Large Scale Hydro Storage facility with a daily capacity of 90 GWh (32850 GWh annually). 1.11.2.: A 320-400 kV HVDC underground cable interconnection of approximately 450km and with a capacity of 1200 MW between Ireland and the UK (onshore and offshore). 1.11.3.: Combined 1900 MW wind generation, with a 6.1 GWh (2226.5 GWh annually) storage in Glinsk, Mayo (IE). 1.11.4.: A 500kV HVDC VSC cable of 530 km (subsea Atlantic 75, cross country Ireland 222km, Irish Sea approx.230, 1-3 km onshore Pembroke) with a capacity of 1300 MW, connecting the combined wind generation and storage facility in Glinsk, Mayo (IE) to Connah's Quay, Deeside (UK) (onshore and offshore).	Electricity Northern Seas Offshore Grid (NSOG)
	2.13. Cluster Ireland – United Kingdom (Northern Ireland) interconnections, including one or more following Projects of	2.13.1.: A new 400 kV AC single circuit (OHL) of 140 km and with a capacity of 1,500 MVA between Turleenan 400/275 kV in	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>Common Interest:</p> <p>2.13.1. Ireland – United Kingdom interconnection between Woodland (IE) and Turleenan (UK – Northern Ireland)</p> <p>2.13.2. Ireland – United Kingdom Interconnection between Srananagh (IE) and Turleenan (UK – Northern Ireland)</p>	<p>Northern Ireland (UK) to Woodland 400/220 kV (IE) (onshore).</p> <p>2.13.2.: A new 275 kV and partly 220 kV AC cross border circuit (OHL) of 196 km and with minimum capacities of 710 MVA and partly 431 MVA between Srananagh 220 kV station in Co. Sligo (IE) and Turleenan 400/275 kV station in Northern Ireland (UK) that will facilitate the integration of a planned wind generation of approximately 768 MW, which equates to 0.1 GW/1000km² (onshore).</p>	
	<p>5.1. Cluster to allow bidirectional flows from Northern Ireland to Great Britain and Ireland and also from Ireland to United Kingdom including the following PCIs:</p> <p>5.1.1. Physical reverse flow at Moffat interconnection point (Ireland/United Kingdom)</p> <p>5.1.2. Upgrade of the SNIP (Scotland to Northern Ireland) pipeline to accommodate physical reverse flow between Ballylumford and Twynholm</p> <p>5.1.3. Development of the Islandmagee Underground Gas Storage (UGS) facility at Larne (Northern Ireland)</p>	<p>5.1.1.: Physical reverse flow at the Moffat interconnection point, which is currently uni-directional, supporting forward flow only from UK to IE, the Isle of Man and Northern Ireland (onshore). The planned capacity is 38.5 GWh/d.</p>	Gas WEST
	<p>5.3. PCI Shannon LNG Terminal located between Tarbert and Ballylongford (Ireland)</p>	<p>Shannon LNG will deliver gas into the existing Bord Gáis Éireann owned national gas transmission network near Foynes, County Limerick in IE via a 26 km high pressure onshore pipeline (with a design pressure of 98 bars). The planned capacity is 117.7 GWh/d.</p>	Gas WEST
	<p>10.1. North Atlantic Green Zone Project (Ireland, UK / Northern Ireland): Lower wind curtailment by implementing communication infrastructure, enhance grid control and establishing (cross-border) protocols for Demand Side Management</p>	<p>A major cross border network infrastructure project delivering a ‘smart grid’. This project comprising intelligent distribution networks with increased cross-border capability, overlaid with high speed communications, enabling operational excellence and leveraging the involvement of all users will be the blueprint for future network deployment on the island of Ireland, and across Europe.</p>	Smart Grids
ITALY (IT)	<p>2.4. PCI France - Italy interconnection between Codrongianos (IT), Lucciana (Corsica, FR) and Suvereto (IT) [currently known as the SA.CO.I. 3 project]</p>	<p>Repowering of existing tri-terminal HVDC interconnection between Sardinia, Corsica and mainland Italy via a 358 km DC subsea cable (onshore and offshore).</p>	Electricity WEST
	<p>2.5. Cluster France - Italy between Grande Ile and Piosasco, including the following PCIs:</p>	<p>2.5.1.: New 190 km HVDC (VSC) interconnection between Grande Ile (FR) and Piosasco (IT) via an approximately 320 kV</p>	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>2.5.1. Interconnection between Grande Ile (FR) and Piosasco (IT) [currently known as Savoie-Piemont project]</p> <p>2.5.2. Internal line between Trino and Lacchiarella (IT)</p>	<p>underground cable and converter stations at both ends (two poles, each of them for a maximum of 600 MW power capacity). The cables will be laid in the security gallery of the Frejus motorway tunnel and along the existing motorways (onshore).</p> <p>2.5.2.: A new 400kV AC double circuit (OHL) of 95 km and with a capacity of 3000 MVA between the existing 400kV substations of Trino and Lacchiarella in North West Italy area (onshore). Restructuring works of local HV network associated to the line Trino – Lacchiarella are planned to be realized after the 400 kV line.</p>	
	<p>2.14. PCI Italy – Switzerland interconnection between Thusis/Sils (CH) and Verderio Inferiore (IT)</p>	<p>A +/- 400 kV HVDC cable interconnector of 150 km (of which 47 under Como lake) and with a capacity of 1000 MW (1100 MW continuous overload) between Verderio Inferiore, near Milano (IT) to Thusis, Graubunden Canton (CH) (onshore). Great part of the cables route will exploit a section of an existing oil pipeline, no longer in service since January 1997 and that crosses the Italian and Swiss border at Splügenpass and is running close by the two grid interconnection points of the Greenconnector project (Sils i.D. in Graubunden and Verderio Inferiore, Lecco).</p>	<p>Electricity WEST</p>
	<p>2.15. Cluster Italy – Switzerland capacity increase at IT/CH border including the following PCIs:</p> <p>2.15.1. Interconnection between Airolo (CH) and Baggio (IT)</p> <p>2.15.2. Upgrade of Magenta substation (IT)</p> <p>2.15.3. Internal line between Pavia and Piacenza (IT)</p> <p>2.15.4. Internal line between Tirano and Verderio (IT)</p>	<p>2.15.1., 2.15.2: A new 400 kV DC/AC link (OHL) between Airolo, Bappanzeno and Baggio of about 160 km and with a capacity of over 2.000 MW/1500 MVA between Italy and Switzerland (onshore), including the following network items:</p> <ul style="list-style-type: none"> - 400kV AC connection between Airolo (CH) and Pallanzeno (IT); - HVDC connection between Pallanzeno (IT) and Baggio (IT) - Reinforcement with new 400 kV section in Magenta substation (IT) <p>2.15.3.: New 400 kV AC double circuit (OHL) of 45 km and with a capacity of 1.500/3.000 MVA between 2 substations in Pavia and Piacenza area (onshore).</p> <p>2.15.4.: New 140 km 400kV AC single circuit (OHL) with a capacity of 1500 MVA between Tirano and Verderio substations (onshore), connecting also the new 400 kV substations Grosio and Venina and including a wide HV network area restructuring program.</p>	<p>Electricity WEST</p>

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>3.2. Cluster Austria - Italy between Lienz and Veneto region including the following PCIs:</p> <p>3.2.1. Interconnection between Lienz (AT) and Veneto region (IT)</p> <p>3.2.2. Internal line between Lienz and Obersielach (AT)</p> <p>3.2.3. Internal line between Volpago and North Venezia (IT)</p>	<p>3.2.1.: The reconstruction of the existing 220 kV interconnection line between Soverzene and Lienz as a 400 kV AC insulated tie-line of about 100-150 km (approximately 35 km on AT and the rest on IT side) and with a capacity of 1500 MVA between Lienz and Veneto region substations, along an optimized route, which minimizes the environmental impact (onshore).</p> <p>3.2.3.: Realization of a new 31 km 400 kV AC OHL with a capacity of 1500 MVA between the existing substation of North Venezia and the future 400 kV substation of Volpago, connected in and out to the 400 kV Sandrigo – Cordignano line (onshore).</p>	Electricity EAST
	<p>3.3. PCI Austria - Italy interconnection between Nauders (AT) and Milan region (IT)</p>	<p>New 400 kV AC/DC interconnection line (OHL) of about 200 km and with a capacity of 1000 MW/1500 MVA between Nauders (AT) and Milan Area (IT) (onshore).</p> <p>The project will be realized in two different phases:</p> <ul style="list-style-type: none"> - phase1) realization of the first part of the line connecting Nauders (AT) and Curon (IT); regarding phase1) Terna is in contact with the Austrian TSO (Austrian Power Grid AG) discussing technical options; - phase2) prosecution of realization of the line until Milan area. 	Electricity EAST
	<p>3.4. PCI Austria – Italy interconnection between Wurlmlach (AT) and Somplago (IT)</p>	<p>A new 220 kV AC OHL of 40 km and with a capacity of 300 MVA from Somplago substation to Wurlmlach substation (onshore).</p>	Electricity EAST
	<p>3.19. Cluster Italy - Montenegro between Villanova and Lastva including the following PCIs:</p> <p>3.19.1. Interconnection between Villanova (IT) and Lastva (ME)</p> <p>3.19.2. Internal line between Fano and Teramo (IT)</p> <p>3.19.3. Internal line between Foggia and Villanova (IT)</p>	<p>3.19.1.: New HVDC interconnection line with a capacity of 1000 MW between Italy and Montenegro via 375 km of 500 kV DC subsea cable and converter stations at both ending points in Villanova (IT) and Lastva (ME) (offshore).</p> <p>3.19.2.: New 400 kV AC single circuit OHL with a length of 200 km and a capacity of 1500 MVA between the existing 400 kV substations of Fano and Teramo (onshore), providing the connection in and out to the future substation to be built in Macerata area.</p> <p>3.19.3.: New 400 kV AC double circuit OHL with a length of 178 km and a capacity of 3.000 MVA between existing 400 kV substations of Foggia and Villanova (onshore), connecting in and out also the Larino and Gissi 400 kV substations. The first part of the line connecting Villanova and Gissi substations was already</p>	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		permitted in January 2013 and is currently in construction. The second part of the line connecting Gissi, Larino and Foggia substations is still in permitting.	
	3.20. Cluster Italy – Slovenia between West Udine and Okroglo including the following PCIs: 3.20.1. Interconnection between West Udine (IT) and Okroglo (SI) 3.20.2. Internal line between West Udine and Redipuglia (IT)	3.20.1.: New 120 km 400 kV AC double circuit OHL with a capacity of 2x1870 MVA between Okroglo and Udine (onshore). 3.20.2.: New 40 km 400kV AC double circuit OHL with a capacity of 1.500-3.000 MVA between the existing substations of West Udine and Redipuglia, providing in and out connection to the future 400 kV substation of South Udine (onshore).	Electricity EAST
	3.21. PCI Italy – Slovenia interconnection between Salgareda (IT) and Divača - Bericevo region (SI)	The project includes a new 300-500 kV HVDC underground cable between Italy and Slovenia with a length of about 150-200 km and a capacity of 1000 MW.	Electricity EAST
	3.25. PCI battery storage systems in Central South Italy	Installation of 250 MW of storage systems (Batteries) on critical 150 kV transmission network in South Italy. Batteries are characterized by removable, modular and flexible installations; these characteristics allow installations in a wide variety of sites and the possible replacement depending on the needs that could arise in the medium / long term. Permitting has already started for the first experimental stage concerning 35 MW, while the remaining part of the project is under pre-feasibility studies.	Electricity EAST
	5.11. PCI Reverse flow interconnection between Italy and Switzerland at Passo Gries interconnection point	Reverse flow at Passo Gries interconnection point on a pipeline section of 450 km between Italy and Switzerland, that will determine a daily capacity of 5 GWh in a first phase (from 1/1/2016) and that of 38 GWh in a second phase (from 1/1/2017). The power of the compressor station(s) is 95 MW.	Gas WEST
	5.19. PCI Connection of Malta to the European Gas network (gas pipeline with Italy at Gela and Floating LNG Storage and Regasification Unit (FSRU))	New pipeline of 150 km from an offshore Floating Storage and Regasification Unit/FSRU (MT) to Sicily (IT) 4.4 MCM/day and 12 km from FSRU to Delimara (MT) with a daily capacity of 1.1 MCM/day. The characteristics of the FSRU are: Daily send-out capacity 5.5 MCM/day Annual send-out capacity 2 BCM/year LNG storage capacity 200000 CM LNG Reloading facility 135000 CM LNG Maximum ship size 135000 CM LNG	Gas WEST
	5.20. PCI Gas Pipeline connecting Algeria to Italy (Sardinia) and France	New transcontinental gas pipeline project between Algeria to	Gas WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	(Corsica) [currently known as Galsi & Cyréné pipelines]	Italian via Sardinia island and Italian mainland. The project can be divided into 2 sections: international section (288 km offshore pipeline from Algeria to Sardinia) and a national section (overall 563 km pipeline of which: 285 km onshore pipeline crossing Sardinia + 275 km offshore pipeline from Sardinia to Tuscany + 3 km onshore pipeline in Tuscany). The capacity of the project is 8 x 109 Sm ³ /year (equal to 7,6 BCM/year) and the power of the compressor station in Algeria (Kouthie Draouche) is of 3x33 MW and of that one in Sardinia (Olbia) of 2x26 MW. New pipeline of 300 km (220 km onshore and 100 km offshore) and with a daily capacity of 3.15 MCM/day that would plug Corsica to the Galsi project, laying an offshore pipeline between Sardinia and Corsica and building onshore connection to the two main cities of Corsica, Bastia and Ajaccio.	
	6.5. Cluster Krk LNG Regasification Vessel and evacuation pipelines towards Hungary, Slovenia and Italy, including the following PCIs: 6.5.1. LNG Regasification vessel in Krk (HR) 6.5.2. Gas pipeline Zlobin – Bosiljevo – Sisak – Kozarac – Slobodnica (HR) 6.5.3. LNG evacuation pipeline Omišalj – Zlobin (HR) – Rupa (HR) / Jelšane (SI) – Kalce (SI) or 6.5.4. Gas pipeline Omišalj (HR) – Casal Borsetti (IT)	6.5.4: New onshore pipeline with a total length of 220 km (146 km to the epicontinental zone border – HR part and 74 km on IT side) and a daily capacity of 46 MCM/day.	Gas EAST
	6.7. PCI Interconnection Slovenia – Italy (Gorizia (IT)/Šempeter (SI) – Vodice (SI))	New onshore pipeline of 100 km with a total daily capacity of 30,44 MCM/day and built in sections: - Section M3/1a Gorizia/Šempeter-Ajdovščina – 29 km; - Section M3/1b Ajdovščina-Kalce – 24 km; - Section M3/1c Kalce-Vodice - 47 km; Power of the compressor station(s) is of 20 MW.	Gas EAST
	6.16. PCI Tauerngasleitung (TGL) pipeline between Haiming (AT)/Überackern (DE) – Tarvisio (IT)	New onshore pipeline with a total length of approximately 290 km crossing the Alps via 10 tunnels with an approximate length of 25 km. The daily capacity in both flow directions will be of maximum 31.2 MCM/day. The power of the compressor station(s) in Auerbach and Feistritz will be of approximately 2 x 33 MW.	Gas EAST
	6.18. PCI: Adriatica pipeline (IT)	New onshore pipeline of approximately 700 km and with a daily	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		capacity of approximately 24 MCM/day. The power of the compressor station(s) will be of 33 MW.	
	6.19. PCI Onshore LNG terminal in the Northern Adriatic (IT)	New onshore LNG terminal with an annual send-out capacity of 8 BCM/year, a LNG storage capacity of 280.000 CM LNG. The maximum ship size is estimated at 145.000 CM. The precise location of the LNG terminal in the Northern Adriatic will be decided by Italy in agreement with Slovenia.	Gas EAST
	<p>7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	<p>7.1.3.: New onshore and offshore pipeline between Greece/Turkey and Italy with a total length of 871 km (766 km onshore and 105 km offshore), with a normal daily capacity of 27.1 MCM/day and a maximum daily capacity of 30.1 MCM/day. Initial throughput capacity of 10 BCM/year. The power of the compressor station(s) is 90 MW.</p> <p>7.1.4.: New onshore and offshore pipeline between Greece and Italy with a total length of 823 km (613 km onshore and 210 km offshore) with a daily delivery capacity of 2.2 MCM/day in Komotini (Greece), 0.55 in Western Greece and of 27.4 in Otranto (Italy). Initial throughput capacity of 10 BCM/year. The power values of the compressor stations are: Komotini: 9.7 x 3 MW – layout: 2+1; Near Messimvria: 9.7 x 3 MW – layout: 2+1; Thesprotia: 25 x 4 MW – layout: 3+1.</p>	Southern Gas Corridor (SGC)
	9.6. PCI TAL Plus: capacity expansion of the TAL Pipeline between Trieste (Italy) and Ingolstadt (Germany)	Increasing capacity of the TAL pipeline in its first section between Trieste and Ingolstadt to allow for full diversification of oil supply to the Czech Republic.	Oil Supply Connections in Central Eastern Europe (OSC)
	10.2. Green-Me (France, Italy): Enhance RES integration by implementing automation, control and monitoring systems in HV and HV/MV substations, advanced communicating with the renewable	Through the implementation of "smart technologies" together with innovative system tools, the RES generation (in particular PV) will be made more observable, predictable and controllable,	Smart Grids

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	generators and storage in primary substations	improving: - the load and generation forecast at primary distribution level - the hosting capacity of further RES maintaining quality and system reliability. - the communication between TSO and DSO automation systems	
LATVIA (LV)	4.2. Cluster Estonia – Latvia between Kilingi-Nõmme and Riga [currently known as 3rd interconnection] including the following PCIs: 4.2.1 Interconnection between Kilingi-Nõmme (EE) and Riga CHP2 substation (LV) 4.2.2 Internal line between Harku and Sindi (EE)	4.2.1.: Estonia – Latvia third interconnection will consist of 211 km of 330 kV AC OHL with a capacity of 1143 MVA, constructed mostly on the existing transmission line routes between Kilingi-Nõmme and RigaCHP2 substations (onshore).	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	4.3. PCI Estonia / Latvia / Lithuania synchronous interconnection with the Continental European networks	The Lithuania – Latvia – Estonia power system and market integration: Synchronous interconnection of Lithuania, Latvia and Estonia with the Continental European networks project is aimed at infrastructure development for deeper market integration and synchronous interconnection of the power systems of the Baltic States with the Continental European networks. Lithuanian, Latvian and Estonian TSOs are currently implementing the Feasibility Study “Interconnection Variants for the Integration of the Baltic States to the EU Internal Electricity Market. Further E194 project development, including notably further studies on synchronisation, will be subject to the result of the Feasibility Study “Interconnection Variants for the Integration of the Baltic States to the EU Internal Electricity Market”.	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	4.4. Cluster Latvia - Sweden capacity increase [currently known as the NordBalt project] including the following PCIs: 4.4.1 Internal line between Ventspils, Tume and Imanta (LV) 4.4.2 Internal line between Ekhyddan and Nybro/Hemsjö (SE)	4.4.1.: The PCI represents the third stage of the Kurzeme Ring project, which consists of a transmission network reinforcement project in Latvia with the construction of new 330 kV OHL in the Western part of Latvia, connecting Grobina with Riga 330 kV network. The PCI covers the section Ventspils-Tume-Imanta (Riga), that is necessary to implement in order to close 330 kV AC transit OHL from Grobina to Imanta (Riga) with a length of 210 km and a capacity of 940 MVA (onshore).	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	8.1. Cluster LNG supply in the Eastern Baltic Sea region, including the following PCIs:	8.1.2.4.: New onshore LNG terminal (SCV, fuel gas evaporator) in Riga, with an annual send-out capacity of 5 BCM/year and a LNG	Gas Baltic Energy Market

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>8.1.1 Interconnector between Estonia and Finland "Balticconnector", and</p> <p>8.1.2. One of the following LNG terminals:</p> <p>8.1.2.1 Finngulf LNG</p> <p>8.1.2.2 Paldiski LNG</p> <p>8.1.2.3 Tallinn LNG</p> <p>8.1.2.4 Latvian LNG</p> <p>8.2. Cluster infrastructure upgrade in the Eastern Baltic Sea region, including the following PCIs:</p> <p>8.2.1 Enhancement of Latvia-Lithuania interconnection</p> <p>8.2.2 Enhancement of Estonia-Latvia interconnection</p> <p>8.2.3 Capacity enhancement of Klaipeda-Kiemenai pipeline in Lithuania</p> <p>8.2.4 Modernization and expansion of Incukalns Underground Gas Storage</p>	<p>storage capacity of 1 x 180.000 CM LNG). The maximum ship size is of 177.000 CM.</p> <p>8.2.1.: Construction of new parallel pipeline from Daugmale to Iecava (LV) with a length of 40 km and a daily capacity of 12 MCM/day (onshore) and upgrade of gas metering station in Kiemenai GM station (LT).</p> <p>8.2.2.: Upgrade of onshore pipeline to a daily capacity of 10 MCM/day. The power of the compressor station(s) is of 35 MW.</p> <p>8.2.4.: Upgrade and extension of an Aquifer storage facility with the following technical characteristics: Current working gas volume - 2300 MCM, and after expansion - 2635- 2835 MCM. Current withdraw capacity - up to 28-30 MCM/day, after modernization expected 34-35 MCM/day. Injection capacity - 17 MCM/day. Cycling rate - 1 time/year (seasonal storage).</p>	<p>Interconnection Plan (BEMIP)</p> <p>Gas Baltic Energy Market Interconnection Plan (BEMIP)</p>
LITHUANIA (LT)	4.3. PCI Estonia / Latvia / Lithuania synchronous interconnection with the Continental European networks	<p>The Lithuania – Latvia – Estonia power system and market integration: Synchronous interconnection of Lithuania, Latvia and Estonia with the Continental European networks project is aimed at infrastructure development for deeper market integration and synchronous interconnection of the power systems of the Baltic States with the Continental European networks.</p> <p>Lithuanian, Latvian and Estonian TSOs are currently implementing the Feasibility Study "Interconnection Variants for the Integration of the Baltic States to the EU Internal Electricity Market. Further E194 project development, including notably further studies on synchronisation, will be subject to the result of the Feasibility Study "Interconnection Variants for the Integration of the Baltic States to the EU Internal Electricity</p>	Electricity Baltic Energy Market Interconnection Plan (BEMIP)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>4.5. Cluster Lithuania – Poland between Alytus (LT) and Elk (PL) including the following PCIs:</p> <p>4.5.1. LT part of interconnection between Alytus (LT) and LT/PL border</p> <p>4.5.2. Internal line between Stanisławów and Olsztyn Mątki (PL)</p> <p>4.5.3. Internal line between Koźienice and Siedlce Ujrzanów (PL)</p> <p>4.5.4. Internal line between Płock and Olsztyn Mątki (PL)</p> <p>4.7. PCI capacity increase of hydro-pumped storage in Lithuania - Kruonis</p> <p>8.2. Cluster infrastructure upgrade in the Eastern Baltic Sea region, including the following PCIs:</p> <p>8.2.1 Enhancement of Latvia-Lithuania interconnection</p> <p>8.2.2 Enhancement of Estonia-Latvia interconnection</p> <p>8.2.3 Capacity enhancement of Klaipėda-Kiemenai pipeline in Lithuania</p> <p>8.2.4 Modernization and expansion of Incukalns Underground Gas Storage</p> <p>8.5. PCI Poland-Lithuania interconnection [currently known as "GIPL"]</p>	<p>Market”.</p> <p>4.5.1.: 400 kV AC double circuit OHL on 51 km and with a capacity of 2x1870 MVA between Alytus and PL-LT border (onshore), with construction of Back-to-Back converter station near Alytus (2x500 MW capacity).</p> <p>Hydro-pumped storage in Kruonis with an installed capacity of 900 MW (4 units of 225 MW). Existing units have 74% of cycle efficiency in maximum power output and can operate in the range of 160–225 MW in generation mode but have no flexibility in pump mode. New 225 MW variable speed (asynchronous) unit is planned to be installed. The new unit will have pump mode ranging from 110 to 225 MW and the cycle efficiency of up to 78%.</p> <p>8.2.1.: Construction of new parallel pipeline from Daugmale to Iecava (LV) with a length of 40 km and a daily capacity of 12 MCM/day (onshore) and upgrade of gas metering station in Kiemenai GM station (LT)..</p> <p>8.2.3.: Upgrade of onshore pipeline with a daily capacity of 6 (capacity enhanced by – 5.5) MCM/day on a distance of 110 km.</p> <p>New onshore pipeline with a total length of 534 km (177 km in the territory of LT and 357 km in the territory of PL) and with a daily capacity increased in stages: Stage I – 6.6 and Stage II – 11.2 MCM/day. The power of the compressor station will be of: Stage I – 9.3 MW and Stage II – 24.4 MW.</p>	<p>Electricity Baltic Energy Market Interconnection Plan (BEMIP)</p> <p>Electricity Baltic Energy Market Interconnection Plan (BEMIP)</p> <p>Gas Baltic Energy Market Interconnection Plan (BEMIP)</p> <p>Gas Baltic Energy Market Interconnection Plan (BEMIP)</p>
LUXEMBOURG (LU)	<p>2.3. Cluster Belgium - Luxembourg capacity increase at the BE/LU border including the following PCIs:</p> <p>2.3.1 Coordinated installation and operation of a phase-shift transformer in Schiffange (LU)</p>	<p>2.3.1.: As a first step (2016) a Phase Shifter Transformer (PST) would be placed in the existing 225 kV line between LU and BE.</p> <p>2.3.2.: In a second stage, one new interconnection between Creos grid in LU and ELIA grid in BE via a 16km AC double circuit</p>	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	2.3.2. Interconnection between Aubange (BE) and Bascharage/Schiffange (LU)	225 kV underground cable with a capacity of 1,000 MVA (onshore).	
	5.17. Cluster between Luxembourg, France and Belgium including one or more of the following PCIs: 5.17.1 Interconnection between France and Luxembourg. 5.17.2 Reinforcement of the interconnection between Belgium and Luxembourg	5.17.1: New pipeline of 15 or 56 km in FR and 2 km in LU with a daily capacity of 0.8 or 3.5 MCM/day (onshore). 5.17.2: Upgrade of existing IP Pétange with the construction of 50 km pipeline in BE	Gas WEST
MALTA (MT)	5.19. PCI Connection of Malta to the European Gas network (gas pipeline with Italy at Gela and FSRU)	New pipeline of 150 km from an offshore Floating Storage and Regasification Unit/FSRU (MT) to Sicily (IT) 4.4 MCM/day and 12 km from FSRU to Delimara (MT) with a daily capacity of 1.1 MCM/day. The characteristics of the FSRU are: Daily send-out capacity 5.5 MCM/day Annual send-out capacity 2 BCM/year LNG storage capacity 200000 CM LNG Reloading facility 135000 CM LNG Maximum ship size 135000 CM LNG	Gas WEST
NETHERLANDS (NL)	1.5. PCI Denmark - Netherlands interconnection between Endrup (DK) and Eemshaven (NL)	An HVDC 320 kV link of approximately 350 km and with a capacity of 700 MW between Denmark West and the Netherlands (offshore) to connect new offshore wind farms to the cable as a first step towards a meshed North Sea offshore grid.	Electricity Northern Seas Offshore Grid (NSOG)
	2.12. PCI Germany – Netherlands interconnection between Niederrhein (DE) and Doetinchem (NL)	New 380 kV AC double circuit (OHL) of approximately 60 km and with a capacity of 2x2360 MVA between Niederrhein and Doetinchem (onshore).	Electricity WEST
	5.15. Cluster of PCI implementing gas compressor optimisation in the Netherlands: 5.15.1. Emden (from Norway to the Netherlands) 5.15.2. Winterswijk/Zevenaar (from the Netherlands to Germany) 5.15.3. Bocholtz (from the Netherlands to Germany) 5.15.4. 's Gravenvoeren (from the Netherlands to Belgium) 5.15.5. Hilvarenbeek (from the Netherlands to Belgium)	Optimisation of gas compressor stations in Emden, Winterswijk/Zevenaar, Bocholtz, 's Gravenvoeren, Hilvarenbeek (NL) with a power of 540 MW (onshore).	Gas WEST
POLAND (PL)	3.14. Cluster Germany – Poland between Eisenhüttenstadt and Plewiska [currently known as the GerPol Power Bridge project]	3.14.1.: New AC 380 kV double circuit OHL of 252 km and with a capacity of approximately 3750 MVA between Eisenhüttenstadt	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>including the following PCIs:</p> <p>3.14.1 Interconnection between Eisenhüttenstadt (DE) and Plewiska (PL)</p> <p>3.14.2 Internal line between Krajnik and Baczyzna (PL)</p> <p>3.14.3 Internal line between Mikułowa and Świebodzice (PL)</p>	<p>and Plewiska (onshore) including the construction of new substations Plewiska Bis (PL) and Gubin (PL). In the final stage after 2022, also substation Zielona Góra between Gubin and Plewiska Bis is planned to connect with this line.</p> <p>3.14.2.: Construction of a new 400kV AC double circuit OHL of 91 km and with a capacity of 2x1870 MVA between Krajnik and Baczyzna (onshore). The single circuit temporarily working at 220 kV on the section between Krajnik and Gorzów and the new 400 kV substation Baczyzna will be connected by splitting and extending the existing line and upgrading limitations between Krajnik and Plewiska.</p> <p>3.14.3.: The 98 km double circuit 220 kV AC line between Mikułowa and Świebodzice will be upgraded to 400 kV single circuit temporarily working at 220 kV and with a capacity of approximately 2x1870 MVA (onshore).</p>	
	<p>3.15. Cluster Germany – Poland between Vierraden and Krajnik including the following PCIs:</p> <p>3.15.1 Interconnection between Vierraden (DE) and Krajnik (PL)</p> <p>3.15.2 Coordinated installation and operation of phase shifting transformers on the interconnection lines between Krajnik (PL) – Vierraden (DE) and Mikulowa (PL) – Hagenwerder (DE)</p>	<p>3.15.1.: Upgrade of existing 220 kV AC OHL between Vierraden and Krajnik to 380 kV double circuit OHL with a length of 26 km and a capacity of approximately 3500 MVA (onshore). The upgrade of the line is on condition that the line is equipped with a PST (PCI 3.15.2.) in order to ensure the system security and stability in case of high flows on the mentioned line. The PST has to be installed and operated by cooperation of Germany and Poland.</p> <p>3.15.2.: Installation of Phase Shifting Transformers (PSTs) on the upgraded interconnection between Krajnik (PL) and Vierraden (DE) and phase shifting transformers (PSTs) on the existing interconnection between Mikułowa (PL) and Hagenwerder (DE).</p>	Electricity EAST
	<p>3.26. PCI hydro-pumped storage in Poland - Mloty</p>	<p>The Mloty project is a Pumped Storage Power Plant of 750 MW power in generation mode and 804 MW in pumping mode that can be used to stabilise the energy system. Due to its location in the Lower Silesian Region in Poland, close to German and the Czech Republic border it can stabilise the energy flow in the region caused as well by wind farms.</p>	Electricity EAST
	<p>4.5. Cluster Lithuania – Poland between Alytus (LT) and Elk (PL) including the following PCIs:</p>	<p>4.5.2.: 220 kV single circuit line between Ostrołęka and Miłosna will be partly upgraded to 400 kV AC double circuit line with a</p>	Electricity Baltic Energy

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>4.5.1. LT part of interconnection between Alytus (LT) and LT/PL border</p> <p>4.5.2. Internal line between Stanisławów and Olsztyn Mątki (PL)</p> <p>4.5.3. Internal line between Kozienice and Siedlce Ujrzanów (PL)</p> <p>4.5.4. Internal line between Płock and Olsztyn Mątki (PL)</p>	<p>length of 106 km and a capacity of 2x1870 MVA between Ostrołęka and Stanisławów (onshore). Moreover, development of Ostrołęka 400 kV substation and new substation 400 kV Stanisławów will be connected by splitting and extending existing line between Miłosna and Narew and that between Miłosna and Siedlce.</p> <p>Existing 220 kV line of 138 km between Ostrołęka and Olsztyn Mątki will be upgraded to 400 kV AC double circuit OHL with a capacity of 2x1870 MVA (onshore). After dismantling of 220 kV line Ostrołęka - Olsztyn the one circuit Ostrołęka - Olsztyn Mątki will be temporarily switched on 220kV and connected to Olsztyn substation.</p> <p>4.5.3.: Existing 220 kV single circuit OHL between Kozienice and Siedlce Ujrzanów will be upgraded to AC 400 kV double circuit line (OHL) with a length of 90 km and a capacity of 2x1870 MVA (onshore). Moreover, Kozienice substation will be upgraded to connect the new lines.</p> <p>4.5.4.: New 400 kV AC single circuit line (OHL) of 180 km between Płock and Olsztyn Mątki with a capacity of 1870 MVA (onshore) and the development of Olsztyn Mątki 400 kV substation.</p>	Market Interconnection Plan (BEMIP)
	<p>6.1. Cluster Czech – Polish interconnection upgrade (Stork II) and related internal reinforcements in Western Poland, including the following PCIs:</p> <p>6.1.1 Poland - Czech Republic Interconnection (Stork II) between Libhošť – Hať (CZ/PL) – Kedzierzyn (PL)</p> <p>6.1.2 Lwowek-Odolanow pipeline</p> <p>6.1.3 Odolanow compressor station</p> <p>6.1.4 Czeszów-Wierzchowice pipeline</p> <p>6.1.5 Czeszów-Kiełczów pipeline</p> <p>6.1.6 Zdieszowice-Wrocław pipeline</p> <p>6.1.7 Zdieszowice-Kędzierzyn pipeline</p> <p>6.1.8 Tworóg-Tworzen pipeline</p> <p>6.1.9 Tworóg-Kędzierzyn pipeline</p> <p>6.1.10 Pogorska Wola-Tworzen pipeline</p>	<p>6.1.1: New onshore pipeline with a length of 107.6 km and a maximum daily capacity of 13.7 MCM/day in the direction PL-CZ and that of 19.6 MCM/day in the direction CZ-PL (Stage I) and 30.1 MCM/day (Stage II).</p> <p>6.1.2. - 6.1.11.: Upgrade of onshore pipelines in Greater Poland, Silesia, Subcarpathian regions (PL). Closest cities: Poznan, Katowice, Krakow, Rzeszow</p> <p>Total length of 739 km, namely:</p> <p>Lwowek-Odolanow pipeline – 162 km;</p> <p>Czeszów-Wierzchowice pipeline – 13 km;</p> <p>Czeszów-Kiełczów pipeline – 32 km;</p> <p>Zdieszowice-Wrocław pipeline – 130 km;</p> <p>Zdieszowice-Kędzierzyn pipeline – 19 km;</p> <p>Tworóg-Tworzen pipeline – 56 km;</p>	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	6.1.11 Strachocina – Pogórska Wola pipeline	Tworóg-Kędzierzyn pipeline – 47 km; Pogorska Wola-Tworzen pipeline – 160 km; Strachocina – Pogórska Wola pipeline – 120 km. The power of the compressor station in Odolanow is of 7 MW.	
	6.2. Cluster Poland – Slovakia interconnection and related internal reinforcements in Eastern Poland, including the following PCIs: 6.2.1 Poland – Slovakia interconnection 6.2.2 Rembelszczyzna compressor station 6.2.3 Rembelszczyzna-Wola Karczewska pipeline 6.2.4 Wola Karczewska-Wronów pipeline 6.2.5 Wronów node 6.2.6 Rozwadów-Końskowola-Wronów pipeline 6.2.7 Jarosław-Rozwadów pipeline 6.2.8 Hermanowice-Jarosław pipeline 6.2.9 Hermanowice-Strachocina pipeline	6.2.1.: New onshore pipeline of approximately 164 km and with a maximum daily capacity of 17.9 MCM/day (Stage I) and 29.9 MCM/day (Stage II) in the direction SK-PL and 14.8 MCM/day in the direction PL-SK. 6.2.2.-6.2.9.: Upgrade of onshore pipelines in the Masovian, Subcarpathian regions (PL). Closest cities: Warsaw, Lublin, Rzeszow Total length of 409 km and namely: Rembelszczyzna-Wola Karczewska pipeline – 37 km; Wola Karczewska-Wronow pipeline – 98 km; Rozwadów-Końskowola-Wronów pipeline – 103 km; Jarosław-Rozwadów pipeline – 60 km; Hermanowice-Jarosław pipeline – 39 km; Hermanowice-Strachocina pipeline – 72 km. The power of the compressor station in Rembelszczyzna is 18.3 MW.	Gas EAST
	8.3. PCI Poland–Denmark interconnection "Baltic Pipe"	New bi-directional pipeline with a total length of 324 km (Baltic Pipe, offshore section of 280 km and pipeline of 44 km between Niechorze and Płoty) and a daily capacity of min. 8.21 MCM/day. The power of the Avedore compressor station is to be determined at a later stage.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	8.5. PCI Poland-Lithuania interconnection [currently known as "GIPL"]	New onshore pipeline with a total length of 534 km (177 km in the territory of LT and 357 km in the territory of PL) and with a daily capacity increased in stages: Stage I – 6.6 and Stage II – 11.2 MCM/day. The power of the compressor station will be of: Stage I – 9.3 MW and Stage II – 24.4 MW.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	8.7. PCI Capacity extension of Swinoujscie LNG terminal in Poland	Extension of onshore LNG terminal with an annual send-out capacity of 7.5 BCM/year and a total LNG storage capacity of 3 x 160.000 CM LNG, with the construction of the third storage tank. In the first stage of the project (currently under construction), the reloading on trucks is provided (two loading bays with	Gas Baltic Energy Market Interconnection Plan (BEMIP)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		capacity of 95.000 t/a) while reloading for vessels is also considered. The facility is designated to receive Carriers up to 216.000 CM (Q-flex vessels).	
	8.8. PCI Upgrade of entry points Lwówek and Włocławek of Yamal-Europe pipeline in Poland	Upgrade of the capacity of the entry points in Lwówek and Włocławek on the Yamal-Europe pipeline (onshore, length NA) from 6.46MCM/day up to 9.8 MCM/day (Lwówek) and from 8.38 MCM/day up to 25.2 MCM/day (Włocławek). Therefore, the total daily capacity will be of 35 MCM/day.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
	9.1. PCI Adamowo-Brody pipeline: pipeline connecting the JSC Ukrtransnafta's Handling Site in Brody (Ukraine) and Adamowo Tank Farm (Poland)	A pipeline of 371 km length connecting the JSC Ukrtransnafta's Handling Site in Brody (UA) and Adamowo Tank Farm (PL) and with a maximum technical capacity of 10, 20 and 30 million tonnes per year respectively, depending on the three consecutive stages of project implementation.	Oil Supply Connections in Central Eastern Europe (OSC)
	9.5. Cluster Pomeranian pipeline (Poland), including the following PCIs: 9.5.1. Construction of Oil Terminal in Gdańsk 9.5.2. Expansion of the Pomeranian Pipeline: loopings and second line on the Pomeranian pipeline linking Plebanka Tank Farm (near Płock) and Gdańsk Handling Terminal	A pipeline of 234 km with the maximum technical capacity still under consideration, depending on the development of the Litvinov-Spergau and Brody – Adamowo pipelines.	Oil Supply Connections in Central Eastern Europe (OSC)
PORTUGAL (PT)	2.16. Cluster Portugal capacity increase at PT/ES border including the following PCIs: 2.16.1. Internal line between Pedralva and Alfena (PT) 2.16.2. Internal line between Pedralva and Vila Fria B (PT) 2.16.3. Internal line between Frades B, Ribeira de Pena and Feira (PT)	2.16.1.: New 50 km double circuit OHL Pedralva - Alfena 400 kV (initially with only one circuit installed), with a capacity of 1630/1860 MVA per circuit correspondent to summer/winter (onshore). In a section the construction of this line may take advantage of an existing corridor of 150 kV single circuit line. 2.16.2.: New 55 km double circuit Pedralva - Vila Fria B 400 kV OHL (initially one circuit installed), with a capacity of 1630/1860 MVA per circuit correspondent to summer/winter (onshore). 2.16.3.: New 160 km double circuit OHL 400 kV Frades B – Ribeira de Pena – Fridão – Feira, along with the new 400/60 kV substation of R. Pena and the switching station of Fridão. Capacity is 2x (1630/ 1860 MVA) (summer/winter) between Frades B and R. Pena, and 2080/2370 MVA (summer/winter) along R. Pena – Fridão – Feira (onshore). On a large extension this line shares towers with the new 220 kV line V.P.Aguiar -	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	2.17. PCI Portugal - Spain interconnection between Vila Fria - Vila do Conde – Recarei (PT) and Beariz - Fontefría (ES)	Carrapatelo - Estarreja. New 400 kV AC double circuit (OHL) of 162 km (112 km in Portugal and 41 km in Spain) between Beariz - Fontefría (ES) and Vila Fria – Vila do Conde – Recarei (PT), with only one circuit being installed on the Fontefría – Vila do Conde section (onshore). New 400 kV substations Fontefría, Boboras, Vila Fria B and Vila do Conde.	Electricity WEST
	5.4. PCI 3rd interconnection point between Portugal and Spain	Extension of the existing pipeline through a 3rd stage of the project between Celorico da Beira and Braganza (PT) and Zamora (ES), on a total length of 310 km (225 km in PT and 85 km in ES) and with a total capacity of 142 GWh/d (11.88 MCM/day) for each direction ES-PT and PT-ES). The planned capacity is 142 GWh/d.	Gas WEST
ROMANIA (RO)	3.8. Cluster Bulgaria – Romania capacity increase including the following PCIs: 3.8.1. Internal line between Dobrudja and Burgas (BG) 3.8.2. Internal line between Vidno and Svoboda (BG) 3.8.3. Internal line between Svoboda (BG) and the splitting point of the interconnection Varna (BG) - Stupina (RO) in BG 3.8.4. Internal line between Cernavoda and Stalpu (RO) 3.8.5. Internal line between Gutinas and Smardan (RO) 3.8.6. Internal line between Gadalín and Suceava (RO)	3.8.4.: A new 400 kV AC OHL double circuit of 159 km and with a capacity of 2x1380 MVA shall be built between the 400 kV substation Cernavoda and the existing 220/110 kV Stalpu substation, which shall be replaced with a 400/110 kV substation (onshore). One of the two circuits shall be connected in-out to the 400 kV substation Gura Ialomitei, situated in the vicinity of the new line. 3.8.5.: New 400kV AC OHL double circuit (one circuit wired) of 137.5 km and with a capacity of 1380 MVA between existing substations Gutinas and Smardan (onshore). 3.8.6.: New 400 kV OHL simple circuit of 260 km and with a capacity of 1204 MVA between existing substations Gadalín and Suceava (onshore).	Electricity EAST
	3.22. Cluster Romania – Serbia between Resita and Pancevo including the following PCIs: 3.22.1. Interconnection between Resita (RO) and Pancevo (RS) 3.22.2. Internal line between Portile de Fier and Resita (RO) 3.22.3. Internal line between Resita and Timisoara/Sacalaz (RO) 3.22.4. Internal line between Arad and Timisoara/Sacalaz (RO)	3.22.1.: New 400 kV AC double circuit OHL with a length of 131 km (63 km on RO side and 68 km on RS side) and with a capacity of 2x1380 MVA between substations Resita and Pancevo (onshore). 3.22.2.: New 400 kV AC OHL of 116 km and with a capacity of 1380 MVA between existing substation 400 kV Portile de Fier and new 400 kV substation Resita, extension with one bay of 400 kV substation Portile de Fier, new 400 kV substation Resita, with 400/220 kV and 400/110 kV transformers, as extension of the	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		existing 220/110 kV substation. 3.22.3., 3.22.4.: Upgrade of an existing 220 kV AC double circuit line (OHL) between Resita – Timisoara – Sacalaz – Arad (RO) to 400 kV double circuit line on 100 km and as single circuit on 74.6 km with a capacity of 1380 MVA on sections Resita-Timisoara, Resita – Sacalaz, Timisoara – Arad and of 1204 MVA on the section Sacalaz – Calea Aradului (already existing between Sacalaz and Arad) – Arad (onshore). Moreover, the project includes the extension of 220/110 kV substation Timisoara with 400 kV and replacement of 220 kV substation Sacalaz with 400 kV substation.	
	6.15. Cluster Integration of the transit and transmission system and implementation of reverse flow in Romania, including the following PCIs: 6.15.1 Integration of the Romanian transit and transmission system 6.15.2 Reverse flow at Isaccea	Works within GMS Isaccea and the upgrade (amplification) of Compressor Station Silistea. The project also implies the construction of a connection pipeline between the DN 1000 Pipeline (Transit 1 Bulgaria) and the NTS with a daily capacity of 14 MCM/day and with the possibility to meter the natural gas volumes transmitted in both directions.	Gas EAST
	6.20. Cluster increase storage capacity in South-East Europe, including one or more of the following PCIs: 6.20.1. Construction of new storage facility on the territory of Bulgaria 6.20.2. Chiren UGS expansion 6.20.3. South Kavala storage in Greece 6.20.4. Depomures storage in Romania	6.20.4.: Extension of storage facility in depleted field in Depomures, with the following technical characteristics: Working Gas Volume 600 (300 existing + 300 new) MCM; Withdraw capacity 6 (2 existing + 4 new) MCM/day; Injection capacity 6 (2 existing + 4 new) MCM/day; Cycling rate 1 times/year.	Gas EAST
	6.22. Cluster Azerbaijan–Georgia–Romania Interconnector project, including the following PCIs: 6.22.1. Gas pipeline Constanta (RO) – Arad – Csanádpalota (HU) [currently known as AGRI] 6.22.2. LNG terminal in Constanta (RO)	Upgrade and extension of the AGRI pipeline between Constanta, Arad (RO) and Csanádpalota (HU), with sections both onshore and offshore. LNG terminal in Constanta (RO).	Gas EAST
	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic	7.1.5.: New onshore pipeline with a length of 1318 km and with the following daily delivery capacity of 6.1 MCM/day in Bulgaria, 6.1 in Romania, 6.1 in Hungary and 52 in Austria. Initial throughput capacity of 23 BCM/year. The power of the compressor station(s) amount to a total of 345 MW.	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>		
	<p>7.2. PCI consisting of integrated, dedicated and scalable transport infrastructures and associated equipment for the transportation of a minimum of 8 bcm/a of new sources of gas from the Caspian Region (Azerbaijan and Turkmenistan) to Romania, including the following projects:</p> <p>7.2.1. Sub-marine gas pipeline in the Caspian Sea from Turkmenistan to Azerbaijan [currently known as the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.2.2. Upgrade of the pipeline between Azerbaijan and Turkey via Georgia [currently known as the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X)]</p> <p>7.2.3. Sub-marine pipeline linking Georgia with Romania [currently known as "White Stream"]</p>	<p>7.2.3.: Onshore and offshore pipeline from Georgia to Romania via the Black Sea with a total length of 1250 km (1115 offshore and 135 onshore) and with a daily capacity of 46 MCM/day. The power of the compressor station for 16 BCM/year is of 375 MW.</p>	<p>Southern Gas Corridor (SGC)</p>
<p>SLOVAKIA (SK)</p>	<p>3.16. Cluster Hungary - Slovakia between Gőnyű and Gabčíkovo including the following PCIs:</p> <p>3.16.1. Interconnection between Gőnyű (HU) and Gabčíkovo (SK)</p> <p>3.16.2. Internal line between Velký Ďur and Gabčíkovo (SK)</p> <p>3.16.3. Extension of Győr substation (HU)</p>	<p>3.16.1.: New AC 400 kV double circuit interconnection with a total capacity of 2 772 MVA between Gabčíkovo and Gőnyű (13 km on Slovak side) and the erection of new switching station Gabčíkovo next to the existing one (onshore).</p> <p>3.16.2.: Erection of the new 2x400kV AC double circuit line of 93 km and with a total capacity of 2772 MVA between substations Velký Ďur and Gabčíkovo and the necessary extension of the</p>	<p>Electricity EAST</p>

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		substation Veľký Ďur (onshore). Clusters 3.16 and 3.17 are co-dependent.	
	3.17. PCI Hungary - Slovakia interconnection between Sajóvánka (HU) and Rimavská Sobota (SK)	Installation of a second 400/120 kV transformer and 2x70 Mvar shunt reactors in station Sajóvánka. Connection of the two existing substations R. Sobota (SK) and Sajóvánka (HU) by the new 2x400 kV AC double circuit line (preliminary armed only with one circuit), with an approximate length of 25 km on SK side and a capacity of 2x1386 MVA, including the R. Sobota (SK) substation equipment (onshore). Clusters 3.16 and 3.17 are co-dependent.	Electricity EAST
	3.18. Cluster Hungary - Slovakia between Kisvárda area and Veľké Kapušany including the following PCIs: 3.18.1. Interconnection between Kisvárda area (HU) and Veľké Kapušany (SK) 3.18.2. Internal line between Lemešany and Veľké Kapušany (SK)	3.18.1.: Erection of new 400 kV AC double circuit line (OHL) with a capacity of 2772 MVA between Veľké Kapušany and a substation in the area of Kisvárda (exact location and length of the line to be defined) (onshore). 3.18.2.: Erection/upgrade of existing 400 kV AC line (OHL) of approximately 100 km and to a total capacity of 2772 MVA between Lemešany and Veľké Kapušany substations (onshore) and the necessary extension of both substations.	Electricity EAST
	6.2. Cluster Poland – Slovakia interconnection and related internal reinforcements in Eastern Poland, including the following PCIs: 6.2.1. Poland – Slovakia interconnection 6.2.2. Rembelszczyzna compressor station 6.2.3. Rembelszczyzna-Wola Karczewska pipeline 6.2.4. Wola Karczewska-Wronów pipeline 6.2.5. Wronów node 6.2.6. Rozwadów-Końskowola-Wronów pipeline 6.2.7. Jarosław-Rozwadów pipeline 6.2.8. Hermanowice-Jarosław pipeline 6.2.9. Hermanowice-Strachocina pipeline	6.2.1.: New onshore pipeline of approximately 164 km and with a maximum daily capacity of 17.9 MCM/day (Stage I) and 29.9 MCM/day (Stage II) in the direction SK-PL and 14.8 MCM/day in the direction PL-SK.	Gas EAST
	6.3. PCI Slovakia – Hungary Gas Interconnection between Veľké Zlievce (SK) – Balassagyarmat border (SK/HU) - Vecsés (HU)	New onshore pipeline with a length of 115 km and a daily capacity of 11.375 MCM/day in the direction SK-HU and 4.55 MCM/day in the direction HU-SK. The power of the compressor station(s) is of 2 x 3.5 MW.	Gas EAST
	9.2. PCI Bratislava-Schwechat-Pipeline: pipeline linking Schwechat (Austria) and Bratislava (Slovak Republic)	A pipeline of 80 km length linking Schwechat (AT) and Bratislava (SK) and with a diameter of 400 mm and the maximal throughput	Oil Supply Connections in

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		capacity of 5.0 million tonnes per year.	Central Eastern Europe (OSC)
	9.3. PCI JANAF-Adria pipelines: reconstruction, upgrading, maintenance and capacity increase of the existing JANAF and Adria pipelines linking the Croatian Omisalj seaport to the Southern Druzhba (Croatia, Hungary, Slovak Republic)	Increasing capacity and operation security of oil pipelines from Omisalj (HR) through Hungary to the Southern Druzhba pipeline in Slovakia.	Oil Supply Connections in Central Eastern Europe (OSC)
SLOVENIA (SI)	3.9. Cluster Croatia – Hungary - Slovenia between Žerjavenec /Heviz and Cirkovce including the following PCIs: 3.9.1. Interconnection between Žerjavenec (HR)/Heviz (HU) and Cirkovce (SI) 3.9.2. Internal line between Divača and Beričevo (SI) 3.9.3. Internal line between Beričevo and Podlog (SI) 3.9.4. Internal line between Podlog and Cirkovce (SI)	3.9.1.: The existing substation of Cirkovce (SI) will be connected to one circuit of the existing Heviz (HU)-Zerjavinec (HR) double circuit 400kV OHL by erecting a new AC 80 km double circuit 400 kV OHL with a capacity of 2x1330 MVA in Slovenia. The project will result in two new cross-border circuits: Heviz (HU) - Cirkovce (SI) and Cirkovce (SI) - Žerjavenec (HR) (onshore). 3.9.2., 3.9.3., 3.9.4.: Upgrading 220 kV AC lines to 400 kV on 193 km and with a total capacity of 2x1330 MVA in corridor Divaca-Klece-Bericevo-Podlog-Cirkovce (onshore).	Electricity EAST
	3.20. Cluster Italy – Slovenia between West Udine and Okroglo including the following PCIs: 3.20.1. Interconnection between West Udine (IT) and Okroglo (SI) 3.20.2. Internal line between West Udine and Redipuglia (IT)	3.20.1.: New 120 km 400 kV AC double circuit OHL with a capacity of 2x1870 MVA between Okroglo and Udine (onshore).	Electricity EAST
	3.21. PCI Italy – Slovenia interconnection between Salgareda (IT) and Divača - Bericevo region (SI)	The project includes a new 300-500 kV HVDC underground cable between Italy and Slovenia with a length of about 150-200 km and a capacity of 1000 MW.	Electricity EAST
	6.5. Cluster Krk LNG Regasification Vessel and evacuation pipelines towards Hungary, Slovenia and Italy, including the following PCIs: 6.5.1. LNG Regasification vessel in Krk (HR) 6.5.2. Gas pipeline Zlobin – Bosiljevo – Sisak – Kozarac – Slobodnica (HR) 6.5.3. LNG evacuation pipeline Omišalj – Zlobin (HR) – Rupa (HR) / Jelšane (SI) – Kalce (SI) or 6.5.4. Gas pipeline Omišalj (HR) – Casal Borsetti (IT)	6.5.3: Onshore and offshore pipeline with a total length of 103 km and a daily capacity of 46 MCM/day.	Gas EAST
	6.6. PCI Interconnection Croatia – Slovenia (Bosiljevo – Karlovac – Lučko – Zabok – Rogatec (SI))	Construction of new sections, upgrade and extension of the pipeline interconnection between HR and SI on a distance of 150 km (onshore) and with a daily capacity of 15 MCM/day.	Gas EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	6.7. PCI Interconnection Slovenia – Italy (Gorizia (IT)/Šempeter (SI) – Vodice (SI))	New onshore pipeline of 100 km with a total daily capacity of 30,44 MCM/day and built in sections: - Section M3/1a Gorizia/Šempeter-Ajdovščina – 29 km; - Section M3/1b Ajdovščina-Kalce – 24 km; - Section M3/1c Kalce-Vodice - 47 km; Power of the compressor station(s) is of 20 MW.	Gas EAST
	6.23. PCI Hungary – Slovenia interconnection (Nagykanizsa – Tornyiszentmiklós (HU) – Lendava (SI) – Kidričevo)	New onshore pipeline with a length of 113 km and a non-interruptible daily capacity of 1.14 MCM/day and an interruptible daily capacity of 2.28 MCM/day. The combined power of the compressor station will be of 8.1 MW (3.5 MW on the Slovenian side).	Gas EAST
SPAIN (ES)	2.6. PCI Spain internal line between Santa Llogaia and Bescanó (ES) to increase capacity of the interconnection between Bescanó (ES) and Baixas (FR)	A new 40 km section of 400 kV AC double circuit (OHL) between Sta. Llogaia, Ramis and Bescanó (ES) (onshore), part of the new Sta. Llogaia – Ramis – Bescanó – Vic / Senmenat 400 kV OHL (single circuit in some sections) . It will connect the already commissioned section between Bescanó-Vic / Senmenat 400 kV to the cross-border HVDC Sta Llogaia (ES)-Baixas (FR). New 400 kV substations in Bescanó, Ramis and Sta.Llogaia, with 400 / 220 kV transformers in Ramis and Bescanó.	Electricity WEST
	2.7. PCI France - Spain interconnection between Aquitaine (FR) and the Basque country (ES)	New 320 kV or 500 kV (voltage tbd) HVDC subsea cable interconnection of approximately 360 km and with a capacity of 2000 MW (tbc) between Aquitaine and the Basque country, via the the Biscay Gulf (offshore).	Electricity WEST
	2.8. PCI Coordinated installation and operation of a phase-shift transformer in Arkale (ES) to increase capacity of the interconnection between Argia (FR) and Arkale (ES)	New Phase Shifter Transformer (PST) in Arkale 220 kV substation, with affection to control the flows on the 220 kV interconnection line between Arkale (ES) and Argia (FR). Coordinated installation and operation between the 2 countries affected will be required.	Electricity WEST
	2.17. PCI Portugal - Spain interconnection between Vila Fria - Vila do Conde – Recarei (PT) and Beariz - Fontefría (ES)	New 400 kV AC double circuit (OHL) of 162 km (112 km in Portugal and 41 km in Spain) between Beariz - Fontefría (ES) and Vila Fria – Vila do Conde – Recarei (PT), with only one circuit being installed on the Fontefría – Vila do Conde section (onshore). New 400 kV substations Fontefría, Boboras, Vila Fria B and Vila do Conde.	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	5.4. PCI 3rd interconnection point between Portugal and Spain	Extension of the existing pipeline through a 3rd stage of the project between Celorico da Beira and Braganza (PT) and Zamora (ES), on a total length of 310 km (225 km in PT and 85 km in ES) and with a total capacity of 142 GWh/d (11.88 MCM/day) for each direction ES-PT and PT-ES). The planned capacity is 142 GWh/d.	Gas WEST
	5.5. PCI Eastern Axis Spain-France - interconnection point between Iberian Peninsula and France at Le Perthus– currently known as Midcat	New onshore pipeline of 184 km interconnecting Spain and France at Le Perthus Interconnection point. The power of the compressor stations is of 46 MW for LE PERTHUS IP and of 30 MW for GRTGAZ SOUTH-TIGF subproject. The planned capacity is 230 GWh/d.	Gas WEST
SWEDEN (SE)	4.4. Cluster Latvia - Sweden capacity increase [currently known as the NordBalt project] including the following PCIs: 4.4.1. Internal line between Ventspils, Tume and Imanta (LV) 4.4.2. Internal line between Ekhyddan and Nybro/Hemsjö (SE)	4.4.2.: New 400 kV AC single circuit OHL of 70 km between Ekhyddan and Nybro and a new 400 kV AC single circuit OHL of 85 km between Nybro and Hemsjö and with a total capacity of 3000 MVA (onshore).	Electricity Baltic Energy Market Interconnection Plan (BEMIP)
	8.6. PCI Gothenburg LNG terminal in Sweden	New onshore LNG terminal with an annual send-out capacity of 0.5 BCM/year and a LNG storage capacity of 20.000 CM LNG. The maximum ship size is of 30.000 CM LNG.	Gas Baltic Energy Market Interconnection Plan (BEMIP)
UNITED KINGDOM (UK)	1.1. Cluster Belgium – United Kingdom between Zeebrugge and Canterbury [currently known as the NEMO project] including the following PCIs: 1.1.1. Interconnection between Zeebrugge (BE) and the vicinity of Richborough (UK) 1.1.2. Internal line between the vicinity of Richborough and Canterbury (UK) 1.1.3. Internal line between Dungeness to Sellindge and Sellindge to Canterbury (UK)	1.1.1.: New DC sea link including 135 km of DC subsea cable with 1000 MW capacity between Richborough and Zeebrugge (offshore) 1.1.2.: New 400kV substation in Richborough and new 400kV AC double circuit OHL between Richborough and Canterbury (onshore) 1.1.3.: Reconductor 400kV AC double circuit OHL between Canterbury, Sellindge and Dungeness (onshore)	Electricity Northern Seas Offshore Grid (NSOG)
	1.2. PCI Belgium – two grid-ready offshore hubs connected to the onshore substation Zeebrugge (BE) with anticipatory investments enabling future interconnections with France and/or UK	Two offshore hubs connecting offshore wind farms and connected to each other and to the AC onshore grid with underground cables, including compensation (offshore)	Electricity Northern Seas Offshore Grid (NSOG)
	1.7. Cluster France-United Kingdom interconnections, including one or	1.7.1: A 225 km HVDC link between France and Great Britain via	Electricity

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>more of the following Projects of Common Interest:</p> <p>1.7.1 France – United Kingdom interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as FAB project]</p> <p>1.7.2 France - United Kingdom interconnection between Tourbe (FR) and Chilling (UK) [currently known as the IFA2 project]</p> <p>1.7.3 France - United Kingdom interconnection between Coquelles (FR) and Folkestone (UK) [currently known as the ElecLink project]</p>	<p>the island of Alderney, with a capacity between 1000 and 1400 MW - exact value still to be determined (onshore and offshore).</p> <p>1.7.2.: New subsea 320 kV HVDC link with a capacity of 1000 MW between the UK and France (offshore).</p> <p>1.7.3.: A new 51 km 320 kV DC electricity interconnector with a capacity of 1000 MW between Coquelles and Folkestone, via the Channel Tunnel (onshore and offshore).</p>	Northern Seas Offshore Grid (NSOG)
	<p>1.9. Cluster connecting generation from renewable energy sources in Ireland to United Kingdom, including one or more of the following PCIs:</p> <p>1.9.1 Ireland – United Kingdom interconnection between Co. Offaly (IE), Pembroke and Pentir (UK)</p> <p>1.9.2 Ireland – United Kingdom interconnection between Coolkeeragh - Coleraine hubs (IE) and Hunterston station, Islay, Argyll and Location C Offshore Wind Farms (UK)</p> <p>1.9.3 Ireland – United Kingdom interconnection between the Northern hub, Dublin and Codling Bank (IE) and Trawsfynydd and Pembroke (UK)</p> <p>1.9.4 Ireland – United Kingdom interconnection between the Irish midlands and Pembroke (UK)</p> <p>1.9.5 Ireland – United Kingdom interconnection between the Irish midlands and Alverdiscott, Devon (UK)</p> <p>1.9.6 Ireland – United Kingdom interconnection between the Irish coast and Pembroke (UK)</p>	<p>1.9.1.: Around 40 individual onshore wind farms, totalling 3GW, collected together through and underground private network in the midlands of Ireland, connected directly to the UK national grid via two 600 kV HVDC sub-sea cables of approximately 500 km and with a capacity of 5 GW in Wales (onshore and offshore).</p> <p>1.9.2., 1.9.3.: An offshore interconnected electricity grid based on renewable resources (wind, wave and tidal, connecting 3200 MW) consisting of 850 km of HVDC interconnectors with a capacity of 500-1000MW in the northern area (offshore).</p> <p>1.9.4., 1.9.5., 1.9.6.: Energy Bridge (EB) HVDC underground cable of +/- 320kV for the 1st circuit and +/- 500kV for 2 and 3, respectively, and with a total capacity of 5 GW. The length of the 3 circuits will be 290 km, 190 km and 129 km, respectively. The cable will route large amounts of renewable electricity generated in a series of interconnected Irish wind farms directly into the UK market (onshore and offshore).</p>	Electricity Northern Seas Offshore Grid (NSOG)
	1.10. Cluster Norway – United Kingdom interconnection	A new HVDC interconnection with a capacity of 1400 MW between Norway and the United Kingdom.	Electricity Northern Seas Offshore Grid (NSOG)
	<p>1.11. Cluster of electricity storage projects in Ireland and associated connections to United Kingdom, including one or more of the following PCIs:</p> <p>1.11.1. Hydro-pumped storage in North West Ireland</p>	<p>1.11.2.: A 320-400 kV HVDC underground cable interconnection of approximately 450km and with a capacity of 1200 MW between Ireland and the UK (onshore and offshore).</p> <p>1.11.4.: A 500kV HVDC VSC cable of 530 km (subsea Atlantic 75,</p>	Electricity Northern Seas Offshore Grid (NSOG)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>1.11.2. Ireland – United Kingdom interconnection between North West Ireland (IE) and Midlands (UK) 1.11.3. Hydro-pumped (seawater) storage in Ireland – Glinsk 1.11.4. Ireland – United Kingdom interconnection between Glinsk, Mayo (IE) and Connah's Quai, Deeside (UK)</p>	cross country Ireland 222km, Irish Sea approx.230, 1-3 km onshore (Pembroke) with a capacity of 1300 MW, connecting the combined wind generation and storage facility in Glinsk, Mayo (IE) to Connah's Quai, Deeside (UK) (onshore and offshore).	
	1.12. PCI compressed air energy storage in United Kingdom - Larne	Compressed Air Energy Storage using caverns / chambers to be created in bedded salt deposits with an annual storage capacity of 550 GWh.	Electricity Northern Seas Offshore Grid (NSOG)
	2.13. Cluster Ireland – United Kingdom (Northern Ireland) interconnections, including one or more following Projects of Common Interest: 2.13.1. Ireland – United Kingdom interconnection between Woodland (IE) and Turleenan (UK – Northern Ireland) 2.13.2. Ireland – United Kingdom Interconnection between Srananagh (IE) and Turleenan (UK – Northern Ireland)	2.13.1.: A new 400 kV AC single circuit (OHL) of 140 km and with a capacity of 1,500 MVA between Turleenan 400/275 kV in Northern Ireland (UK) to Woodland 400/220 kV (IE) (onshore). 2.13.2.: A new 275 kV and partly 220 kV AC cross border circuit (OHL) of 196 km and with minimum capacities of 710 MVA and partly 431 MVA between Srananagh 220 kV station in Co. Sligo (IE) and Turleenan 400/275 kV station in Northern Ireland (UK) that will facilitate the integration of a planned wind generation of approximately 768 MW, which equates to 0.1 GW/1000km ² (onshore).	Electricity WEST
	5.1. Cluster of PCIs to allow bidirectional flows from Northern Ireland to Great Britain and Ireland and also from Ireland to United Kingdom consisting of: 5.1.1 Physical reverse flow at Moffat interconnection point (Ireland/United Kingdom) 5.1.2 Upgrade of the SNIP (Scotland to Northern Ireland) pipeline to accommodate physical reverse flow between Ballylumford and Twynholm 5.1.3 Development of the Islandmagee Underground Gas Storage (UGS) facility at Larne (Northern Ireland)	5.1.1: Physical reverse flow at the Moffat interconnection point, which is currently uni-directional, supporting forward flow only from UK to IE, the Isle of Man and Northern Ireland (onshore). The planned capacity is 38.5 GWh/d. 5.1.2: Upgrading of the Scotland to Northern Ireland pipeline to accommodate physical reverse flow between Ballylumford and Twynholm. The upgrade involves 3 components: install compression, reversal of a metering stream and flow control and removing upstream gas odourisation equipment and installing at a downstream point so that the gas in the pipeline will not be odourised in future. The planned capacity is 132 GWh/d. 5.1.3: New salt cavity gas storage Islandmagee UGS at Larne (UK). The project will provide a working as volume of 500 MCM/day allowing for a withdraw capacity of 22 MCM/day and	Gas WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
		an injection capacity of 12 MCM/day.	
	5.2. PCI Twinning of Southwest Scotland onshore system between Cluden and Brighthouse Bay (United Kingdom)	Reinforcing the 50 km single section of the SWSOS transmission system (onshore). The planned capacity is 375 GWh/d.	Gas WEST
	10.1. North Atlantic Green Zone Project (Ireland, UK / Northern Ireland): Lower wind curtailment by implementing communication infrastructure, enhance grid control and establishing (cross-border) protocols for Demand Side Management	A major cross border network infrastructure project delivering a 'smart grid'. This project comprising intelligent distribution networks with increased cross-border capability, overlaid with high speed communications, enabling operational excellence and leveraging the involvement of all users will be the blueprint for future network deployment on the island of Ireland, and across Europe.	Smart Grids
Neighbouring countries			
ALBANIA (AB)	6.21. PCI Ionian Adriatic Pipeline (Fieri (AB) – Split (HR))	New pipeline mainly onshore, but also partly offshore with a total length of 540 km (250 km in HR, 110 in ME, and 180 in AB) and with a daily capacity of 14 MCM/day.	Gas EAST
	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs: 7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)] 7.1.2 Gas compression station at Kipi (EL) 7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)] 7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)] 7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary	7.1.3.: New onshore and offshore pipeline between Greece/Turkey and Italy with a total length of 871 km (766 km onshore and 105 km offshore), with a normal daily capacity of 27.1 MCM/day and a maximum daily capacity of 30.1 MCM/day. Initial throughput capacity of 10 BCM/year. The power of the compressor station(s) is 90 MW.	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
BOSNIA AND HERZEGOVINA (BA)	3.5. Cluster Bosnia and Herzegovina - Croatia between Banja Luka and Lika including the following PCIs: 3.5.1. Interconnection between Banja Luka (BA) and Lika (HR) 3.5.2. Internal lines between Brinje, Lika, Velebit and Konjsko (HR)	3.5.1.: New 400 kV AC interconnection line (OHL) of 155 km (45 km in Croatia) and with a capacity of 1320 MVA between Banja Luka and Lika (onshore).	Electricity EAST
MONTENEGRO (ME)	3.19. Cluster Italy - Montenegro between Villanova and Lastva including the following PCIs: 3.19.1. Interconnection between Villanova (IT) and Lastva (ME) 3.19.2. Internal line between Fano and Teramo (IT) 3.19.3. Internal line between Foggia and Villanova (IT)	3.19.1.: New HVDC interconnection line with a capacity of 1000 MW between Italy and Montenegro via 375 km of 500 kV DC subsea cable and converter stations at both ending points in Villanova (IT) and Lastva (ME) (offshore).	Electricity EAST
NORWAY (NO)	1.8. PCI Germany - Norway interconnection between Wilster (DE) and Tonstad (NO) [currently known as the NORD.LINK project]	A new HVDC subsea cable of minimum 500 kV, approximately 520-600 km and with a capacity of 1400 MW between Southern Norway and Northern Germany (onshore and offshore).	Electricity Northern Seas Offshore Grid (NSOG)
	1.10. Cluster Norway – United Kingdom interconnection	A new HVDC interconnection with a capacity of 1400 MW between Norway and the United Kingdom.	Electricity Northern Seas Offshore Grid (NSOG)
SERBIA (RS)	3.22. Cluster Romania – Serbia between Resita and Pancevo including the following PCIs: 3.22.1 Interconnection between Resita (RO) and Pancevo (RS) 3.22.2 Internal line between Portile de Fier and Resita (RO) 3.22.3 Internal line between Resita and Timisoara / Sacalaz (RO) 3.22.4 Internal line between Arad and Timisoara / Sacalaz (RO)	3.22.1.: New 400 kV AC double circuit OHL with a length of 131 km (63 km on RO side and 68 km on RS side) and with a capacity of 2x1380 MVA between substations Resita and Pancevo (onshore).	Electricity EAST
	6.10. PCI Gas Interconnection Bulgaria – Serbia [currently known as IBS]	New onshore pipeline with a length of 150 km and a daily capacity of 4.93 MCM/day interconnecting Bulgarian and Serbian gas systems between Sofia (BG) and Nis (RS).	Gas EAST
SWITZERLAND (CH)	2.11. Cluster Germany – Austria - Switzerland capacity increase in Lake Constance area including the following PCIs:	2.11.1. (description refers to all projects in cluster): Construction of new 400 kV AC lines (OHL) and extension of existing ones on	Electricity WEST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>2.11.1. Interconnection between border area (DE), Meiningen (AT) and Rüthi (CH) 2.11.2. Internal line in the region of point Rommelsbach to Herbertingen, Herbertingen to Tiengen, point Wullenstetten to point Niederwangen (DE) and the border area DE-AT</p>	<p>approximately 380 km and with a total capacity of 3500 MVA (tbd), and erection of a 400/220/110kV-substation. Transmission routes include: Herbertingen - Tiengen, Herbertingen - Pkt. Rommelsbach, Herbertingen - Meiningen (AT) – Rüthi (CH), Pkt. Wullenstetten - Pkt. Niederwangen (onshore).</p>	
	<p>2.14. PCI Italy – Switzerland interconnection between Thusis/Sils (CH) and Verderio Inferiore (IT)</p>	<p>A +/- 400 kV HVDC cable interconnector of 150 km (of which 47 under Como lake) and with a capacity of 1000 MW (1100 MW continuous overload) between Verderio Inferiore, near Milano (IT) to Thusis, Graubunden Canton (CH) (onshore). Great part of the cables route will exploit a section of an existing oil pipeline, no longer in service since January 1997 and that crosses the Italian and Swiss border at Splügenpass and is running close by the two grid interconnection points of the Greenconnector project (Sils i.D. in Graubunden and Verderio Inferiore, Lecco).</p>	<p>Electricity WEST</p>
	<p>2.15. Cluster Italy – Switzerland capacity increase at IT/CH border including the following PCIs: 2.15.1. Interconnection between Airolo (CH) and Baggio (IT) 2.15.2. Upgrade of Magenta substation (IT) 2.15.3. Internal line between Pavia and Piacenza (IT) 2.15.4. Internal line between Tirano and Verderio (IT)</p>	<p>2.15.1., considered together with 2.15.2.: 2.15.1., 2.15.2: A new 400 kV DC/AC link (OHL) between Airolo, Bappanzeno and Baggio of about 160 km and with a capacity of over 2.000 MW/1500 MVA between Italy and Switzerland (onshore), including the following network items: - 400kV AC connection between Airolo (CH) and Pallanzeno (IT); - HVDC connection between Pallanzeno (IT) and Baggio (IT); - Reinforcement with new 400 kV section in Magenta substation (IT). 2.15.3.: New 400 kV AC double circuit (OHL) of 45 km and with a capacity of 1.500/3.000 MVA between 2 substations in Pavia and Piacenza area (onshore). 2.15.4.: New 140 km 400kV AC single circuit (OHL) with a capacity of 1500 MVA between Tirano and Verderio substations (onshore), connecting also the new 400 kV substations Grosio and Venina and including a wide HV network area restructuring program.</p>	<p>Electricity WEST</p>
	<p>5.11. PCI Reverse flow interconnection between Italy and Switzerland at Passo Gries interconnection point</p>	<p>Reverse flow at Passo Gries interconnection point on a pipeline section of 450 km between Italy and Switzerland, that will determine a daily capacity of 5 GWh in a first phase (from 1/1/2016) and that of 38 GWh in a second phase (from</p>	<p>Gas WEST</p>

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
TURKEY (TR)	<p>Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs:</p> <p>7.1.1. Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2. Gas compression station at Kipi (EL)</p> <p>7.1.3. Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4. Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5. Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	<p>1/1/2017). The power of the compressor station(s) is 95 MW.</p> <p>7.1.1.: TANAP: New onshore and offshore pipeline between the Eastern and Western borders of Turkey and crossing Anatolia with a length of 1900 km and an initial throughput capacity of 16 BCM/year.</p> <p>SCP-(F)X: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p> <p>TCP: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.</p>	Southern Gas Corridor (SGC)
	<p>7.2. PCI consisting of integrated, dedicated and scalable transport infrastructures and associated equipment for the transportation of a minimum of 8 bcm/a of new sources of gas from the Caspian Region (Azerbaijan and Turkmenistan) to Romania, including the following projects:</p> <p>7.2.1 Sub-marine gas pipeline in the Caspian Sea from Turkmenistan to Azerbaijan [currently known as the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.2.2 Upgrade of the pipeline between Azerbaijan and Turkey via Georgia [currently known as the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X)]</p> <p>7.2.3 Sub-marine pipeline linking Georgia with Romania</p>	<p>7.2.2.: SCP-(F)X: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p>	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	[currently known as "White Stream"] 7.4. Cluster of interconnections with Turkey, including the following PCIs: 7.4.1 Gas compression station at Kipi (EL) with a minimum capacity of 3bcm/a 7.4.2 Interconnector between Turkey and Bulgaria with a minimum capacity of 3 bcm/a [currently known as "ITB"]	7.4.2.: New onshore pipeline of up to 200 km (approx. 75 km Bulgarian section and approx. 130 km Turkish section) and with a daily capacity of 9-15 MCM/day in a first phase.	Southern Gas Corridor (SGC)
UKRAINE (UA)	9.1. PCI Adamowo-Brody pipeline: pipeline connecting the JSC Uktransnafta's Handling Site in Brody (Ukraine) and Adamowo Tank Farm (Poland)	A pipeline of 371 km length connecting the JSC Uktransnafta's Handling Site in Brody (UA) and Adamowo Tank Farm (PL) and with a maximum technical capacity of 10, 20 and 30 million tonnes per year respectively, depending on the three consecutive stages of project implementation.	Oil Supply Connections in Central Eastern Europe (OSC)
Other third countries			
ALGERIA (DZ)	5.20. PCI Gas Pipeline connecting Algeria to Italy (Sardinia) and France (Corsica) [currently known as Galsi & Cyréné pipelines]	New transcontinental gas pipeline project between Algeria to Italian via Sardinia island and Italian mainland. The project can be divided into 2 sections: international section (288 km offshore pipeline from Algeria to Sardinia) and a national section (overall 563 km pipeline of which: 285 km onshore pipeline crossing Sardinia + 275 km offshore pipeline from Sardinia to Tuscany + 3 km onshore pipeline in Tuscany). The capacity of the project is 8 x 10 ⁹ Sm ³ /year (equal to 7,6 BCM/year) and the power of the compressor station in Algeria (Kouthie Draouche) is of 3x33 MW and of that one in Sardinia (Olbia) of 2x26 MW. New pipeline of 300 km (220 km onshore and 100 km offshore) and with a daily capacity of 3.15 MCM/day that would plug Corsica to the Galsi project, laying an offshore pipeline between Sardinia and Corsica and building onshore connection to the two main cities of Corsica, Bastia and Ajaccio.	Gas WEST
AZERBAIJAN (AZ)	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic	7.1.1.: TANAP: New onshore and offshore pipeline between the Eastern and Western borders of Turkey and crossing Anatolia with a length of 1900 km and an initial throughput capacity of 16 BCM/year. SCP-(F)X: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	<p>capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p> <p>TCP: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.</p>	
	<p>7.2. PCI consisting of integrated, dedicated and scalable transport infrastructures and associated equipment for the transportation of a minimum of 8 bcm/a of new sources of gas from the Caspian Region (Azerbaijan and Turkmenistan) to Romania, including the following projects:</p> <p>7.2.1 Sub-marine gas pipeline in the Caspian Sea from Turkmenistan to Azerbaijan [currently known as the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.2.2 Upgrade of the pipeline between Azerbaijan and Turkey via Georgia [currently known as the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X)]</p> <p>7.2.3 Sub-marine pipeline linking Georgia with Romania [currently known as "White Stream"]</p>	<p>7.2.1.: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.</p> <p>7.2.2.: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p>	Southern Gas Corridor (SGC)
GEORGIA (GE)	<p>7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic</p>	<p>7.1.1.: TANAP: New onshore and offshore pipeline between the Eastern and Western borders of Turkey and crossing Anatolia with a length of 1900 km and an initial throughput capacity of 16 BCM/year.</p> <p>SCP-(F)X: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput</p>	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>Sea, and including one or more of the following PCIs:</p> <p>7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.1.2 Gas compression station at Kipi (EL)</p> <p>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)]</p> <p>7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)]</p> <p>7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary</p>	<p>capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p> <p>TCP: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.</p>	
	<p>7.2. PCI consisting of integrated, dedicated and scalable transport infrastructures and associated equipment for the transportation of a minimum of 8 bcm/a of new sources of gas from the Caspian Region (Azerbaijan and Turkmenistan) to Romania, including the following projects:</p> <p>7.2.1 Sub-marine gas pipeline in the Caspian Sea from Turkmenistan to Azerbaijan [currently known as the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.2.2 Upgrade of the pipeline between Azerbaijan and Turkey via Georgia [currently known as the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X)]</p> <p>7.2.3 Sub-marine pipeline linking Georgia with Romania [currently known as "White Stream"]</p>	<p>7.2.2.: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X).</p> <p>7.2.3.: Onshore and offshore pipeline from Georgia to Romania via the Black Sea with a total length of 1250 km (1115 offshore and 135 onshore) and with a daily capacity of 46 MCM/day. The power of the compressor station for 16 BCM/year is of 375 MW.</p>	Southern Gas Corridor (SGC)
ISRAEL (IL)	<p>3.10. Cluster Israel - Cyprus – Greece between Hadera and Attica region [currently known as the Euro Asia Interconnector] including the following PCIs:</p> <p>3.10.1. Interconnection between Hadera (IL) and Vasilikos (CY)</p> <p>3.10.2. Interconnection between Vasilikos (CY) and Korakia,</p>	<p>3.10.1. (description refers to all projects in cluster): The project consists of a 600 kV DC underwater electric cable and any essential equipment and/or installation for interconnecting the Cypriot, Israeli and the Greek transmission networks (offshore). The project will have a capacity of 2000 MW and a total length of around 820 nautical miles/around 1518 km (329 km between CY</p>	Electricity EAST

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	Crete (EL) 3.10.3. Internal line between Korakia, Crete and Attica region (EL)	and IL, 879 km between CY and Crete and 310 km between Crete and Athens) and allow for reverse transmission of electricity. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY. The dumping depth of the cable will exceed the 2000 m under the sea in some areas between IL and CY and will exceed the 2500 m under the sea in some areas between CY and EL.	
TURKMENIS TAN (TM)	7.1. Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Georgia and Turkey and ultimately reaching final EU markets through two possible routes: one crossing South-East Europe and reaching Austria, the other one reaching Italy through the Adriatic Sea, and including one or more of the following PCIs: 7.1.1 Gas pipeline from the EU to Turkmenistan via Turkey, Georgia, Azerbaijan and the Caspian [currently known as the combination of the "Trans Anatolia Natural Gas Pipeline" (TANAP), the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and the "Trans-Caspian Gas Pipeline" (TCP)] 7.1.2 Gas compression station at Kipi (EL) 7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as the "Trans-Adriatic Pipeline" (TAP)] 7.1.4 Gas pipeline from Greece to Italy via the Adriatic Sea [currently known as the "Interconnector Turkey-Greece-Italy" (ITGI)] 7.1.5 Gas pipeline from Bulgaria to Austria via Romania and Hungary	7.1.1.: TANAP: New onshore and offshore pipeline between the Eastern and Western borders of Turkey and crossing Anatolia with a length of 1900 km and an initial throughput capacity of 16 BCM/year. SCP-(F)X: Upgrade of the existing pipeline system between Azerbaijan and Turkey via Georgia system with throughput capacity upgrades of 16 BCM/year by 2018 (SCP-X) and 5 BCM/year by 2019 (SCP-(F)X). TCP: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.	Southern Gas Corridor (SGC)
	7.2. PCI consisting of integrated, dedicated and scalable transport infrastructures and associated equipment for the transportation of a minimum of 8 bcm/a of new sources of gas from the Caspian Region (Azerbaijan and Turkmenistan) to Romania, including the following projects: 7.2.1 Sub-marine gas pipeline in the Caspian Sea from	7.2.1.: Offshore pipeline in the Caspian sea with a length of 300 km and a capacity of 32 BCM/year will branch-off at a connection with the East-West pipeline in Turkmenistan or, for the first stage, from a collection point of offshore Caspian production/treatment in Turkmenistan. It will feed into Sangachal terminal/SCP-(F)X in Azerbaijan.	Southern Gas Corridor (SGC)

Country	Project of Common Interest/Cluster of PCIs	Description of PCI/s relevant for the country concerned	Priority corridor
	<p>Turkmenistan to Azerbaijan [currently known as the "Trans-Caspian Gas Pipeline" (TCP)]</p> <p>7.2.2 Upgrade of the pipeline between Azerbaijan and Turkey via Georgia [currently known as the "Expansion of the South-Caucasus Pipeline" (SCP-(F)X)]</p> <p>7.2.3 Sub-marine pipeline linking Georgia with Romania [currently known as "White Stream"]</p>		