I. Gas demand

There is currently no gas demand in Cyprus.\footnote{1}

The energy mix pattern continues to be dominated by oil and petroleum products, which represented 92.8\% of the gross energy consumption in 2015 – See graph.\footnote{2}

The contribution of renewable energy to the gross inland energy consumption has steadily increased over recent years and the renewables share has reached 6.4\% in 2015.

II. Gas supply

The Eastern Mediterranean Sea contains a cluster of proven gas fields that is under the control of Egypt, Israel and Cyprus.\footnote{3}

The Aphrodite gas reservoir is under the Cyprus Exclusive Economic Zone (EEZ), block 12, even though it seems the Cypriot share would represent a relatively modest potential. There are still discussions on the potential discovery of other gas sources. The bottom line for Cyprus is simply that it risks having exaggerated expectations. While there is the possibility of further discoveries in Cypriot territorial and EEZ waters, testing whether those aspirations can be turned into hard cash would require coherent development programs and, above all, drilling.\footnote{4}

\begin{itemize}
\item Cyprus has no demand for gas
\item The newly discovered Aphrodite gas reservoir is under the Cyprus exclusive economic zone (EEZ) and its production currently being developed with multiple partners
\item Exploration for other gas fields under the Cyprus EEZ is ongoing
\item Mega pipeline project (EastMed project) planned to connect Cyprus to European gas transmission system with risk to create a dependence on a new fossil fuel
\end{itemize}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{cyprus_gas_demand.png}
\caption{Energy mix in Cyprus 2015}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{cyprus_gas_supply.png}
\caption{Gas supply map of the Eastern Mediterranean}
\end{figure}

\footnotesize{\textsuperscript{1} http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_trends
\textsuperscript{3} http://www.naturalgaseurope.com/beware-false-hopes-in-east-med-28534
\textsuperscript{4} http://www.naturalgaseurope.com/beware-false-hopes-in-east-med-28534}
CEOs of Italy’s Eni and French Total confirmed their interest for further exploration in Cyprus EEZ. The Cypriot Government has approved British Gas Group (BG) as a partner in the offshore Aphrodite (block 12) gas field. Remaining partners in the field are Delek Group energy exploration and production units Avner Oil and Gas and Delek Drilling, which will each own 15%. Block 12 is believed to hold 3.6 trillion to six trillion cubic feet of fossil gas resources (~100-170 bcm).

Nonetheless, in August 2016, Cyprus signed a gas supply deal with Egypt, aiming at transporting Cypriot fossil gas from the Aphrodite gas field to Egypt from 2020/2022 onwards. The big question with regard to this particular case is: Is it the role of the EU to encourage the production of new gas sources at a time when 80% of fossil fuels resources should be kept in the ground to have a chance to stay below the 2°C temperature rise threshold?

III. Gas infrastructure

These offshore discoveries have unsurprisingly attracted interest from neighbouring EU countries, which has led to discussions around an important gas project that could transmit gas from the Aphrodite reservoir to the European gas system through Greece and to Italy (through the Poseidon pipeline project which is in the PCI list).

These discussions have sufficiently advanced to receive EU support, via the PCI list – See map. The project, called EastMed project, would therefore consist in a 1,900 km pipeline with an estimated capacity of 320-350 GWh/d (~11.5 bcm/y) and with the option to upgrade the capacity of the pipeline sections from Crete up to 510 GWh/d (~16 bcm/y), in case – and only in case - relevant reserves will be discovered in the offshore of Crete.

Furthermore, in August 2016, Cyprus signed a gas supply deal with Egypt, aiming at transporting the Cypriot fossil gas from the Aphrodite gas field rather to Egypt from 2020/2022 onwards.

The presence of this project in the PCI List is particularly unjustifiable after the ratification of the Paris Agreement and the widely accepted fact that 80% of fossil fuels reserves should stay in the ground to achieve the objective of the Agreement. This project heavily contributes to the promotion of gas extraction and to the extension of fossil fuel era while all efforts and limited financial capacity should instead go to renewables and efficiency measures. This project also supports the development of an industry in a country which has never consumed gas and which therefore does not currently have transmission systems. Developing transmission

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5 http://www.naturalgaseurope.com/cyprus-declares-third-offshore-round-28786
infrastructure therefore looks extremely cynical if it does not benefit to the country where the production occurs, but if it does and if Cyprus starts using a part of this future production, the project would have therefore contributed to create a new reliance on a fossil fuel at a time when new energy capacity installed should be strictly limited to renewable ones.

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