BiH relies heavily on coal fired TPPs to produce electricity, with brown coal and lignite representing some of the most important energy resources in the country. In addition to substantial coal reserves, the mining of coal in BiH remains a traditional sector which employs a large number of people in a country struggling with unemployment. These coal reserves, in combination with large-scale hydro-power, make BiH one of the few countries in South East Europe (SEE) with excess generation and export potential. Unfortunately, reliance on coal means that BiH's carbon intensity is one of the highest in the region, with coal accounting for 75% of the country's greenhouse gas emissions, concentrated in towns and cities close to thermal power plants. Given that BiH is a signatory to the Energy Community Treaty, coal cannot be exploited as a means of generating electricity without regard to the environmental obligations stemming from this membership.

Current and Future Production Capacity

With over 50% of the country's electricity being generated by TPPs, domestic coal remains the main source of electricity generation in BiH and the country's generating capacity could more than double in the future with the proper investment in infrastructure. TPPs in Tuzla and Kakanj, owned and operated by Elektroprivreda BiH and TPPs Gacko and Ugljevik owned and operated by Elektroprivreda RS represent the main TPP installations in BiH, with a total of nine functioning units and a total installed capacity of 1765 MW. All of these units were built before 1990 in order to supply electricity to the other republics of the former Yugoslavia. The governments of both entities of BiH have included in their list of economic development priorities the modernisation of existing TPP facilities and the construction of new TPPs to make use of the country's plentiful coal resources, while older plants lacking modern flue gas desulpherisation systems to reduce air pollution will have to be closed by 2030 in compliance with Energy Community requirements. The Stanari TPP in the RS, with a generating capacity of 300 MW, represents one such new development which, when commercially operational in 2016, will produce 2 million MWh of energy per year. The Stanari TPP will be fuelled by the Stanari coal mine which holds reserves of 100-million tonnes of lignite. The EPC contract for this TPP was signed between Serbian EFT Group and Dongfang Electric Corporation in 2010, and financial close with China Development Bank was concluded at the end of 2012. The construction of the Banovići TPP in the FBiH, with a generating capacity of 300 MW is also set to

commence in the near future. The project sponsor, RMU Banovići (Banovići Brown Coal Mines) selected four companies for the final round of a qualifying tender to finance and build the new TPP earlier this year, with construction scheduled to be completed in 2018. In terms of modernisation, the Japan International cooperation Agency is currently financing the supply, installation and commissioning of the flue gas desulpherisation system at the Ugljevik TPP. Without these measures to construct further based power generation facilities and to refurbish existing TPPs, BiH risks losing its comparative advantage in the regional electricity market.

Thermal Power and the Energy Community

Given BiHs's membership in the Energy Community and potential future EU membership, any discussion of the exploitation of coal resources in the country to generate electricity must take place in the context of BIH's environmental obligations under the Energy Community Treaty. Among its principle goals, the Energy Community Treaty seeks to reduce the environmental situation of electricity generations in countries that are a party to the treaty. Upon signing, BiH committed itself to implementing core aspects of the EU acquis communautaire (EU laws), strengthening the country's energy sector regulatory framework, and liberalising its energy market in line with the acquis under the treaty. While the Energy Community Treaty specifically states that the treaty shall not "affect the rights of a Party to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply" , the exploitation of such resources must take place in an environmentally sensitive manner. BiH is required to implement the acquis communautaire on environment in accordance with a specific timetable set out in Annex II of the treaty (Article 12). Annex II provides for the following timetable for implementation of the acquis on environment:

The acquis communautaire on the environment for the purpose of the Energy Community Treaty was subsequently amended to also include certain provisions of Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (the "Industrial Emissions Directive") (only Chapter III, Annex V, and Article 72(3)-(4)) by a decision of the Ministerial Council of the Energy Community (the "Decision").57 The Industrial Emissions Directive essentially brings together six other directives, including the Large Combustion Plants Directive, in order to lay down a single directive on integrated prevention and control of pollution created from industrial activities. Chapter III, Annex V, and Article 72(3)-(4) of the Industrial Emissions Directive are applicable to "new" plants built in Energy Community countries from 1 January 2018 onwards. With respect to "existing plants", BiH is expected to achieve significant emissions

reductions, in accordance with the Large Combustion Plants Directive, from 1 January 2018 onwards at the latest. However, the terms “new” and “existing” plant are not defined in the Decision of the Energy Community Secretariat, leading to uncertainty as to which plants are subject to the emissions control mechanisms provided for under Chapter III, Annex V, and Article 72(3)-(4) of the Industrial Emissions Directive.

In response to this uncertainty, the Energy Community Secretariat issued a policy statement on how these terms should be applied to large combustion plants in countries which are party to the Energy Community Treaty (“Policy Guidelines”).58 Although the interpretation of these terms by the Energy Community Secretariat is not legally binding (the Ministerial Council is the only institution that has the mandate to provide guidance in interpreting the provisions of the Energy Community Treaty and the related acquis communautaire), in the absence of a formal interpretation, the Policy Guidelines should be relied upon by governments, companies and technical advisors in determining their obligations with respect to industrial emissions.

In considering several possible interpretations of “new” and “existing” plants, the Policy Guidelines conclude that the date that a permit is granted for the construction of a combustion plant should determine whether a plant is “new” or “existing” for the purpose of Directive 2010/75/EU. As the Policy Guidelines state: “combustion plants that have been granted a permit before 1 January 2018, or the operators of which have submitted a complete application for a permit before that date (provided that such plants are put into operation no later than 1 January 2019), should be considered as existing plants under Article 1(2) of Ministerial Council Decision 2013/06MC-EnC. All other plants should be considered as new plants under Article 1(2) of Ministerial Council Decision D.2013/06/MC-EnC”.

The Policy Guidelines go on to define a “permit” as “a written authorisation to operate all or part of an installation or combustion plant (…)”. The meaning of the term “permit” also had to be further clarified due to the significant differences between the permitting practices of EU Members States and Energy Community parties, as well as between Energy Community countries. While it is common practice in EU Member States to issue an integrated permit for large combustion plants and other such projects, this practice does not exist in BiH and other Energy Community countries, where the permitting processes are not streamlined (i.e. developers are required to obtain an environmental permit, water permit, construction permit, etc. separately). Taking this into consideration, the Secretariat concluded that a “permit” should be understood as the final decision issued by the authorities which allows a combustion plant to operate.

It can be concluded from the Policy Guidelines that TPPs which are granted final authorisation to operate by the relevant authorities before 1 January 2018, should be considered as “existing plants” for the purposes of the Decision and are not under an obligation to implement the Industrial Emissions Directive by 31 December 2017. Any new plants which receive final authorisation
to operate on or after 1 January 2018 are expected to comply fully with Chapter III, Annex V, and Article 72(3)-(4) of the Industrial Emissions Directive. Meanwhile, existing TPPs in BiH are required to achieve significant emissions reductions in accordance with the Large Combustion Plants Directive, by complying with one of the following two options recently clarified by the Energy Community Secretariat:
Compliance with emission values set out in the
Large Combustion Plants Directive from 1 January 2018 onwards, through the retrofitting and modernisation of individual TPPs individually; or
Implementation of a national emission reduction plan (“NERP”) providing for the gradual reduction of large combustion plant emissions to the emission ceilings provided for the Industrial Emissions Directive, to be applied between 1 January 2018 and 31 December 2027.
At the latest Energy Community Task force on Environment Meeting held in Brussels on 3 June 2015, attending representatives from the FBiH said that they were in the process of amending their Rulebook on Emission Limit Values in order to meet the relevant requirements of the Industrial Emissions Directive, but that the cut-off date for implementation of the directive with respect to existing plants should be clearly defined, while the Industrial Emissions Directive has only partially been implemented in the RS. It was also reported that a NERP for BiH is being drafted by the USAID Energy Investment Activity Project, which will include two separate emission reduction plants for Elektroprivreda BiH and Elektroprivreda RS. Whether these commitments are fulfilled will depend on the ability of policy makers in BiH to consider thermal power’s long-term potential and impacts, rather than short-term economic gains.
According to the international legal principle of common but differentiated responsibility, BiH has the right to increase its carbon emissions to secure its economic development. Given the country’s vast coal reserves, and its position in the regional market as an electricity exporter, there is little doubt that BiH will continue to encourage investment in the construction of TPPs. However, because the country’s greenhouse gas emissions per unit of GDP are high (currently almost four times higher than in the EU), the development of new TPPs using the most modern technologies available for reducing carbon emissions

should be expected, not only to fulfil the country's obligations under the Energy Community Treaty, but in consideration of BiH's future goal of accession. The Energy Community Secretariat concludes in its Policy Guidelines that the long-term ramifications of new projects being planned and developed should be strictly considered and that such projects may fall short of emission compliance requirements in January 2018 if the best available technologies for emissions control are not applied. These are important considerations for developers and regulators to bear in mind.