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## Chinese-financed coal projects in Europe

*A real and immediate threat to the EU's decarbonisation efforts*



*Kostolac B, Serbia, with desulphurisation installation built by China's CMEC. Photo: Marius Besu*

### 1. Context

With seven EU member states now coal-free<sup>1</sup> and 14 more planning to end electricity generation from coal by 2030, the coal phase out in the EU is well underway. 2018 saw several plant closures and announcements, while the European Union has stepped up its commitment to climate change mitigation and has set out a path to reach net zero greenhouse gas emissions by 2050.

In March this year, the European Commission in its [Strategic Outlook in EU-China relations](#) underlined that: "...China is constructing coal-fired power stations in many countries; this undermines the global goals of the Paris Agreement."<sup>2</sup>

In its Vision and Actions on the Belt and Road Initiative announced in 2015, China has made it clear that for investment in infrastructure, "efforts should be made to promote green and low-carbon infrastructure construction and operation management, taking into full account the impact of climate change on the construction".<sup>3</sup>

<sup>1</sup> Belgium, Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta.

<sup>2</sup> [European Commission and HR/VP contribution to the European Council EU-China – A strategic outlook](#), 12 March 2019

<sup>3</sup> [China State Council statement at UN Business and Human Rights Forum in Geneva](#), November 27, 2019

Yet not only does China's support for coal plants in Southeast Europe contradict global climate imperatives, but as explained below, individual plants are running afoul of EU legislation on procurement, State aid and environment as well. This contravenes China's commitment to, and support for, the [UN's 2018 recommendation to China](#) that all infrastructure projects outside its territory should be in line with applicable national and international law.

## 2. Overview of China-supported coal projects in Southeast Europe

EU member state Romania and three EU enlargement countries - Bosnia and Herzegovina, Kosovo and Serbia - plan to build new lignite power plants. These plans starkly conflict with the Paris Agreement's aim of limiting climate change to 1.5°C<sup>4</sup> but readily available Chinese money is enabling the plants in Romania, Bosnia and Herzegovina and Serbia to go ahead.<sup>5</sup>

As the international financial institutions have phased out direct coal financing, most of the plants are slated for policy-driven loans from the Export and Import Bank of China (China Eximbank) or other Chinese policy banks like China Development Bank (CDB) and the Industrial and Commercial Bank of China (ICBC). **Up to 3.1 GW of coal plants may be built in southeast Europe with Chinese financial support.**

The **three financing deals signed so far** by Chinese banks for new lignite power plants in the region are for Stanari (CDB, June 2012, already built), Kostolac B3 (China Eximbank, December 2014) and Tuzla 7 (China Eximbank, November 2017), but at least six more plants have been subject to Memoranda of Understanding between Chinese companies and Southeast European Governments.

Increasingly, the signing of large scale energy infrastructure projects including coal-fired power stations involving Chinese power generation companies and loans from Chinese banks have been signed at the annual **China and Central and Eastern European Countries (CEEC)** cooperation platform. **The platform, known as "17+1" with Greece's entry - and formerly called "16+1" - was initiated and led by China's Ministry of Foreign Affairs.** Serbia's **Kostolac B3**, and **Bosnia and Herzegovina's Tuzla 7 and Kamengrad** coal-fired power units were among the bilateral MoUs signed between China and the governments of EU enlargement countries at previous "16+1" meetings.

**All the Western Balkan projects exhibit breaches of EU legislation** on environment, state aid and/or procurement and they will also **lock EU accession countries into several decades of harmful and increasingly expensive coal use.**

Nevertheless, apart from Stanari in Bosnia-Herzegovina, which started operating in 2016, **all the new coal plants are delayed. It is not too late to stop them.**

Those still planning new coal plants would do well to learn from **Greece's painful experience with the Ptolemaida V plant.** For years, Greece pushed ahead with this new unit, but finally this September, when the plant was already at a very advanced stage of construction, Greece's Prime Minister announced that [Greece will phase out coal electricity generation by 2028](#), leaving the future of the plant uncertain.

<sup>4</sup> Alexander Pfeiffer, Richard Millar, Cameron Hepburn, Eric Beinhocker: [The '2°C capital stock' for electricity generation: Committed cumulative carbon emissions from the electricity generation sector and the transition to a green economy](#), Received 11 September 2015, Revised 16 February 2016, Accepted 18 February 2016, Available online 24 March 2016; Oil Change International et al: [The Sky's Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Production](#), September 2016.

<sup>5</sup> Financing for the Kosovo e Re plant has not been confirmed by any bank but has been requested from the US's Overseas Private Investment Corporation (OPIC) and several export credit agencies. Chinese financing is unlikely as China has not recognised Kosovo.

This same announcement put an end to Greece's plans to build another new coal plant - **Meliti II**. In September 2016, the Greek public power corporation PPC signed a [Memorandum of Understanding](#) with the China Machinery and Engineering Corporation (CMEC) - the same company involved in Kostolac B in Serbia – for the construction of a second unit at the Meliti power station near Florina. But with a coal phase-out by 2028, the plant no longer looks likely to go ahead.

Chinese companies are also active in installing pollution control equipment in existing coal plants, notably at **Kostolac B** in Serbia. In 2016 this plant was [the largest sulphur dioxide polluter in Europe](#),<sup>6</sup> and China Machinery and Engineering Corporation (CMEC) built a desulphurisation (De-SOx) unit that was [officially opened](#) in July 2017. However, in 2018, the plant's emissions remained almost as high as in 2016.<sup>7</sup> It is not exactly clear what the problem is, but the fact that the De-Sox has yet to start operating more than two years after its official opening raises questions about the quality of the technology used. CMEC is now building a new unit at the same site.

### 3. Chinese-financed coal projects in Southeast Europe

#### KOSTOLAC B3 LIGNITE POWER PLANT, 350 MW, SERBIA



*The Drmno mine that feeds the Kostolac B power plant, Serbia.*

#### Key issues:

- No tender conducted for the main contractor

<sup>6</sup> Defined here as the European Union and Western Balkans.

<sup>7</sup> For more information, see CEE Bankwatch Network: Comply or Close: How Western Balkan coal plants breach air pollution laws and what governments must do about it, December 2019.

- Non-compliant with current EU pollution limits, known as the 2017 LCP BREF<sup>8</sup>
- Lignite mine expansion without an environmental impact assessment<sup>9</sup>
- Economically unfeasible even with a CO<sub>2</sub> price of EUR 5.79 per tonne<sup>10</sup>. The current CO<sub>2</sub> price is four times higher.
- Arbitration on the project to be conducted under Chinese rules.

The construction of the Kostolac B3 plant is the second phase of a deal between Serbia's state-owned electricity company EPS and the [China Machinery Engineering Corporation \(CMEC\)](#) related to the Kostolac B plant in north-east Serbia. The first phase, as outlined above, consisted of building a De-Sox unit for the existing units B1 and B2, which in spite of being officially opened in July 2017, still is not operational.

In response to an enquiry from Serbian NGO the [Center for Ecology and Sustainable Development \(CEKOR\)](#), the Environmental Inspectorate stated on 01.03.2018 that the de-SOx installation was not operating during the winter months. It added that the planned landfill for the gypsum - a by-product of de-SOx - had not been completed. Yet it is hard to believe that the lack of gypsum landfill is the only reason that the De-Sox is not operating. The investment raises a plethora of questions that urgently need to be answered.

Meanwhile, in November 2013, [an Engineering, Procurement and Construction \(EPC\) contract was signed with CMEC](#) to build the new unit Kostolac B3. No tender procedure took place. Instead, the Chinese and Serbian governments signed an intergovernmental agreement freeing joint projects from tender obligations<sup>11</sup> – a move which would not be allowed under EU law.

A USD 608 million concessional loan contract was [signed with China Eximbank](#) in December 2014. In early 2015 it was ratified by the Serbian parliament in an extraordinary session announced to the public less than 24 hours in advance. The contract contains several problematic provisions, e.g. any arbitration will take place in Beijing.

The Serbian government took the loan on behalf of state company EPS, raising issues of compliance with its state aid obligations under the [Energy Community Treaty](#).

The environmental impact assessment process had to be repeated after the original approval expired and the [Espoo Convention Implementation Committee](#) criticised Serbia for failure to assess the transboundary environmental effects of the plant. A new environmental assessment was carried out in 2017 and the study was approved on 28 September.

Just weeks later, on 20 November – a few days before the China-Central & Eastern Europe summit in Budapest - it was suddenly announced that construction of Kostolac B3 was starting. Surprised, [CEKOR](#) requested the building permit. However, the only document disclosed was a permit for the B3 chimney, not for the whole plant. And it is dated July 2017, before the environmental assessment was even completed. A construction permit for the main part of the plant was [issued only in April 2019](#), a year and a half after work officially began.

<sup>8</sup> [Best available techniques reference document for large combustion plants](#), 2017

<sup>9</sup> <https://www.energy-community.org/legal/cases/2018/case0918RS.html>

<sup>10</sup> <https://bankwatch.org/wp-content/uploads/2017/03/briefing-Balkans-CO2-29Mar2017.pdf> page 11.

<sup>11</sup> On 20 August 2009 the Serbian government signed a Memorandum of Understanding with the Chinese government on economic and technical co-operation in the field of infrastructure. Annex 2 to the 2009 agreement was signed on 26 August 2013. This annex includes a clause in Article 5 that (our translation): Agreements, contracts, programmes and projects carried out in accordance with Article 4 of the Agreement on the territory of the Republic of Serbia do not carry an obligation to publish a public tender for carrying out investment works and delivery of goods and services, except if it is otherwise specified in the commercial contract from paragraph 4 of this Article.”



To add to the legal issues, the expansion of the captive Drmno opencast mine was in 2013 exempted from undertaking an EIA process,<sup>12</sup> a decision which appears to conflict with Serbian legislation as well as the EIA Directive under the Energy Community Treaty. The Decision is currently subject to an [investigation by the Energy Community Secretariat](#).

In 2017, the EU updated its industrial emissions rules (the so-called LCP BREF), which Kostolac B3 will be obliged to abide by upon Serbia's entry into the EU, if not before. However, the air emissions limits in the Kostolac B3 environmental assessment are not in line with the new standards. As an EU accession country, Serbia needs to make sure that any new plant is in line with these standards or it risks being landed with expensive retrofit costs later on.

The plant's contribution to Serbia's energy security is also doubtful, as the Drmno mine suffered serious flooding in 2014. As well as having to mount a huge effort to save the mine during the May floods, [between July and September more than 2 million m<sup>3</sup> of water spilled into the mine](#), bringing with it around 800 000 m<sup>3</sup> of sludge and mud, and engulfing mining machinery in mud.

## STANARI LIGNITE POWER PLANT, 300 MW, REPUBLIKA SRPSKA, BOSNIA-HERZEGOVINA



*The Stanari coal mine*

### Key issues:

- Open Espoo Convention investigation due to BIH's failure to notify neighbouring countries about potential transboundary pollution
- Out of line with recent EU pollution standards
- Growing community discontent regarding the lignite mine's operation and expansion, which has exacerbated floods in the nearby settlement.<sup>13</sup>

The Stanari power plant project was initiated by [Energy Financing Team](#) (EFT) and financed by the state-owned China Development Bank (CDB). Construction, carried out by Dongfang Electric Corporation, started in 2013 and the plant started commercial operations in September 2016. Due to its use of a dry cooling system, the plant's net efficiency level is only around 34.1 percent, compared to 36.5-40 percent required by the [EU best available techniques standard](#).

<sup>12</sup> Ministry of Energy, Development and Environmental Protection of the Republic of Serbia: Decision no.353-02-901/2013-05, dated 26.07.2013.

<sup>13</sup> <https://www.facebook.com/CentarZaZivotnuSredinu/videos/365457984251676/>

Originally the plant's environmental permit allowed air pollution from the plant to be 2-3 times as high as allowed by the EU Large Combustion Plants Directive. Only after a [complaint to the Energy Community](#) dispute settlement mechanism was submitted by environmental group Center for Environment from Banja Luka in January 2014, [was the permit reviewed](#). Since the plant was permitted, the Energy Community's rules have changed to require the application of the stricter Industrial Emissions Directive for plants entering operation after 2019, rendering Stanari out of step before it even entered operation.

Stanari is currently under examination by the Espoo Convention due to BIH's failure to notify neighbouring Croatia and Serbia about the plant's potential transboundary impacts.

In May 2017 media [reported](#) that Croatia's HEP is considering buying the Stanari power plant from EFT, [or a 50% share in it](#), raising questions about its profitability. No further information has become available since then.

## TUZLA 7, 450 MW, FEDERATION OF BIH, BOSNIA-HERZEGOVINA



*Tuzla ash disposal site and power plant in the background, photo capture:*  
<https://www.facebook.com/CentarZaZivotnuSredinu/videos/551026885345677/>

### Key issues:

- Ongoing Energy Community State aid infringement procedure regarding the loan guarantee.<sup>14</sup>
- Open Espoo Convention investigation due to BIH's failure to notify neighbouring countries about potential transboundary pollution.
- Deficient and outdated environmental assessment being challenged in court.

<sup>14</sup> <https://www.energy-community.org/news/Energy-Community-News/2019/03/26.html>

- Plant not designed to be in line with the new EU LCP BREF pollution control standards.
- CO<sub>2</sub> prices barely taken into account and coal prices unrealistically low in the feasibility study.
- No location confirmed for a new ash landfill after Šićki Brod residents successfully resisted the proposed site.

In August 2014, publicly-owned electricity company Elektroprivreda Bosne and Hercegovine (EPBiH) signed a construction contract with China Gezhouba Group and Guangdong Electric Power Design - subsidiaries of China Energy Engineering Corporation - for the construction of a new unit at Tuzla, after Japan's Hitachi - also shortlisted - dropped out of the project partly due to its poor economics.

The price tag for construction at the time was EUR 785.7 million, but it was later admitted that the project was not economically feasible in this form. The current construction cost of the plant is EUR 722 million, but it is unclear what compromises have been made to lower the cost.

A feasibility analysis, by the Banja Luka-based Institute for Construction,<sup>15</sup> assumes that Tuzla 7 will have to start paying a carbon price only in 2034 and that it will only be EUR 7.1 per tonne, rising to EUR 12.12 per tonne in 2061. Considering the ETS price is over EUR 25 per tonne at the time of writing, this leads to a serious underestimate of the plant's generation costs.

The assessment assumes annual CO<sub>2</sub> costs of EUR 2.7 million in 2034, rising to EUR 31.4 million in 2061. Yet even at 20 EUR/tonne, the annual cost would be EUR 51.87 million.

Moreover, the projected price at which coal would be sold by Elektroprivreda BiH's mines to the Tuzla 7 plant is EUR 21.87/tonne. This is lower than 2013-2016 production price.

Additionally, in this period the coal production price was higher than the sales price, while the Government granted State aid to the mines to pay off unpaid social contributions.<sup>16</sup> If the coal sales price covered the costs of production, it would have to increase.

Both of these issues would significantly increase the cost of generation from the projected EUR 42.45/MWh. This raises the risk of the plant becoming a stranded asset. Given that EPBiH is state-owned, it is the public purse that will pay if the project is unprofitable.

Tuzla 7 obtained a new environmental permit in July 2016 as the original one from 2009 expired in November 2015. The permit is being challenged in court by Ekotim, due to procedural irregularities and deficiencies in the permit. After Sarajevo Cantonal Court dismissed the case on the spurious grounds that an organisation based in Sarajevo cannot challenge the environmental permit for a project in Tuzla, the case has been taken to the Supreme Court of the Federation of Bosnia and Herzegovina.

In addition, local people from the village of Šićki Brod have successfully resisted the construction of the ash landfill for the new plant, leaving the new plant without anywhere to put its waste.

On 27 November 2017 at the China-led 16+1 summit between China and 16 Central and Eastern European nations, a surprise signing of a China Eximbank loan contract for Tuzla 7 took place.

On 1 April 2019, the Federation of BiH parliament approved a guarantee for the planned loan from China Eximbank, which brought the case strong criticism from the European Commissioner for Enlargement<sup>17</sup> as well as

<sup>15</sup> Ocjena kritičnih varijabli studije izvodljivosti bloka 7, TE Tuzla, Institut za građevinarstvo „IG“, d.o.o, Banja Luka, 2018. - Assessment of the Critical Variables of the Feasibility Study for Unit 7 of the Tuzla power plant

<sup>16</sup> [https://bankwatch.org/wp-content/uploads/2015/06/EnCom-state-aid-cases-08Jun2015\\_0.pdf](https://bankwatch.org/wp-content/uploads/2015/06/EnCom-state-aid-cases-08Jun2015_0.pdf)

<sup>17</sup> <http://ba.n1info.com/English/NEWS/a321510/Johannes-Hahn-concerned-about-Block-7-loan-from-China-Exim-Bank.html>

an infringement case opened by the Energy Community for failure to comply with EU state aid legislation, transposed through the Energy Community Treaty.

Like Kostolac B3, Tuzla 7 is not designed to be in line with the new EU LCP BREF pollution control standards. In November 2013, the Center for Ecology and Energy from Tuzla launched a report on the health impacts of existing and planned coal thermal power plants in the Tuzla area. Using WHO methodology, the study found that coal plants around Tuzla, including Tuzla 7 and the planned unit at Banovići, are expected to cause total health-related economic costs of EUR 810 million and the loss of 39,000 life-years in the period 2015-2030.

#### 4. Potential Chinese coal projects in Southeast Europe

##### BANOVIĆI, 350 MW, FEDERATION OF BIH, BOSNIA-HERZEGOVINA

###### Key issues:

- EIA permit challenged in court
- Open Espoo Convention investigation due to BIH's failure to notify neighbouring countries about the plant's potential transboundary impacts
- No assessment of joint impacts of Tuzla 7 and Banovići plants
- Concerns about water supply

A new plant at the Banovići mine near Tuzla is planned by the predominantly state-owned RMU Banovići (Banovići Brown Coal Mines). On 24.11.2015 an [EPC contract was signed](#) with Dongfang. Financing is expected from the Industrial and Commercial Bank of China (ICBC) but has not been signed yet.

There is a serious lack of energy planning and coordination between Tuzla 7 and Banovići. It is very unlikely that two plants just a few kilometres from one another can both be feasible, but they are being developed in parallel, each as if the other did not exist.

The capacity of the Banovići plant was changed during the tender process from 300 MW to 350 MW, which as well as being questionable from the procurement perspective, meant that a new environmental impact assessment had to be carried out in 2015.

A new environmental permit was issued on 11 January 2016 but the Ministry for the Environment and Tourism failed to notify even those who had taken part in the consultation process. It was nearly two months before NGO Ekotim was able to obtain the permit. Ekotim is challenging the permit in court due to deficiencies in the procedure, the EIA study and the permit.

Another issue of concern with the planned plant is water use. A new reservoir is planned at Ramići that would be used to cool the coal plant, however filling the reservoir during drier periods may be in direct competition with filling Lake Modrac, which is used for drinking water for Tuzla and for cooling the Tuzla power plant. A further concern is that only an earth dam is planned to keep the reservoir in place, which may not be enough in times of heavy rainfall. It may pose a danger to communities downstream. As these weaknesses were not addressed in the environmental permit for the reservoir, it too is now being challenged in court by Ekotim.

Both Tuzla 7 and Banovići are generally backed by the Federal government. However in December 2017 the Federal Ministry for Spatial Planning denied RMU Banovići a construction permit for the plant. Key issues such as



water supply, coal supply, wastewater, flue gases and disposal had not been resolved, and the Ministry concluded that the project is not in line with the Tuzla Canton spatial plan. Officially, the project is moving forward, but it remains to be seen whether the plant goes ahead.

## KAMENGRAD, 2 X 215 MW, FEDERATION OF BIH, BOSNIA-HERZEGOVINA

After years of vague plans for this project, a Memorandum of Understanding [was signed](#) at the “16+1” China-CEE summit in Budapest on 27 November 2017 between China Energy Engineering Corporation (CEEC), Lager Group of Bosnia-Herzegovina, and the Federation of BiH government. The plant would be built at a site where there is a coal mine but no existing power plant.

Chinese state media [reported](#) in late 2017 that once an agreement is reached with its Bosnian counterparts, CEEC would provide the bulk of the financing for the construction of the green field coal plant and would source the coal from the existing coal mine. CEEC's deputy CEO claimed all talks were on track in the interview.

At a public debate on the adoption of the Una-Sana Canton spatial plan in August 2018, citizens and the local council of Sanski Most (the nearest city) demanded the removal of the power plant project from the plan. This was carried out, although the plan has not yet been adopted. In November 2019, another presentation of the Kamengrad coal power plant project appeared on the agenda of the Sanski Most Municipal Council. However, the meeting was [cancelled](#) after public pressure.

Lobbying for the construction of the plant continues, but there may be further barriers ahead. Lager Group obtained the concession for the coal mine after it was declared bankrupt, but this process is now [under investigation](#) by the Una-Sana Cantonal Prosecutor.



*Kamengrad lignite mine*

## UGLJEVIK III LIGNITE POWER PLANT, 2 X 300 MW, REPUBLIKA SRPSKA, BOSNIA-HERZEGOVINA

### Key issues:

- Environmental assessment invalid after successful NGO complaint to the Energy Community
- Low net efficiency (34.1 percent)
- Open Espoo Convention investigation due to BiH's failure to notify neighbouring countries about potential transboundary pollution

Ugljevik III was promoted by Russian billionaire Rashid Sardarov's Comsar Energy. Comsar reported in 2013 that it had signed a construction contract with China's China Power Engineering and Consulting Group Corporation (CPECC). However in 2017 it was [reported](#) that negotiations with the company failed and no new contract has been signed.

Before the 2014 elections in BiH there was a flurry of activity, with the Republika Srpska government declaring it a project of public interest and issuing a partial construction permit, but since then there has been little progress.

In mid-2017 the Supreme Court of Republika Srpska cancelled the project's environmental permit. However, the Ministry of Spatial Planning, Construction and Ecology responded by issuing another permit without repeating the environmental assessment. This new permit was challenged in court by the Center for Environment.

An [analysis](#) published by the [Center for Environment](#) also shows that the environmental assessment lacked key data and that the expected SO<sub>2</sub>, NO<sub>x</sub> and dust emissions are false. After a formal complaint was submitted to the Energy Community, in August 2017 a dispute settlement case was opened on the issue. In November 2018 the Bosnia-Herzegovina authorities [agreed not to use the environmental assessment](#) for the project, meaning that the whole process would have to be repeated if the project goes ahead.

In August 2018, local media reported that [Comsar was threatening to give up the project](#) unless an extension of the concession from 30 to 45 years was granted, together with a reduction of the capacity from 600 MW to 350 MW, because the plant would otherwise be unprofitable.

In June 2019 it was reported that [Republika Srpska's state-owned electricity company, Elektroprivreda Republike Srpske \(ERS\), plans to buy off Comsar Energy's concession](#) for Ugljevik III. The likely cost has been cited at around EUR 90 million. Quite why ERS would buy off the concession rather than the government simply annulling it is far from clear.

## GACKO II LIGNITE POWER PLANT, 350 MW, REPUBLIKA SRPSKA, BOSNIA-HERZEGOVINA

### Key issues:

- unrealistically low CO<sub>2</sub> price included in the feasibility study
- underestimation of coal sale price
- unreferenced assumption that electricity produced in Gacko would be exported

In 2016, China Machinery Engineering Corporation reported to its Board and in its Corporate Social Responsibility report the signing of a Memorandum of Understanding on the Gacko II coal-fired power station with the Ministry of Energy of the Republic of Srpska and China's own Poly Group for the construction of a 300 MW unit.<sup>18</sup>

<sup>18</sup> CMEC Corporate Social Responsibility report, 2016.

After several other Chinese companies had expressed interest in the project as well, in December 2017 a “general contract” was signed with CMEC and Emerging Markets Power Fund. However, there is no sign of a tender having taken place so it is not clear what the exact nature of the document is. At the signing, Minister of Energy Industry and Mining Petar Đokić stated that another agreement would soon be signed to form a project company. If so, this would be highly unusual in a region where Chinese involvement in coal plants was so far limited to construction contracts. The plant would be built at the site of the existing plant in Gacko but no environmental impact assessment has been undertaken yet.



*Gacko power plant*

Gacko II's feasibility study is highly questionable for three main reasons:

- EUR 18/tonne is mentioned in the study as a realistic coal price – yet the amount used in the calculation is much lower, around EUR 13.3/tonne.
- It foresees export of all the electricity generated, at a price of EUR 50/MWh, except in exceptional cases when 30% would be sold on the domestic market at EUR 19.90/MWh. There is no evidence that the electricity would find a market and that it could be sold at this price – which is higher than the real export price in recent years. Moreover, the scenario including 30% of electricity being sold domestically is not even examined in the calculation – if it was it would show that the plant is unprofitable.
- A CO<sub>2</sub> price of EUR 5/tonne is mentioned in the text, but not included in the calculation. Even this very low CO<sub>2</sub> price would take the plant into the realm of unprofitability.

## ROVINARI LIGNITE POWER PLANT, 600 MW, ROMANIA

Talks of plans for a new unit at Rovinari involving the China Huadian Engineering company have been going on for several years but the project has not received any significant permits. In early November 2014, a [new joint venture company was set up](#) between Huadian and Oltenia Energy Complex (CEO).

The project had been at a standstill for years, until it was included on the list of priority investments in the Energy Strategy for 2016-2030. The Strategy estimated the cost of the project at approximately EUR 1 billion. Since then, several rounds of negotiations have taken place between Chinese delegations, the Romanian Ministry of Energy and the energy utility, Oltenia Energy Complex (OEC).

The planned supercritical unit would have several issues, including:

- Economics: [The project would likely have difficulties in meeting the project's debt service requirements](#) as the organic cash flow generation would be limited and not sufficient under current energy market prices.
- Environmental concerns: EU Directive 2011/92/EU on environmental impact assessment makes licensing coal plants more complicated than before, as the project's impact on climate and the vulnerability of the project to climate change must be explicitly considered in the environmental impact assessment.

Under the current EU Emissions Trading Scheme, the [evolution of CO<sub>2</sub> prices](#) will be key for the viability of the project. Coal fired units are usually the single largest CO<sub>2</sub> emitters in any given country. This is no different in this case. The strong increase in prices over the last two years would significantly reduce the financial viability of the new Rovinari unit.

## 5. Are Chinese actor taking an interest in renewable energy in Southeast Europe?

China's state-owned enterprises (SOEs) specialising in construction and power generation have expressed interest in a number of other energy projects in the region. Chinese representatives have emphasised that the country is also ready to invest in wind and solar but that the governments are generally not coming forward with such projects.

However, there have been some concrete steps forward in this field. In November 2019 the [Možura wind power plant](#) was officially opened in Montenegro, built by a consortium that included the Shanghai Electric Power Company.

At the 2017 China-CEE summit in Budapest on 27 November 2017, an EPC contract with a 15-year maintenance agreement for the [48 MW Kupres 1 wind park](#) was signed. In Croatia, Chinese company Norinco International Cooperation Ltd has also [bought a share in a 156 MW wind farm project](#) near Senj.

## 7. Who pays, who gains?

The region's companies and governments have ambitious plans, but it remains to be seen how realistic they are. Equity participation by Chinese SOEs is only planned in Rovinari and Gacko II, and the other projects financed or likely to be financed by China's state banks are not anticipated to proceed without host country state guarantees. These add to public debt and may raise state aid issues, depending on the conditions of issuance.



Those who benefit most directly from the financed and planned coal-fired power plant projects are in fact Chinese SOEs that specialize in power generation and construction. Upon completion of the construction of coal plants and associated facilities, these SOEs receive full payments by the project promoters in European countries who have taken loans from Chinese state banks.



Wang Yi, China's Minister of Foreign Affairs, Premier Li and Serbia's President Vučić at the 16+1 Summit, 2014. Photo: China Daily

Earlier this year at the Belt and Road Forum hosted in Beijing, China launched the **Green Investment Principles for the BRI**, which, among other things, highlight the importance of disclosing environmental information for all BRI projects. Specifically, China commits to “conducting analysis of the environmental impact of our investments and operations, **which should cover energy consumption, greenhouse gas (GHG) emissions, pollutants discharge, water use and deforestation, and explore ways to conduct environmental stress test of investment decisions.**”

The BRI Green Investment Principles come on the heels of several policy attempts by China to address the carbon leakage resulting from the export of its high carbon emitting industry such as coal power generation, and how financing through Chinese loans and investments in international coal projects have increased - not decreased - in spite of earlier efforts to rein in financing for projects that are incompatible with the Paris Agreement.

Yet for now, all the new coal projects outlined represent a threat to the health and public finances of southeast European countries. They also distort the EU energy market by failing to follow the rules on environment, State aid and/or procurement while at the same time selling electricity to neighbouring EU countries. As the CO<sub>2</sub> price rises in the EU, the compliance gap is becoming ever wider. It is high time for the EU to support stronger enforcement tools for the Energy Community Treaty, and the introduction of a tax on CO<sub>2</sub> in the accession countries or a border carbon tax for those failing to play by the rules.

**Read more about coal in the Balkans:**  
[bankwatch.org/project/coal-in-the-balkans](http://bankwatch.org/project/coal-in-the-balkans)