EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

Funded by
the European Union

Implementation of the Industrial Emissions Directive in Ukraine's energy sector

Achievements and challenges

dixigroup

Funded by
the European Union

Integrated approach based on the Directive 2010/75/EU

Different permits and licenses regulated by different legislative acts

UA commitments:

- Energy Community Treaty and National Emissions Reduction Plan (NERP) (2018-2033)
- Annex XXX of the AA
- EU candidate status
- Climate obligations (NDC under UNFCCC, European Green Deal support) and commitments (Powering Past Coal Alliance on coal phase out etc.)

Additional arguments:

- Approximation of the EU acquis
- Environmental requirements in Ukraine's Recovery Plan
- Public health, environment + contribution to climate change mitigation
- Environmental requirements become the priority again after war

EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

Funded by
the European Union

What about Ukraine's energy sector?

- Coal-fired power (TPPs) and cogeneration (CHPs) plants of Ukraine ranked 1st in Europe by emissions of three main atmospheric air pollutants (SO_2, NO_x and PM10)
- 8 Ukrainian TPPs are among the top ten polluters for PM10 in Europe
- In 2019, 8 of 20 coal-fired TPPs exceeded the limits for SO_2, NO_x and dust emissions, which led to about 2,700 deaths among population of the surrounding regions
- 8.7 million people impacted by power plants which exceed the WHO air quality guidelines
- In Ukraine, about 58,000 people die every year due to industrial pollution, and air pollution being the main reason;
- Coke plants are among the largest sources of environmental pollution with toxic substances (4 of 10)
- In 2020, 79% of CO_2 emissions in Ukraine were generated by burning fossil fuels in the energy sector and metallurgy

Energy industries according to Annex I of the Directive 2010/75/EU:

combustion of fuels in installations with a total rated thermal input of 50 MW or more, refining of mineral oil and gas, production of coke, gasification or liquefaction of coal or other fuels in installations with a total rated thermal input of 20 MW or more.

dixigroup

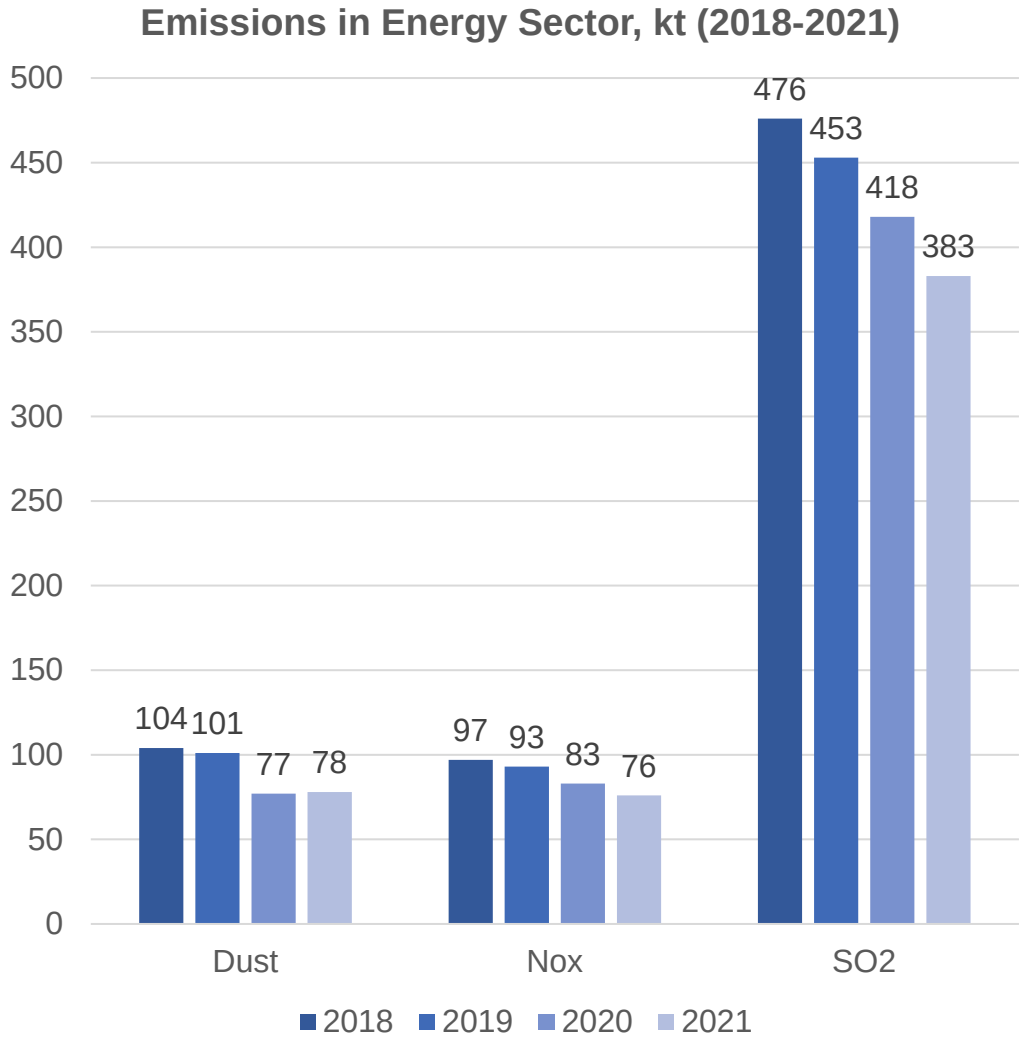
EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

NERP implementation

Funded by
the European Union

In 2021, Ukraine almost twice overperformed its emission reduction plan in energy sector

- **But!** The **emissions decreased mainly due to the economic downturn** and the COVID-19 pandemic
- The implementation of actions to reduce emissions (Annex 3 of the NERP) is **significantly lagging behind**
- Only **1** pilot desulfurization unit was installed at the Trypillya power plant of Centrenergo PJSC. According to the plan, by the end of 2022, **5 dust, 4 sulfur and 4 nitrogen abatement installations** should be constructed
- **The lack of efficient funding sources** slows down the implementation of the NERP Annex 3 measures
- The temporary WG at the Ministry of Energy was supposed to develop the financial mechanism for the NERP implementation, but **the war has begun**.



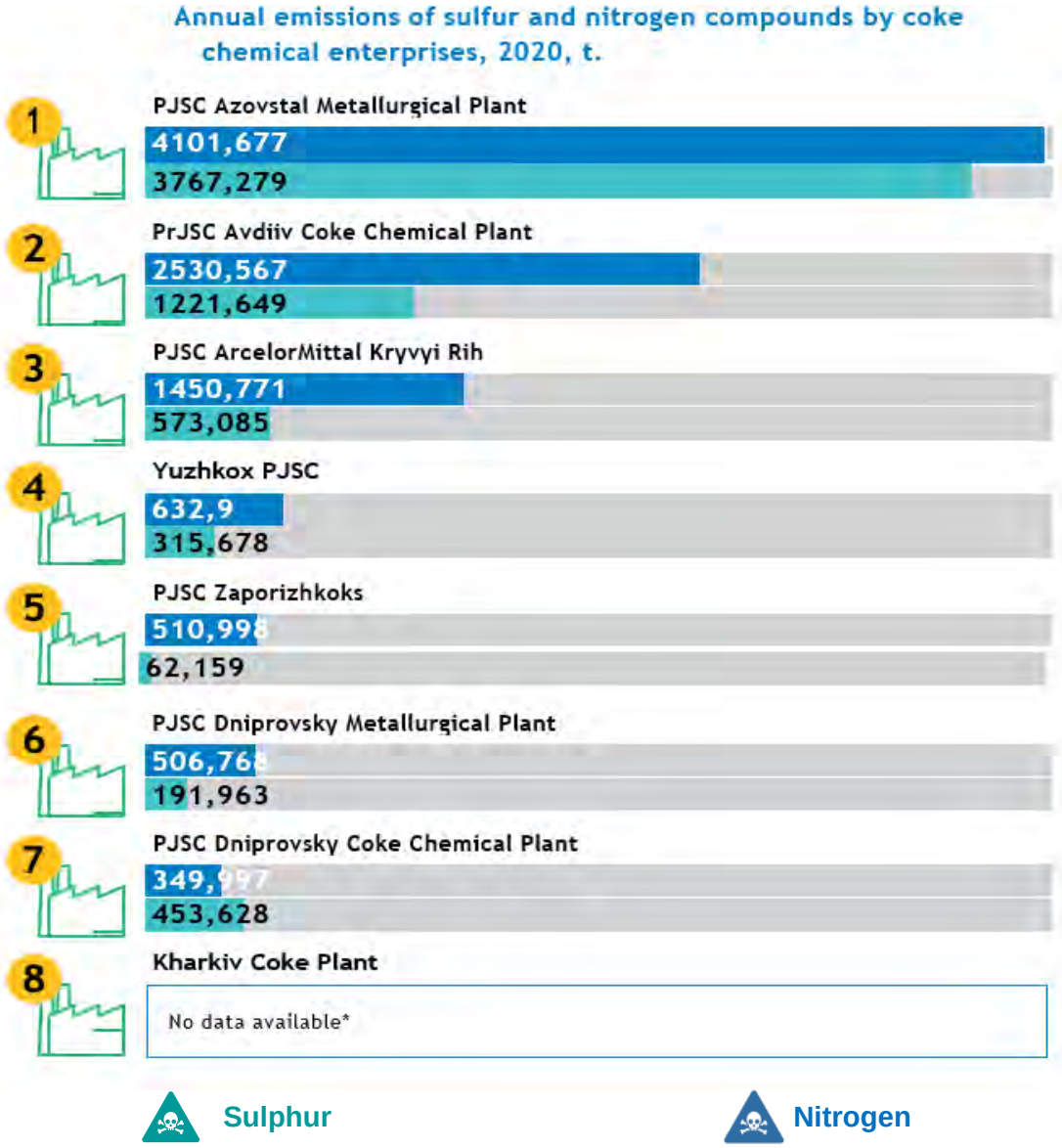
Source: Ministry of Energy of Ukraine

EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

Funded by
the European Union

Coke industry in Ukraine

- As of the beginning of 2022, 8 coke chemical enterprises were operating in Ukraine
- Of the three dozen coke batteries, more than half have expired the operating life of 25 years and were working over limits
- That's why it will be necessary to invest in the transition to clean technologies or to close down the production
- Back in 2009, the Ministry of Environment by its Order No. 507 approved technological standards for emissions from coke furnaces. But in 2014, the deadline for its implementation was postponed to January 1, 2021, and in 2021 - to January 1, 2022. **And it was prolonged again in October 2022.**



EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

Funded by
the European Union

Oil and Gas industry

- At the beginning of 2022, only 2 of 7 big oil refineries in Ukraine were operating: Kremenchuk Oil Refinery and Shebelynka Gas Processing Plant
- The Kherson Oil Refinery was under long-term reconstruction, production at the Lysychansk, Odesa, Drohobych, and Nadvirna refineries was suspended
- In 2020, emissions from the Kremenchuk Oil Refinery accounted for 88.55% of all stationary emissions sources in the city. The enterprise is not equipped with modern emission abatement systems
- The draft Concept of the Ukraine's Gas and Oil Processing Industry Development by 2025 does not include requirements for the ecological modernization of the industry

dixigroup

Funded by
the European Union

LEGISLATION FRAMEWORK

Adopted Concept of the Industrial Pollution Policy Implementation. According to the document, the framework Law had to be adopted by 2021

Draft Law No. 4167 (with alternative drafts 4167-1 and 4167-2) **rejected**

Updated versions (No. 6004, 6004-1, 6004-2) **under consideration**

The inspection provisions are generally in line with the Directive 2010/75/EU requirements. However, it is need to agree the relevant provisions within different drafts of Ukrainian Laws.

The legislation always faced resistance even before the war started.

Now it will be even more difficult to implement.

Draft No. 4167 media coverage (negative mentions)
21.05.2021 and 15.07.2021 — days of voting in the Verkhovna Rada

Source: Study «Environmental issues in the Ukrainian public information space, 2019-2021»

EASTERN PARTNERSHIP
CIVIL SOCIETY FORUM

Funded by
the European Union

War impact on Energy and Industry

Zmiivska TPP, September 2022

PJSC Metallurgical Plant Azovstal, 2022

Shebelynka refinery, June 2022

Slovyank TPP, September 2022

PrJSC Avdiivka Coke Chemical Plant, March 2022

Kremenchuk Oil Refinery, May 2022