



An assessment of the reduction of the negative impact of atmospheric emissions on the environment and human health as the result of the introduction of the best available techniques and the implementation of CLTAP Protocols requirements in the development of federal and regional industrial development programs in Russian Federation

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VICE-DIRECTOR OF THE FEDERAL STATE INDEPENDENT STATE-FINANCED ENTERPRISE  
«RESEARCH INSTITUTE «CENTER FOR ENVIRONMENTAL INDUSTRIAL POLICY»

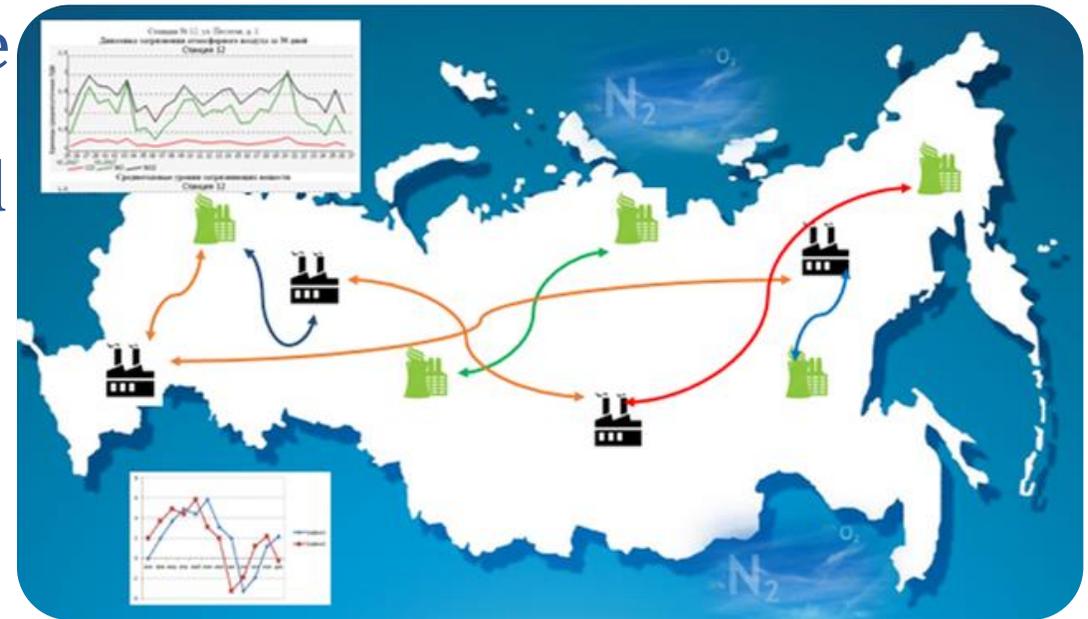
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# OBJECTIVE OF THE PROJECT

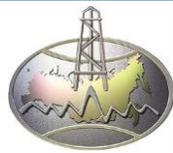
Establishment of a system for the registration of national environmental requirements and CLTAP Protocols requirements in the development of federal and regional industrial development programs, using the assessment of the effects on air pollution of various scenarios for the introduction of best available techniques (BAT)



# PROSPECTIVE PARTICIPANTS OF THE PROJECT



**CITEPA**



**Ministry of Natural Resources and Ecology of Russian Federation**

**Ministry of Industry and Commerce of Russian Federation**



**Environmental agencies of regional administration of the subjects of Russian Federation**

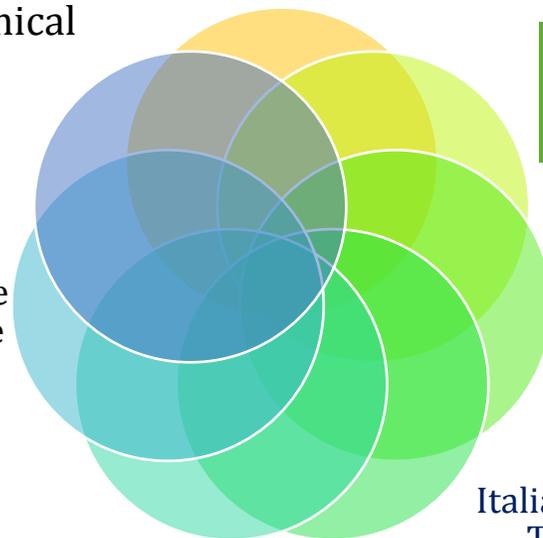
**The Interprofessional Technical Centre for Studies on Air Pollution (CITEPA)**



**German Environment Protection Agency**



**Secretariat of the United Nations Economic Commission for Europe on the Convention on Long-range Transboundary Air Pollution**



**Federal Service for Supervision of Natural Resources**



**Task Force on Techno-Economic Issues**

**Federal Service for Hydrometeorology and Environmental Monitoring**



**Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA)**





# MAIN STAGES OF THE PROJECT

*Choice of pilot schemes for the modelling system development and testing*

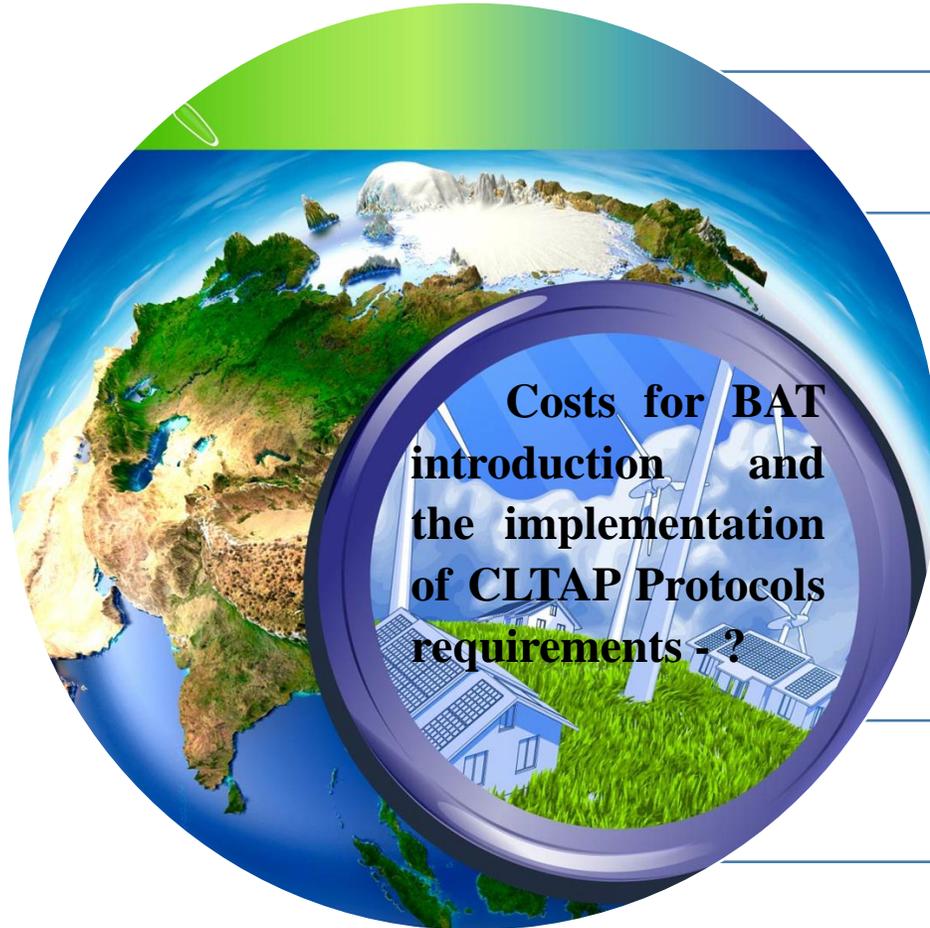


-  there is a database for sources of emission;
-  a database for sources of emission in development



# MAIN STAGES OF THE PROJECT

## *Analysis and drafting of the modelling tools' list*



vegetation and historical parks located in the cities;



water bodies located in the cities;



buildings, metal structures and architectural monuments;



paintings in museums;



nature reserves located in or near cities.



health of people living in the cities;



**Monthly average concentrations**

**Annual average concentrations**





# MAIN STAGES OF THE PROJECT

## *Drafting the necessary initial data list*

characteristics of emission sources (coordinates, height, diameter/ dimensions of the mouth);

characteristics of emissions (emissions' value in g/sec and ton/year, gas flow rate, volumetric flow rate in m<sup>3</sup>/sec in normalized conditions, temperature and pressure);

a list of emission sources, where BAT will be implemented, with an indication of a percentage reduction of air emissions;

electronic maps of the pilot cities;

meteorological data for the analyzed regions;

data for instrumental environmental monitoring carried out in the pilot cities

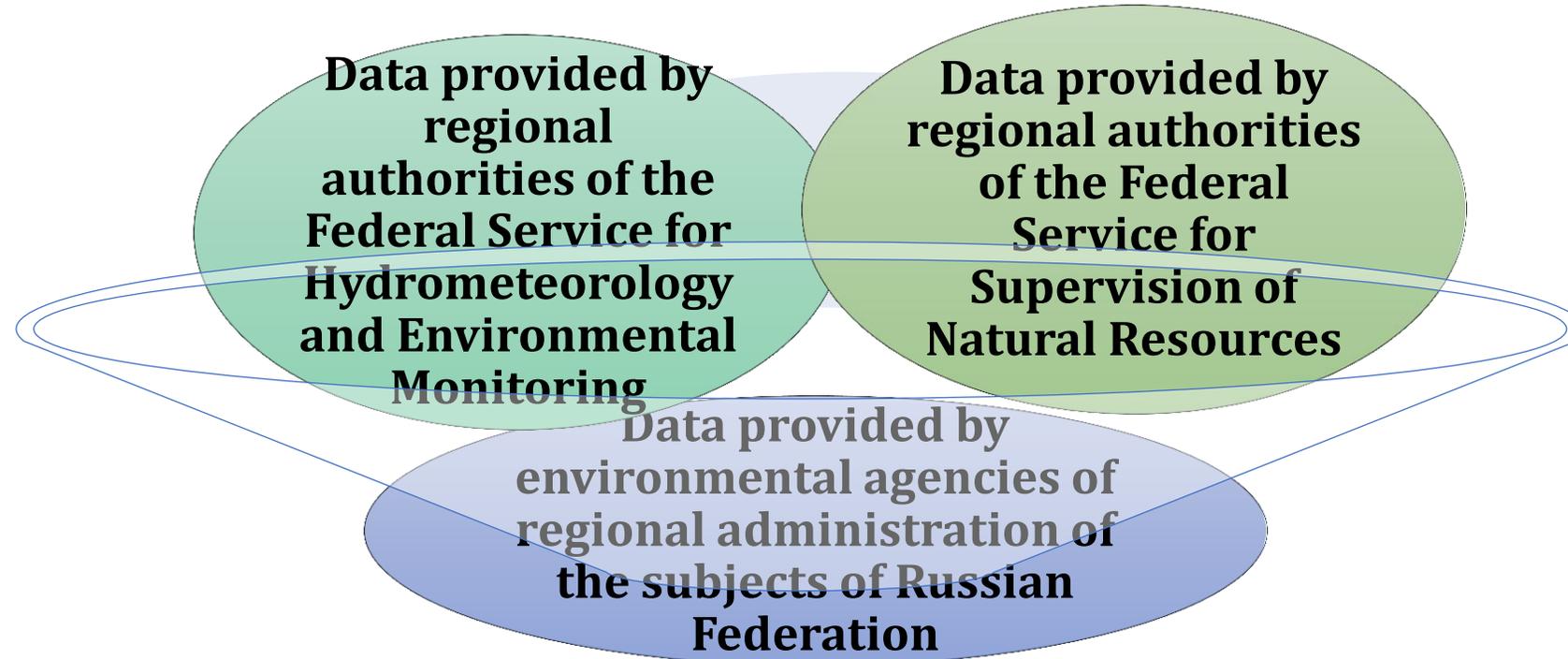
National BAT emission level values

structure and sectors of the Russian Industry which are impacted by BAT requirements and CLTAP Protocols requirements



# MAIN STAGES OF THE PROJECT

*Development of the initial data database*



**databases with compatible formats that can be used for calculations by the chosen models.**



# MAIN STAGES OF THE PROJECT

*Calculations for the existing conditions*

**initial data  
databases**

**calculations using  
chosen models**

**comparison of the results with critical  
levels of negative impact of air pollution  
on different pilot cities' areas B**



# MAIN STAGES OF THE PROJECT

*Comparison of calculation results with the monitoring data*

calculation results for the levels of negative impact of air pollution, obtained using European model

calculation results for the levels of negative impact of air pollution, obtained using Russian model

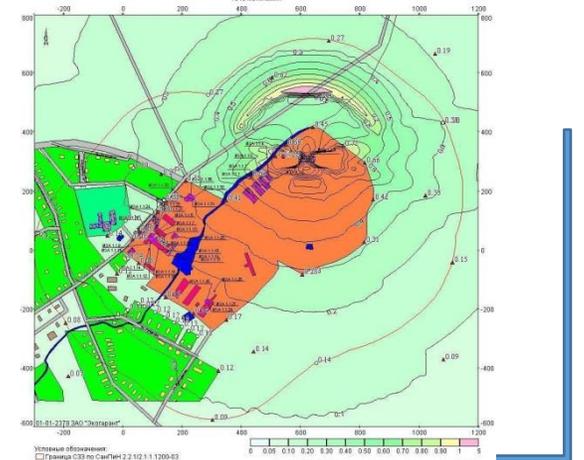
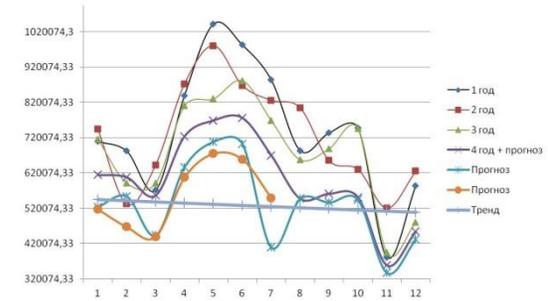
results of instrumental monitoring of air pollution in the pilot cities.



# MAIN STAGES OF THE PROJECT

## *Calculations after the introduction of BAT*

- ❑ calculations for introduction of BAT (initial data - decreased values of atmospheric emissions from the sources planned for the BAT implementation)
- ❑ comparison of calculations' results with critical levels of negative impact of air pollution for different areas of pilot cities
- ❑ The cost estimation of the introduction of the best available techniques and the implementation of CLTAP Protocols requirements.





# MAIN STAGES OF THE PROJECT

*Analysis of the obtained results of modelling and development of proposals in making management decisions*

Calculations for the existing scenario;

Calculations for the scenario of BAT introduction and the implementation of CLTAP Protocols requirements ;

Evaluation in order to determine if the BAT implementation has been sufficient to reach permitted levels of negative impact of air pollution for different areas of pilot cities

In case the BAT implementation is not sufficient – calculation of the the value of additional decrease of atmospheric emissions for the pilot city



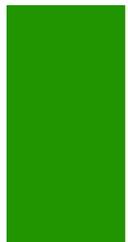
# CURRENT STATUS OF THE PROJECT AND ITS FURTHER PROMOTION



Ministry of  
Industry and  
Trade of Russian  
Federation



Federal State Autonomous Institute  
«Research Institute «Environmental  
and Industrial Policy Center» EIPC



This project proposal:  
- is the official initiative of the a subordinate enterprise of **the Russian Ministry of Industry and Trade and EIPC;**  
- is supported by **Italian and French Sides.** Italian and French Sides have already spoken about its interest to take part in this project.



# EXISTING STATUS OF PROJECT AND FOLLOWING STEPS

## Following steps:



to be supported by TFTEI (October 2017);

to negotiate Executive Body CLPTAP (December 2017);

to include our project into the International Activity Plans of the Ministry of Industry and Trade and the Ministry of Natural Resources and Ecology of Russian Federation (February 2018);

Kick-off meeting project's participants (March 2018).



# Thank you for your attention!

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