EEB CALL FOR TENDER: "INDUSTRY DATABASE PROJECT"
Deadline to apply 12 April 2019 at 23:59 CET

Tender Specifications:

The European Environmental Bureau (EEB) is the largest federation of environmental citizens' organisations in Europe with over 150 membership organisations in more than 30 countries. We work on a vast array of environmental issues, and this project relates to our work on industrial pollution and, to a certain extent, to the Aarhus pillars.

I.   Objective of the project subject to tender:

We would like to create an online platform providing user-friendly access to information with useful search filters and data visualisations by combining existing databases which are adapted for other purposes then currently met by the EU-PRTR.
The primary objective is improved environmental benchmarking and compliance promotion in terms of Best Available Techniques pollution standards for industrial activities subject to the Industrial Emissions Directive (IED). The initial focus will be on certain key sectors: energy generation (all LCP and Waste Incineration), the cement industry, refineries and iron and steel production.

We aim to use the new combined data to:
- Show amount and concentration of pollution releases (expressed in mg x pollutant / Nm3 flow rates) and other environmental impacts;
- Demonstrate the potential for improved performance (against other plants and against the best available techniques) for air pollution reduction (other media in next phase);
- Indicate current abatement techniques installed / abatement efficiencies applied;
- Visualise the location of plants (map-based view);
- Show health related impacts of air pollution (applying default cost factors);
- Enable environmental benchmarking and legal work (e.g. the use of possible derogations from stricter emission limits), with appropriate data filters and automatic calculation of results (e.g. possible pollution reduction, saved external health costs);
- Calculate plant efficiency by comparing data (e.g. emissions v energy or other production outputs);
- If possible, add extra features such as type and origin of fuels, mining related environmental damages (e.g. scale of land grab), with flexibility to add further such fields later;
- Allow download of datasets / search filters on certain parameters;

- Allow ranking of countries / permit writers (ambition level set for emission limit values) / derogations granted.

II. <u>Essential features of the industry database:</u>
a) Performance information would be installation / site specific and updated on an annual basis (static);
b) The data based should be hosted on EEB server which should be able to manage the information based on possible comments received;
c) The database should enable a search by powerful search filters
d) The database should allow to make available for download certain additional documents in pdf format (e. g. permits, compliance reports, monitoring data etc) or integrate data in the visualisation (e.g. permit limits to be integrated in the reporting)
e) The database should allow a filtering / sorting / ranking of environmental performance information relating to certain media (air, water, resource consumption, soil) or issues (scale of pollution prevention improvement potential for certain pollutants, BAT compliance, scale off health / environmental impacts etc)
f) The database should allow a visualisation of trend environmental performance (e.g. compare performance due to given regulatory context versus new context)
g) Third parties should be able to provide comments / text that could be disseminated subject to pre-validation of data controller e.g. operator can provide information on abatement techniques installed, investments made to improve performance etc

More information on those features is provided in the Annex.

III. <u>Initial focus of the project and possible extension:</u>
Due to availability of data and policy priorities by the EEB the focus of the database should start with LCPs and air pollution related impacts. The database should however enable to extend to other IED sectors such as Cement production, Iron and Steel and refineries. In a later stage industrial scale of animal rearing and other sectors will be covered
As possible add-ons the database should enable:
- Integrate other information available on the status against relevant Environmental Quality Standards (Air, water, waste, substitution of chemicals of concern) e.g. EEA Air pollution index; Surface Water Quality maps
- Enable the integration / cross check with new information based on satellite monitoring e.g. Copernicus.
- Allow direct real time reporting by operators of continuous monitoring data (CEM)

Possible good example(s) of database projects the EEB is willing to establish for all IED activities is provided as an indication:
-   Norwegian PRTR plant level database e.g.
    https://www.norskeutslipp.no/Templates/NorskeUtslipp/Pages/company.aspx?id=61&CompanyID=6256&epslanguage=en or
    https://www.norskeutslipp.no/Templates/NorskeUtslipp/Pages/company.aspx?id=61&CompanyID=5307&epslanguage=en
-   Electricity map (carbon intensity / fuel input base
    https://www.electricitymap.org/?page=map&solar=false&remote=true&wind=false
-   PRTR enhanced data-visualisations: https://tableau.discomap.eea.europa.eu/t/Aironline/views/E-PRTRreviewtoolv2_0/PollutantReleases?%3Aembed=y&%3AshowAppBanner=false&%3AshowShareOptions=true&%3Adisplay_count=no&%3AshowVizHome=no combined with https://www.eea.europa.eu/themes/industry/industrial-pollution/industrial-pollution-country-profiles-2018/industrial-pollution-profiles-2018

IV Maximum available service price subject to tender:
-   **The maximum amount eligible for tender is 35 000€ (VAT included), thirty-five thousand EURO**
-   **The Service should be provided by latest October 2019.**

The tenderer should be able to carry out the tasks specified in the eligibility criteria as developed under section A and should be able to demonstrate that the service provided would:
-   meet the objectives set out in part I; and
-   be able to fulfil the essential features set out in part II
-   where relevant, fulfil the features / requirements/possible extension as provided in the Annex

The scope will be limited to LCPs >50MWthermal input as to phase I. Subject to further funding / inhouse capacities/ and experience with the tender the database project would be extended to further sector activities

Whilst most of the work, such as compilation of datasets, would be carried out in house certain validation checks in relation to data-matching of operators and application of default factors as identified in part V.A6 would need to be provided by the tenderer. The related time estimate needed for that task is evaluated to 5 working days for that activity.

V: Eligibility criteria and supporting evidence:

A: Technical and professional criteria on technical proposal / tender delivering the service:

The tenderer must be able to prove the required technical and professional capacity to carry out the work subject to this call for tender. The following criteria and evidence should be provided:

Criteria as to technical and professional capacity	Possible Evidence	Comments
A1 Experience in the field of processing environmental performance data in relation to IED activities	List of studies / service / other involvement in last 5 years that relate to that criteria	Evaluation criteria, non-essential
A2 Experience in the field of data reporting and dissemination in relation to IED Activities e.g. PRTR, monitoring data to air and water, resource consumption	List of up to 5 studies / service / other involvement in last 5 years that relate to that criteria	Essential criteria
A3 Experience in processing data on air emissions, water emissions, fuel / other raw materials input, waste generation and other outputs	List of up to 5 studies / service / other involvement in last 5 years that relate to that criteria	If the experience does not cover all environmental media listed, please specify
A4 experience in establishing databases on environmental performance data such as based on large Excel / Access datasets	List of up to 5 studies / service / other involvement in last 5 years that relate to that criteria	Essential criteria
A5 Ability to provide high quality outputs / internet pages in English language	List of up to 5 publications / webpages	Essential criteria
A 6 ability to conduct data verification, data matching of installation or applying default factors where data	List up to 3 studies / service / other involvement in last 5 years that relate to that criteria	Essential criteria

gaps exist (e.g. conversion of emissions data in other formats, deriving fuel intensity factors etc)		
A7 General experience in improving compliance promotion and environmental benchmarking of large scale industries	List up to 3 studies / service / other involvement in last 5 years that relate to that criteria	This is not an exclusion criteria but considered an asset
A8 Ability to provide the service with an initial database version by 08/2019 and finalized by 10/2019.	Declaration of honour, plausibility of workplan overview and time planning	Evaluation criteria, non-essential
A9 Ability of the proposed database to a) integrate further add-ons / functionalities and parameters b) add further industry sectors c) allow other database integration such as air quality index as described in the Annex to this tender	Memo as to possible features that could be added / compatibility of proposed service	Essential criteria

B] Contractual conditions:
a) the tender must comply with applicable environmental, social and labour law obligations established by Union law, national legislation, collective agreements or the international environmental, social and labour conventions listed in Annex X to Directive 2014/24/EU.
- B1: subcontracting is not permitted unless explicitly approved in writing by the EEB.
- B2: A memo of the tender providing background information as to the expertise in the field of the subject matter relating to the service as well as experience in the field of environmental reporting on IED activities (with necessary evidence), not exceeding 5 pages where possible);
-B3 a CV of the persons involved in the service;
-B4 where available the environmental and sustainability policy of the tenderer.

Selection procedure:

Any tenderer must apply in writing (by email) **before 12 April 2019 at 23:59 CET** to christian.schaible@eeb.org with "Tender application Industry database project" in the subject line. The necessary evidence as to the eligibility criteria should be made available either through ZIP folder attached to the email or downloadable through providing the external link.

The application should include:
- the documentation required under part V. B i.e. B2 (memo), B3 CVs, and where available B4.
- the electronic copy / weblinks as to required evidence as to part V. A (list of evidence)

The Contract will be awarded to the tender offering "best value for money" (i.e. the tender offering the best price-quality ratio) against the criteria listed in part V. A.

- The EEB shall evaluate the offers received against objective criteria which enable measuring the quality of the offers and which take into account the price and service provided as well as possible quality ranking criteria as to the service provided;
- The EEB shall keep sufficient and appropriate documentation with regard to the procedures applied and which justify the decision on the pre-selection of tenderers and the award decision.
- All applicants will be notified in writing on the outcome of the selection
- Questions received by any tender and possible answers of the EEB would be provided in this Q & A document.

Published in Brussels, on EEB website eeb.org/careers
on 27 March 2019

ANNEX: detailed overview of Database project idea

Various EU databases exist but for different purposes. The final, combined database should provide easy access to all of the relevant information about each plant/generator. We need to be able to update and manage the database for our own purposes (research, compliance promotion and campaigning) but also want to be able to present the data online for use by third parties.

Essential features:
1) **Search filters (plants)**: Sort by fuel (lignite, hardcoal, peat, biomass, natural gas, other gaseous fuels, liquid fuels, other solid fuels); industry sector type (LCP, Waste incineration, Refinery, Iron and Steel, other); operators name and or mother company; country; plant size category;
2) **Search filters compliance / legal status** (Chapter 3 IED derogations split per type, Art 15.4 derogation?): at least 5 filters;
3) Visualise the location of plants (map-based view);
4) Show amount and concentration of pollution releases and in later stage energy efficiency and water use (graphs) / datasets – annual averaged;
5) Allow to demonstrate the potential for improved performance (against other plants and against the best available techniques) for air pollution reduction: emission reduction potential - at least 4 parameters: NOx, SOx, dust, mercury with 4 operation scenarios: a) current, b) as if IED compliant, c) lenient BAT level, d) strict BAT level;
6) Show health related impacts of air pollution (applying default cost factors) for each of the [4] pollutants / aggregated damage costs under the 4 scenarios as point 5 (annual average);
7) Add same features as to 5+6 based on energy efficiency (annual average);
8) Add feature to calculate the soil grab for lignite as to fuel input consumption (annual averaged), EU lignite specs overview is available as to water content/ ash content etc;
9) Enable environmental benchmarking and legal work (e.g. flagging high Emission limit values), with appropriate data filters + data sorting features (sort ascending, descending etc) per pollutant;
10) Add extra features such as integrating permits in force, inspection reports;
11) Allow information box on abatement techniques and abatement efficiencies (calculated);
12) Enable download of the datasets / information filtered;

13) Enable an edit box on plant by plant page (third parties can edit some info about a plant subject to validation by EEB data-controller).

Issues that we are interested in:
- How to combine the data (Large combustion plants foundation/starting point).
  - Currently no unique ID per plant/facility/site (some potential overlaps in the data, some manual work likely to be required) for ENTSO-E data match
  - Generate annual energy output / pollution output to benchmark
  - Years covered varies between databases
- How to present the data
  - Plant by plant pages with more add-ons features e.g. : various indexes such as resource consumption - for lignite plants the scale of land use in m3 per fuel input can be calculated and visualized, overall pollution index (in € per MWel), GHG intensity, damage costs air pollution, improvement potentials (air pollution), waste transfers, possibility to upload datasets and permits
  - Search filters

Good example of possible visuals: https://www.electricitymap.org/ or Norwegian PRTR
https://www.norskeutslipp.no/en/Miscellaneous/Company/?CompanyID=21735
- How to manage the data
  - What is the best back-end solution for us to be able to add/edit data -also from third parties ? Note an annual update is expected for the datasets
  - Need good / flexible solution to visualise the data after queries and downloading
- Allow system where upload of pdf documents (permits, inspection reports) + excel datasets (real monitoring data) is possible, when going on plant specific pages.

The databases we have are:
- The Large Combustion Plants Database (LCP-D) (main database)
  - Health impacts have been calculated for some plants (hardcoal) – EBC database, last version based on 2016 data
- The European Pollution Release and Transfer Register (E-PRTR)

- ○ A Europe-wide database showing air and water pollution from industry
- ○ Waste amount / type is also included
- A water database
  - ○ Years: 2001-2012
  - ○ Voluntary database with information on water relevant aspects
  - ○ Shows:
    - Water consumed (for cooling)
    - Technical characteristics of cooling
- Database of real time energy output (ENTSO-E database)
  - ○ Years: 2011- current
  - ○ Includes, but not limited to, LCPs + Waste Incineration
  - ○ Country split data, Name of generation unit mentioned, id code not clear
    Illustration: see here
  - ○ Shows:
    - Electrical generation (hourly MW output per unit)
    - Fuel types (we're interested in biomass, lignite, hardcoal, other gaseous/fossil fuel types, data includes nuclear and renewables).
- Database of EU ETS transaction log
  - ○ Years: 2005- 2017 (verified)
  - ○ Tonnes of CO2 emitted (up to 2017) – under compliance date
  - ○ Future allocations
  - ○ Includes, but not limited to, LCPs (all installations covered by EUETS)
  - ○ Country split data, Name of generation unit mentioned, location, id code (EU ETS)
  - ○ Shows:
    - Electrical generation (hourly MW output per unit), Fuel types (we're interested in biomass, lignite, hardcoal, other gaseous/fossil fuel types, data includes nuclear and renewables).