





### China is looking for international players to join the fight against air pollution!

**The Bluetech Award** is launched by the Clean Air Alliance of China as the first award to promote leading air pollution prevention and control technologies around the world to solve the most pressing air quality challenges in China.

Since 2015, the Clean Air Alliance of China has launched the first Bluetech Award, attracting 110 technologies from approx. 20 countries. After clean air technology assessment, 11 winners were selected in the VOC pollution control, diesel engine pollution control, disaggregated coal emission control, ultra-low emission control for coal fired power plants, and indoor air purification technology categories, widening their China network and be promoted through our various platforms.

This year, we are once again calling for applications for the 3<sup>rd</sup> Bluetech Award and seeking the best available clean air technologies to help tackle China' air quality problem.

Apply today and get your name known as a leader of the global clean air campaign!



# **Award Benefits**

The Bluetech Award winners will be recognized as the best solutions to tackle air pollution emissions in the world. Winners will be able to:

- 1. Display their companies at the VIP display booth area at the China International Clean Air Technology Forum, the premier event around corporate and industrial strategies and solutions to improve air quality in China;
- 2. Speak at the China International Clean Air Technology Forum, attended by key Chinese and international investors, project owners, governmental leaders and corporates;
- 3. Join tours to key pilot cities and partake in customized, exclusive investor and client meetings;
- 4. Receive coverage on major Chinese and global media partners;
- 5. Be highlighted on our "Bluetech Catalogue" that will be promoted to relevant parties;
- 6. Receive the Bluetech Award certificate and trophy.

# Categories

- Diesel engine emission reduction technologies & clean energy substitutes.
- Coal combustion emission control & clean energy substitutes (non-power sector).
- VOCs substitution and pollution prevention.
- Indoor air pollution control.
- Advanced pollution source and air quality monitoring.
- Other commercial-ready technology



# Eligibility

Any individual or organization that is developing or implementing solutions that lead to cleaner air is eligible to apply.

## Bluetech "Future star" Award

2017 Bluetech Award has specially setup this Award for all valuable developing technologies which are yet commercialized. To leverage Bluetech platform resources in helping the potential technologies' development. This Award covers all clean air technology categories, such as monitoring, pollution control, energy saving, new material, renewable energy, new energy vehicle etc.

## Procedure

# How We Judge

The committee will use CAAC's "Clean Air Technology Assessment Methodology" to assess the nominated technologies. The assessment will examine achieved performance and testing results to look for breakthrough potential in terms of environmental impact, technical performance and financial viability:

- Environmental Impact: Pollution control efficiency and effectiveness, etc.
- Technical Performance: User friendly design, operation performance and service life, etc.
- Financial Viability: Initial installation cost, life cycle operation and maintenance costs, etc.

# How to Apply

Please submit a completed application for each technology and send with related materials via email by August 15, 2017. Early applications may receive additional exposure opportunities.
Please contact *Innovation Center for Clean Air Solutions (ICCS)*Dr. Ling Xuan, email: <u>bluetech@iccs.org.cn</u> Phone: (86) 10-65155838-8006

# **Bluetech Award Categories**

#### Category 1: Diesel engine emission reduction technologies & clean energy substitutes

Over the past few years, China is driving at an increasingly faster pace: in fact, the country is ranked first globally in terms of vehicle speed increase rate over the past five years. China is also driving longer distance: the average mileage of passenger vehicles in Beijing today is approximately 44 km per day, twice as much as that in the EU. Additionally, most cars are driven in developed urban areas, which subsequently concentrate air pollution in urban regions. In China's megacities like Beijing, Shanghai and Shenzhen, vehicle emissions have become the top local polluter of PM<sub>2.5</sub>, contributing to nearly 30% of all local PM<sub>2.5</sub> emissions. Diesel vehicles are believed as the most significant problem, as they are responsible for up to 70% of all vehicle NO<sub>x</sub> emissions, and up to 90% of all vehicle particulate matter emissions. Furthermore, diesel powered non-road vehicles, such as ships, port machinery, agricultural machinery and general engineering machinery and so on, their emissions are also believed as significant problems due to lack of control. Some advanced cities like Shanghai and Shenzhen have already begun to employ new energy (e.g. LNG) and emission control retrofit (e.g. DPF) technologies in their policy making to control non-road vehicle emissions.

We are looking for the following types of diesel engine emission control technologies:

- Fuel treatment technologies, such as diesel fuel treatment, clean energy (e.g. LNG) etc.
- Engine combustion optimization technologies, such as Exhaust Gas Recirculation, fuel injection optimization techniques, etc.
- Engine emission control technology, such as Diesel Oxidant Catalyst, Particulate Oxidation, Catalyst, Selective Catalytic Reaction, Diesel Particulate Filter, etc.

### Category 2: Coal combustion emission control & clean energy substitutes (non-power sector)

Coal is the major energy source in China. It contributes approx. 60% of the primary energy and has become one of the main pollution sources. Thanks for governmental policy support, emission control for coal fired power plants have been conducted in many places. However, emissions from non-electrical coal combustion should not be underestimated. The PM<sub>2.5</sub> source apportionment analysis for Jing-Jin-Ji region shows that coal-fire emission has contributed about 25% of local PM<sub>2.5</sub> emissions. In order to meet the national goal for air pollution improvement, the Municipal Research Institute of Environmental Protection along with Innovation Center for Clean-air Solutions have conducted a project to collect emission control technology for non-electrical coal combustion and list the advanced technologies into 'Clean Coal Combustion Technical Guidebook'.

We are looking for the following type of Emission Control Technology for Non-electrical Coal Combustion.

- Alternative clean energy & renewable energy technologies;
- Advanced heating technology, such as waste heat recovery technology, etc.;
- Other related technology.

### Category 3: VOCs substitution and pollution prevention

VOCs is one of the main primary pollutants in various regions throughout China and is one of the major precursors for secondary  $PM_{2.5}$  and ozone. VOCs and its secondary products are toxic and cancerous, harming public health. As the China launches the official "war on pollution," the 13<sup>th</sup> Five Year Plan listed VOCs as an important contaminant, pushing some major cities and provinces to create their own VOCs control targets.

We are looking for the following types of VOCs monitoring and control technologies:

- Leak Detection and Repair (LDAR) related technologies, such as leak detection technology, leak repair technology, etc.
- VOCs end of pipe control technologies, such as VOCs recycling technology, VOCs destruct system, etc.
- Low VOCs substitutes, such as low VOCs paint, low VOCs solvents, etc.
- Other technologies that address VOCs pollution.

### Category 4: Indoor air pollution control

People spend, on average, 70% of their time in indoor environment and therefore are potentially more exposed to indoor air pollutants. In addition to outdoor pollution infiltration, there are also many pollution sources in indoor environments, which causes high indoor air pollution that are often more severe than the outdoor air. As people are becoming more aware of air quality and health, concerns on the indoor air quality have also been raised.

We are looking for the following types of indoor air purification technologies:

• Central HVAC system purification technologies.

• Decentralized purification technologies, such as indoor air purifiers, vehicle air purifiers, etc.

### Category 5: Advanced pollution source and air quality monitoring

In order to effectively conduct air pollution prevention work, it is essential to know the specific air pollution characteristics of the area and its major pollution sources. Advanced monitoring technologies are able to provide real time, accurate and comprehensive air quality data, which can support air quality management, policymaking and strategic planning. Hence, the Bluetech Award has selected the advanced pollution source and air quality monitoring as one of the technology categories.

We are looking for the following types of advanced monitoring technologies.

- Ambient and indoor air quality monitoring technologies;
- Pollution source monitoring technologies, such as online VOCs monitoring devices, portable devices.

### Category 6: Other commercial-ready technology