The Executive Director, World Bank Group, 1818 H St. NW Washington D.C. 20433 USA

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Dear Executive Director,

Sub- Complaint against proposed investment in ABELLON CLEAN ENERGY LIMITED (Project no- 46819)

We are writing to share with you a collective complaint drafted by the representatives of the affected community, the Centre for Financial Accountability, International Accountability Project, National Hawker Federation and Paryavaran Suraksha Samiti to call upon the board of directors at International Finance Corporation to not proceed with the investment for the establishment of waste to energy plants by ABELLON CLEAN ENERGY LIMITED (Project number- 46819) in Gujarat, India. The primary objective of the complaint concerns violations of IFC's Performance Standards, livelihood impacts of the project, the documented potential adverse health impacts of the project on the community, social and environmental harms of the project, and flawed Environmental and Social Impact Assessment (ESIA).

Should IFC invest in this project, it would go against its Performance Standards and against the principles that IFC stands for.

Yours sincerely,

Chytheyen DK Jay Vyas Ker Jayendrasinh Centre for Financial Accountability National Hawker Federation Jam Khambhaliya

Rohit Prajapathi Vadodara Shailendrasinh R Jadeja Rajkot

Vaishnavi Varadarajan International Accountability Project

Summary of the complaint :

Abellon Clean Energy Limited (ACEL) is a Waste to Energy (WTE) developer based out of Gujarat in India, who is developing 4 WTE plants in Rajkot, Vadodara, Ahmedabad and Jamnagar of cumulative capacity 52.20 MW as of 2023. Of these four projects, the project in Jamnagar with a capacity to produce 7.5 MW of power is operational. However, since the operation of the plant in November 2021, it has caused huge air pollution and health impacts on the communities living near the plant. The communities have filed complaints against the operation of the plant to the Gujarat Pollution Control Board. Issues faced by the communities include noise pollution, air pollution, deposition of effluent smog on their residences, water pollution, health impacts etc. However, the recent disclosure by the IFC about the proposed investment in Abellon Clean Energy Limited (ACEL)/ Goodwatts Jamnagar WTE private limited has alarmed the communities and raised the fear of further aggravation of their problems because of the companies. Also, civil society organizations in the cities of Ahmedabad, Rajkot, and Vadodara have expressed that the project engenders further social, environmental and economic harms of communities living around the vicinity of the proposed plants.

Careful examination of the Environmental and Social Impact Assessment (ESIA) reports submitted have revealed glaring flaws in the assessment. We have also identified the breach of several IFC Performance Standards, which are mandatory requirements of the IFC to its client. Furthermore, to circumvent the Government of India's (GOI's) environmental norms, the project proponents have deliberately chosen to keep the WTE project size as 14.9 MW instead of 15 MW, to escape Environmental Clearance (EC) mandated by the Environment Impact Assessment (EIA) rules 2006. Waste-to-energy incinerators are categorized as a "red category" industry by the Central Pollution Control Board of India due to heavy pollution of air, water and soil.

WTE incinerators burn municipal solid waste which is non-renewable, to generate electricity. Discarded materials such as paper, plastic, and glass that are derived from finite natural resources, which could have otherwise been recycled and composted are burnt in WTEs.The report by the Centre for Financial Accountability which analyzed 20 waste-to-energy plants across 12 states in India, revealed how despite strong policy and financial support, WTEs in India have failed. WTE plants are a false solution to the problem of excess waste because they—

- Pollute air, soil, and water through the release of emissions and leachate
- Cause major health problems in surrounding communities
- Place financial burdens on local and union governments
- Generate one of the most expensive forms of electricity
- Generate hazardous ash as a residue
- Undermine waste prevention, reuse, and recycle
- Exclude local economies of recycling and waste management

The detailed complaint comprises the following sections for your reference:

A. Violations of IFC's performance standards

- B. Violations of the Indian legal regime
- C. Problems with WTE as a waste management method
- D. Financial performance of the WTE industry in India
- E. Case study of Okhla WTE in India
- F. Key demands
- G. Annexure

A. Violations of IFC's performance standards :

PS 1 - Flaws in Assessment and Management of Environmental and Social Risks and Impacts (ESIA)-

a. Wrong input waste characterization and Gross Calorific Value (GCV)-

The main fuel for the proposed waste-to-energy plant is municipal solid waste. Typically, Indian MSW is considered to have very high moisture content and low calorific value. However, to calculate the studies done by Abellon (project proponent) have been considered rather than relying on data from the state pollution control board/ relevant government ministry. This has led to a misrepresentation and suppression of several facts. For example, the ESIA report of the Jamnagar WTE says the following-

"To understand the waste categorization proximate analysis was done for the area by Abellon wherein samples of waste were collected from Door-to-Door Waste being dumped in MSW Dumping Yard, Theba Bypass Jamnagar, Waste directly sampled from Open Points, Bins, and container and from the legacy waste present at the Jamnagar waste dumping area. Total 2241 tests were performed on the samples collected on 27th April 2022. This included qualitative tests like bulk density, moisture, ash, Gross Calorific Value (GCV) along with quantitative sieve analysis for above 8-inch, 4–8-inch, 2-4 inch and below 2-inch size and boiler feed waste. Waste characterization for the fresh waste and legacy waste (sampled from Jamnagar Waste dumping area) has been presented in Figure 2-3. The Fresh Municipal Solid waste collected majorly of green waste (landscape & gardening waste) (41.90%), Plastic (17.57%), paper (5.97%), and Cloth (11.27%). Other materials like Food (8.43%), Coconut (5.93%), Paper (5.97%), Rubber (3.13%), and Inert (4.93%) also contribute to the collection."

Not all plastics and paper will be available for the WTE plant in Jamnagar since the Jamnagar municipality is <u>mandated</u> to do source segregation and send only non-recyclable plastics for WTE incineration. Hence the GCV of waste for the WTE plant will be significantly less than the projected value resulting in significantly less electricity generation. And, if the WTE plant burns 17.57% of the plastics in MSW, it will significantly impact the livelihoods of hundreds of waste pickers in the city.

b. False projection of "No Project" Scenario-

The Ahmedabad Municipal Corporation (AMC) has made significant strides in the area of solid waste management and has developed a significant amount of infrastructure to manage waste such as segregated waste collection, composting facilities for bio-degradable waste(1000 tons/day), floral waste collection, animal carcass collection, construction and demolition waste management(1000 tons/day), and material recovery facility of 100 tons/day, which is the biggest in India. However, the ESIA report for Ahmedabad wrongly mentions that all of the 4,000 tons of garbage generated in the AMC is just dumped in the landfill and mentions the GHG gases mitigated by the WTE plant. It says-

"At present, Ahmedabad city is producing 4000 TPD of fresh municipal waste. The waste generation of the city is increasing at a rate of 25% per year. Waste collected is dumped into the landfill and dumping site. Since the Ahmedabad landfill is an unscientific open landfill, the organic waste matter is subjected to biodegradation resulting into Green House Gas (GHG) emissions in the form of methane, which is a matter of environmental concern. Continuation of such practice will result in an increase in GHG emissions."

Construction is also underway for a <u>500 ton/day Bio-CNG plant</u> project awarded by the Ahmedabad Municipal Corporation. Hence, the argument that a "No project Scenario" will lead to a significant increase in GHG emissions is false.

c. Omission about the presence of another upcoming WTE plant in Ahmedabad

While proposing the 1000 ton/day WTE incinerator plant, the ESIA report conveniently omits to mention that Ahmedabad already has <u>another WTE incineration plant</u> to process 1000 TPD of MSW in its <u>advanced stages of completion</u>. Once this plant too becomes operational, there will be a scramble for waste between the WTE operators and the viability of the project itself will be threatened. This will also result in a direct conflict with the <u>55,000 waste pickers of Ahmedabad</u> who depend on waste for their livelihoods.

d. No inclusion of waste pickers in the proposed projects-

The ESIA report does not comprehensively report on the apprehensions of the proposed WTE incineration plant on their livelihoods. For example, the ESIA report in Ahmedabad has relied largely on secondary data on the issues of waste pickers without holding actual consultations with waste picker cooperatives or organizations. The Self-Employed Women's Association (SEWA) in Ahmedabad which has organized 40,000 waste pickers under its cooperatives - Geetanjali and Karyasiddhi have shared that the establishment of the waste-to-energy plant in Ahmedabad impacts their livelihoods severely. A study conducted in 2022 by the National Institute of Urban Affairs (NIUA) and Chintan Environmental Research and Action Group revealed that plastics, paper, cardboard, and to some extent textiles form the major source of income for the waste pickers. This basically means that if fractions that would otherwise be recovered and recycled by the informal waste sector are diverted straight to the WTE incineration facility, informal waste workers would lose access to these materials and their source of income.

PS 3 - Resource Efficiency and Pollution Prevention:

a. Burning of recyclable plastics and other materials-

The GoodWatts waste-to-energy plant (Abellon) in Jamnagar already burns the recyclable fraction of the MSW which is in violation of the Solid Waste Management Rules, 2016. According to the EPR Portal of the CPCB, Jamnagar WTE burnt about 35,734 metric tons of plastic in the FY 2022-23 including about 9,647 tons of recyclable plastics. This translates into about 100 tons of plastic burnt every day in a small city that generates just about 250 tons of garbage per day. This is hugely problematic for the

environment and health of the city and causes huge pollution. This violates not only the Performance Standards of IFC but also the Plastic waste management rules of the GOI which says that only non-recyclable plastics have to be incinerated.

b. "Red Categorization" of the Waste to energy incineration plants-

The <u>Central Pollution Control Board</u> (CPCB) already classifies WTE incineration plants as a "red category" industry because of the high pollution index "PI". According to the CPCB classification, WTE incineration plants have one of the highest Pollution Index score (>60) because of flue gas discharges such as SOx, NOx, HCL, PM, Dioxins, and Furans etc, water effluent with toxic pollutants and hazardous bottom/fly ash that needs to be disposed of in a secured scientific landfill. For comparison, none of the other waste management technologies are classified as "red".Bio-methanation and Construction and Demolition (C&D) waste processors are classified as "orange". However, despite adequate evidence on the negative impacts of waste-to-energy incineration in India and across the globe, the IFC has classified this project as "Category B" rather than "Category A" as it has significant adverse environmental and social risks that are diverse and irreversible.

c. Conflicts in the sourcing of waste-

The <u>ESIA report</u> for Jamnagar WTE mentions that, currently 66.66% or 500 tons of the daily waste requirement for the plant comes from the legacy waste of Rajkot Municipality which is about 92 km away from Jamnagar. Transportation of waste for such long distances is both environmentally and economically problematic. However, the bigger conflict surfaces when the ESIA report for Rajkot WTE, which is under construction, mentions that it too will use the legacy waste from Rajkot Municipality. The ESIA report for Jamnagar also mentions that in the future it plans to source its waste from Vadodara which is about 372 km away which will render the projects financially unviable. However, again the same project proponent is building a WTE plant in Vadodara which will use waste from the Vadodara Municipality. Thus, it is well established that there is a huge shortfall in the planning of sourcing of waste for these projects. Also, it can be clearly seen that the incinerable fraction of MSW cannot satisfy the requirement of all the four WTE plants and there will be a scramble for waste leading to various conflicts and improper functioning of the plant.

PS 4 - Community Health, Safety, and Security:

a. False reporting of "No odor from operations" -

The ESIA report for Jamnagar mentions that-

"The actual observation around the fence line indicated no smell. Also, discussions with nearby residents suggested that they have not experienced any instance of odour from the operations."

However, the communities living near the Jamnagar WTE have raised several complaints regarding the foul odor emanating from the plant and its health impacts. They have resorted to road blockades and gheraoing of the factory as a mark of protest. It has been well documented by the local media and the Gujarat Pollution Control Board based on their inspection. They have also lodged complaints with the Municipality commissioner regarding this. (Check annexure for photos, videos and inspection report by pollution control board)

b. Show cause notice by Gujarat Pollution Control Board for impact on communities-

Abellon/Goodwatts WTE has been served with "show cause notice" based on the complaints of the residents near the plant because of the deposition of black soot on their homes, noise pollution and foul odor on 15.12.2021. Other problems faced by the communities include eye irritation, headaches, respiratory illness because of the severe air pollution from the plant. Their long pending demand for the past two years is the relocation of the *(Check annexure)*

B. Violations of the Indian legal regime:

a. Solid Waste Management Rules, 2016

The criteria for the WTE incineration process is the use of non-recyclable waste having a calorific value of 1500 Kcal/kg. It also mandates that the principles of waste hierarchy be followed to reduce the amount of waste being disposed of while maximizing resource conservation and resource efficiency. Yet, these rules are violated with impunity in this project. For example, Vadodara municipal corporation produces 750 Tons per day (TPD) of solid waste out of which 10.25% or 77 tons is incinerable (including both recyclable and non-recyclable). However, beyond all logical reasoning, the project proposed in Vadodara is for 1000 TPD. Even if the WTE were to burn all the recyclables, it would still be 1300% over capacity. All four proposed WTE projects in Gujarat are disproportionately oversized in clear violation of the Solid Waste Management Rules, 2016.

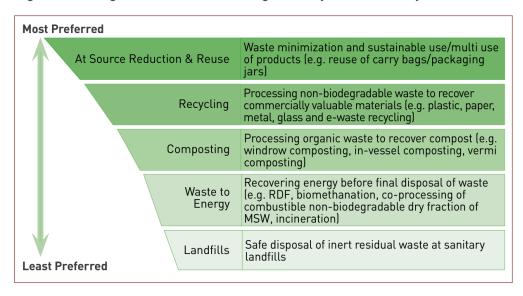


Figure 1.1: Integrated Solid Waste Management System Hierarchy

b. Plastic Waste Management rules (PWM), 2016

The Extended Producer Responsibilities (EPR) notification of the PWM rules mandates that only "category 3" type of plastics (Multi Layered Plastic Packaging, MLP) which are non-recyclable have to be burnt in WTE incinerators. But, the WTE incinerator in Jamnagar has clearly violated this rule by burning about 15,120 tons of category 1 and category 2 recyclable plastics.

c. CPCB emission norms for incinerators

The emissions from the WTE incinerators have caused huge health impacts to the communities living beside the plant in Jamnagar, Gujarat and they have made representations to the Gujarat State Pollution Control Board regarding the same.

d. Document Manipulation

A complaint has been filed against the Project proponent (Goodwatts Energy Pvt.Ltd), Rajkot with the Indian Renewable Energy Development Agency (IREDA) for "Document Manipulation" by not obtaining "No Objection Certificate" from Rajkot Urban Development Authority and Nakarwadi-Rajkot Gram Panchayat for construction of building. This is a clear violation under the Indian legal regime.

Mapping of IFC's Performance Standards violations and Indian legal regime-

S.no	Project harm	IFC's Performance Standard violated	Other violations	Indicators used and evidence
1.	Wrong Input waste characterization and Gross Calorific Value (GCV)	PS 1	GOI's <u>SWM</u> rules, 2016	ESIA report submitted
2.	False projection of "No Project" Scenario	PS 1	-	Data from Ahmedabad Municipal Corporation
3.	Hiding the fact about the other WTE project in Ahmedabad	PS 1	-	Data from Ahmedabad Municipal Corporation
4.	No proper consultation with waste pickers	PS 1 and PS 3	-	Statement by Waste Picker Cooperatives
5.	Burning of recyclable plastics and other materials	PS 3	GOI's PWM rules	EPR portal
6.	"Red Categorization" of the Waste to energy incineration plants	PS 3	-	GOI's Central Pollution Control Board (CPCB) classification.
7.	Conflicts in the sourcing of waste	PS 1, PS 3	-	ESIA report submitted
8.	Compromise of Community health, safety and security	PS 4	CPCB norms	Acknowledgement copy of the complaint by Jamnagar Municipal Corporation

C. Problems with WTE as a waste management method:

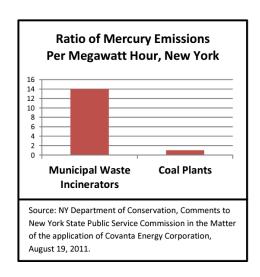
Policy documents that support the installation of WTEs valorise them as a scientific solution to the problem of urban waste. The 2014 Niti Aayog report on WTE in India, illustrates examples of successful WTE plants in other countries. It does this while ignoring widespread public protests against incinerator facilities and the shutdown of several WTEs across the world and a few even in India. Contrary to what the government would like us to believe, incinerators are worse for the environment and public health as compared to other waste management alternatives. Incineration releases major pollutants into the atmosphere such as dioxins, furans, lead, carbon monoxide, oxides of sulphur and nitrogen, hydrocarbons, and particulates. Toxic ash leftover from burning waste needs to be disposed of in engineered landfills, and if not handled properly can pollute soil and water in the area.

a. Waste incineration is a source of non-renewable energy

Municipal waste is non-renewable, consisting of discarded materials such as paper, plastic, and glass that are derived from finite natural resources such as forests that are being depleted at unsustainable rates. Burning these materials in order to generate electricity creates a demand for "waste" and discourages much needed efforts to conserve resources, reduce packaging and waste, and encourage recycling and composting.

b. All incinerators pose considerable risk to the health and environment of neighboring communities as well as that of the general population

Even the most technologically advanced incinerators release thousands of pollutants that contaminate our air, soil, and water. Many of these pollutants enter the food supply and concentrate up through the food chain. Incinerator workers and people living near incinerators are particularly at high risk of exposure to dioxin and other contaminants. In newer incinerators, air pollution control devices such as air filters capture and concentrate some of the pollutants; but they don't eliminate them. The captured pollutants are transferred to other by-products such as fly ash, bottom ash, boiler ash/ slag, and wastewater treatment sludge that are then released into the environment.



c. Burning waste contributes to climate change-

Incinerators emit <u>more carbon dioxide</u> (CO2) per unit of electricity (2988 lbs/MWh) than coal-fired power plants. (2249 lbs/MWh). Denmark—the poster child of Europe's incinerator industry— recently discovered that its incinerators were releasing <u>double the quantity of carbon dioxide</u> than originally estimated, and had probably been doing so for years, causing Denmark to miss its Kyoto Protocol GHG reduction targets. In contrast, a 2009 <u>study by the EPA</u> concluded that up to 42% of U.S. GHG emissions could be impacted through zero waste strategies such as recycling and composting.

d. Incinerators are only able to make small amounts of energy-

Due to the low calorific value of waste, incinerators are only able to make small amounts of energy while destroying large amounts of reusable materials. Conversely, zero waste practices such as recycling and composting serve to conserve three to five times the amount of energy produced by waste incineration. The amount of energy wasted in the U.S. by not recycling aluminum and steel cans, paper, printed materials, glass, and plastic is equal to the annual output of 15 medium-sized power plants.

e. Recycling creates 70 times more jobs than incinerators

The taking away of recyclables by WTE incinerators basically results in the collapse of an entire waste ecosystem. A <u>meta-analysis</u> of 36 studies spanning 16 countries that examined the job creation potential of various waste management strategies found that the recycling ecosystem involving the waste pickers, aggregators and recyclers, creates around 70 times as many jobs as WTE incinerators.

f. Incinerators are the most expensive method to generate energy and to handle waste, while also creating significant economic burdens for host cities.

Even with upto 50% Viability Gap Funding (VGF) from various central and state governments of India for setting up of the plants and getting paid for processing waste, WTE incineration produces electricity at around 7 rupee per unit, which is the costliest form of electricity in the country. In 2011, Harrisburg, PA became the largest U.S. city to declare bankruptcy, and the financial blame rests squarely on the shoulders of its staggering debt payments for upgrades at the city's incinerator. Detroit taxpayers have spent over \$1.2 billion dollars in debt service payments from constructing and upgrading the world's largest waste incinerator. As a result, residents have had to pay high trash disposal fees of over \$150 per ton. The city could have saved over \$55 million in just one year if it had never built the incinerator. For a fraction of these costs, investments in recycling, reuse, and remanufacturing would create significantly more business and employment opportunities.

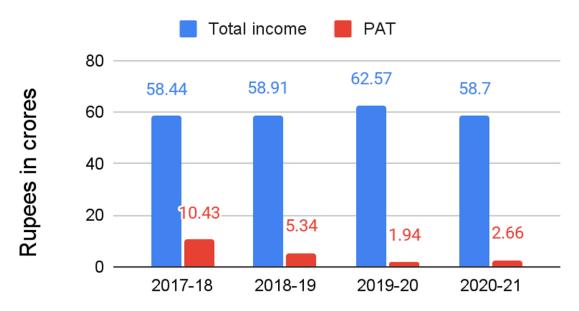
D. Financial performance of the WTE industry in India-

The horizontal analysis of top Waste to Energy Companies in India namely, JITF Urban Infrastructure Limited (JUIL) which has 7 WTE projects in various stages amounting to a total capacity of approx. 111 MW, Re Sustainability Limited which has 44 MW of WTEs and operates India's largest WTE incineration plant and Abellon which has 1 operational plants and 3 under-construction plants shows that each company's current assets have decreased over the period 2019-2023. Interestingly, Essel Infraprojects which had about 15 WTE incineration plants in various stages of operation with a combined worth of about 2500-3000 crore before it sold off its assets and a 75% haircut was provided. The analysis suggests that companies operating in the Waste-to-Energy (WtE) sector face challenges in maximizing revenue and profitability, which hinders their sustainability.

Lack of availability of high calorific value segregated waste on one side, and high operations and maintenance costs on the other, have been responsible for the failure of several WTE plants in the country. In the case of the Timarpur Okhla Waste Management Company Limited (TOWMCL) WTE, loans from public financial institutions formed a big chunk of the project's financing. Thus, along with the social, environmental, and health costs of WTE plants, people also have to bear the financial burden in case they fail. The capital cost of the plant at the time of installation was Rs. 204 crores. The project was financed in an equity-to-debt ratio of 30:70. Rs. 140 crores (70%) were borrowed from a consortium of banks, with the lead bank being Axis Bank. The remaining amount of Rs. 60 crores (30%) was financed in the form of equity by Jindal. According to TOWMCL's financial statements, between 2017 to 2021, the company got government grants worth Rs. 40.45 crores. Separately as an operating revenue, the company received Rs. 47 lakhs each year through government grants. The Power Finance Corporation (PFC), an Indian financial institution under the ownership of the Ministry of Power, issued a loan of Rs. 122.66 crores to the company in the year 2018-19. In the year 2020-21, TOWMCL still had to repay Rs. 104.21 crores of the loan to PFC.

Despite having a high tariff rate, free land and government grants and subsidies, TOWMCL's profit rates are not inspiring. As opposed to the total income made by a company in a financial year, profit after tax (PAT) is the net profit available for the shareholders after paying all the expenses and taxes by the business unit. A fall in this value indicates a decrease in the company's profitability and ability to cover its day-to-day expenses.

TOWMCL - Total income and PAT



The annual income of TOWMCL has remained stable between approximately Rs. 58 to 62 crores for the last 4 years. However, PAT has been on a decline. It was Rs. 10.43 crores in 2017–18, Rs. 5.34 crores in 2018–19 and Rs. 1.94 crores in 2019–20, which improved slightly to Rs. 2.66 crores in 2020–21. Despite repeated public protests and records of pollution violations, the government is still keen on continuing to finance the Okhla WTE and may also finance the proposed expansion of the unit in the future.

It is clear that the projects across the WtE sector require substantial financial support through debt and grants. The public's hard-earned money is being channeled into these plants via grants, which eventually go to these loss-making companies. The financial debt keeps accumulating over the years, leading to bankruptcy and insolvency of these companies.

E. Case study of Okhla WTE in India

According to the 2018 Revision of World Urbanization Prospects produced by the Population Division of the UN Department of Economic and Social Affairs (UN DESA), Delhi was the world's second-largest city with 2.9 crore inhabitants. It was estimated that by 2028 Delhi will become the world's most populous city. With a sharp increase in population, the city has also seen a steep rise in the generation of municipal solid waste (MSW). Total solid waste generation in Delhi for the year 2018-19 was 10,614 TPD30 in 2019-20 it was 10,466 TPD,31 in 2020-21 it was 10,990 TDP,32 and in 2021-22 it was 11,108 TPD. Policy documents and waste management manuals released by the government acknowledge that waste management requires efforts and investments into the more foundational aspects of waste reduction and the implementation of reuse models along with a decentralised approach. However, despite this, the government's solutions to the problem have been focused on end-of-the-line solutions like dumping in landfills and incineration. Delhi became India's first city to have four operational waste-to-energy (WTE) plants. The 16 MW Okhla WTE is the oldest of the four and also the most controversial, with consistent violations over the years and no real contribution to solving the waste crisis in the city. According to a 2016 report on Power Generation from Municipal Solid Waste, by the Standing Committee on Energy 2015-16, under the Swachh Bharat Mission, "in order to promote projects of waste to energy, it is clarified that the central government Grant / VGF may also be used for such projects, either upfront or as generation based incentive for power generated for a given period of time." The project was financed in equity:debt ratio of 30:70 with all the equity being eventually bought by Jindal Urban Infrastructure Limited. The incorporation of the Timarpur Okhla Waste Management Company Limited (TOWMCL) After the MoU was signed by IL&FS, what followed was a very complicated company structure which ultimately resulted in the special purpose vehicle of Timarpur Okhla Waste Management Company Limited (TOWMCL).

As per the concession agreement, TOWMCL was given the following rights-

- 1. The right to choose technology—TOWMCL was given the right to 'develop the Project Facilities using such technology that it considers suitable and commercially viable for the purposes of implementing the Project'. It was also 'acknowledged that it is the intention of TOWMCL to essentially use Biomethanation, RDF and material recovery technology associated with the concept of an integrated waste processing plant, though TOWMCL had the right to change the technology at any point'
- 2. The right to use supplementary fuel for the power plant
- 3. The right to sell or otherwise dispose of any products derived or produced from the Plant as a consequence of undertaking the processing of the MSW and sewage
- 4. NDMC shall grant TOWMCL a licence to use the site at a nominal licence fee of Rupee One (Re. 1/-) per annum for the term and NDMC shall execute the License Agreement with TOWMCL together with the execution of this Agreement
- 5. The right to negotiate directly with each New Bulk Generator and fix a suitable fee (or a mechanism for determination of such fee) for the transportation and disposal of the MSW generated by the relevant New Bulk Generator

6. All costs of any operations for ensuring collection and delivery of MSW at the Receipt Point, including but not limited to collection, manual segregation, storage, transportation and delivery of MSW at the Receipt Point and disposal of the Rejected Waste, were to be borne by NDMC. 7. NDMC agreed that it would deliver, on every day after the Commercial Operations Date (COD), the MSW equivalent to at least the NDMC MSW Quantity at the Receipt Point, in accordance with the Delivery Schedule, and in the event it is not able to deliver the NDMC MSW Quantity for a period of six consecutive days, it would pay TOWMCL for each day of such failure after the six-day period, as a pre-agreed reasonable compensation.

8. TOWMCL would, from the COD of the Power Plant, pay to NDMC, subject to the approval of DERC, Rs. 0.05 (five paise) for every unit of electricity sold from the Power Plant. The Royalty Amount would increase proportionately to any increase in approved tariff after the first year of commercial operations.

In 2009, residents of Sukhdev Vihar and Okhla filed a lawsuit in the Delhi High Court to stop the plant from getting constructed. Residents' claims included that the public hearing before the EC was not announced properly and the Environmental Impact Assessment (EIA) report was never released to the public. Further, the company claimed in its Detailed Project Report (DPR) to generate RDF with a calorific value of 2,000 kcal but later revised the figure to 800-1,300 kcal in its bid documents. Based on this crucial revelation, the Ministry of New and Renewable Energy (MNRE) noted on 29 May 2008 that "this will necessitate that a fresh DPR is prepared as not only will the actual quantity of MSW required to be processed be different but also the basic parameters of all the equipment will change." However, no new DPR had been released. After 28 hearings at the Delhi High Court between 2009 and 2013, the case was transferred to the National Green Tribunal (NGT). Several hearings over the years revealed the NGT and Delhi government's refusal to acknowledge the harm being caused by the WTE. The following image displays important developments in the case. The petitioners appealed the NGT judgement in the Supreme Court of India and the matter is currently subjudice.

The NGT judgement of 2017 directed the operators of the plant - Jindal Urban Infrastructure Ltd., to pay a compensation of Rs. 25 lakhs and the Central Pollution Control Board (CPCB) "to collect and analyse the samples of ambient air quality once in four months". In a 2018 order, the NGT mandated that a joint inspection of WTE plants at Delhi be conducted by the CPCB and the DPCC. The most recent report available is of the inspection carried out in September and October 2020 in which all the three WTE plants in Delhi were found violating pollution regulations that included the release of excess Dioxins and Furans, Hydrogen chloride and excess quantities of particulate matter at nearby air quality monitoring stations. According to the WHO, dioxins are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones and also cause cancer. Following this, the DPCC imposed a fine of Rs. 5 lakhs on each plant as "environmental compensation, without any further direction on future monitoring or reduction of the pollution levels." According to the results of the stack emission monitoring of the Okhla WTE plant, the dioxins and furans released by the plant are 890% more than the permitted amounts. Similarly, levels of hydrogen chloride exceeded prescribed limits by 296%. Interestingly, the Online Continuous Emission Monitoring System (OCEMS) installed by the plant had recorded readings vastly different from

what the CPCB's inspection found, showing figures closer to the stipulated norms. The plant also produces 250 metric tonnes of ash daily from the combustion process that are disposed of at a landfill in Jaitpur. Thus, despite repeated monitoring and some penalties, not much at the Okhla WTE has changed and they are now seeking an expansion to burn an additional 2000 tons of garbage. After initially rejecting the proposed expansion of the Okhla waste-to-energy plant from a capacity of 23 MW to 40MW, the expert appraisal committee (EAC) under the Union ministry of environment, forest and climate change (MoEFCC) has changed its stance, recommending that the plant be given environmental clearance. The expansion is currently challenged in the Supreme court by the residents of Sukhdev Vihar and Okhla.

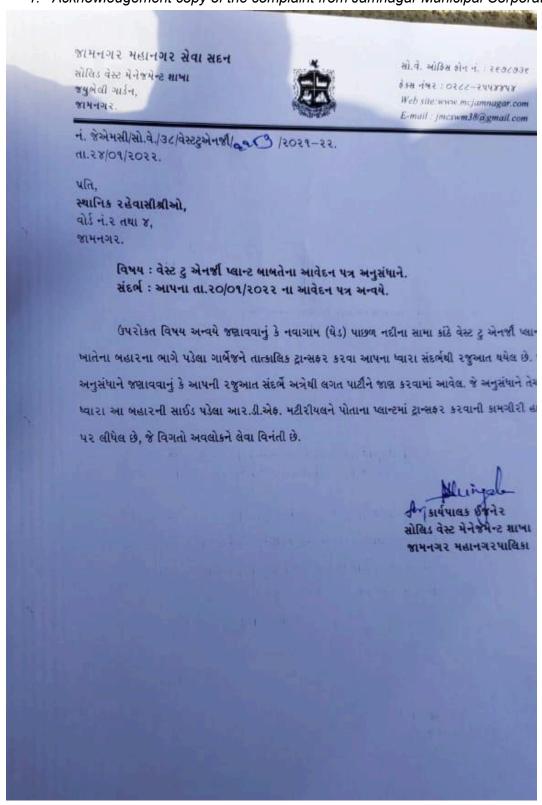
F. Key Demands:

We urge that International Finance Corporation not proceed with the investment for the establishment of waste to energy plants by ABELLON CLEAN ENERGY LIMITED (Project number- 46819) in Gujarat, India. The performance and the impacts of the first WTE plant by Abellon (Goodwatts) in Jamnagar has been dismal to say the least and has caused huge air pollution and health impacts on the communities living near the plant. Proceeding with further expansion/ construction of new WTE plants will aggravate the issues faced by the communities and the project engenders further social, environmental and economic harms of communities living around the vicinity of the proposed plants. We hope that based on the evidence provided on the violations of IFC's Performance Standards, livelihood impacts of the project, the documented potential adverse health impacts of the project on the community, social and environmental harms of the project, and the flawed Environmental and Social Impact Assessment (ESIA), the IFC will not proceed with the project investment.

Should you have any further clarifications on the harms of the project, please reach out to us and we also request for an online meeting to discuss further on the project.

G. Annexure:

1. Acknowledgement copy of the complaint from Jamnagar Municipal Corporation-



2. Show Cause notice by Pollution Control Board to Abellon/Goodwatts WTE

(ce/5/91-2

Name: Goodwatts Wte Jamnagar Private Ltd

Inspection Date: 29/01/2020

This unit is visited w. r. to their CTE- amendment application for increase in quantity of industrial & domestic water consumption as well as increase in quantity of industrial & domestic waste water generation due to increase manpower and revised calculation of water requirement. Unit has obtained CTE No. 97282 for electricity generation 7.5 MW from biomass and Refused Derived fuel (RDF- preprocessed) and also got amended vide letter no. GPCB/CCA-JMN-1471/ID-44894/519691,dated 05/09/2019 for MSW to RDF= 200TPD and preprocessed RDF = 250TPD. Now they want to increase quantity of domestic water consumption 2.5 klpd to 7.5 klpd and industrial water consumption 770 klpd to 925 klpd. As per application 7.5 klpd for dom. purpose will be used ground water and 925 klpd from will be used STP treated water for industrial purpose. Domestic waste water generation will be also increase 2.5 klpd to 6.0 klpd and industrial w/w generation will be also increase 114 klpd to 196 klpd. 6 klpd Domestic waste water will be send to Soak pit/Septic Tank. 73 klpd Industrial backwash & regeneration will be disposed to STP. 9 klpd w/w generated from boiler blow down will be used for cooling tower make up. MGF+ UF reject (41 lkpd) and RO reject (21 klpd) w/w will be used for plantation/gardening purpose. 14 KLD from RO Reject water will be used for Lime Slurry preparation & 38 KLD will be used for Bottom Ash Quenching & SBC Water. Water breakup and water balance sheet is uploaded with application by them. During visit it is observed that erection work of boiler is going on and civil work of bunker is found completed. Erection work of MSW pretreatment shed is found in progress. They have planted the tree on periphery of the premises.

Name: Goodwatts Wte Jamnagar Private Ltd

Inspection Date: 16/11/2021

This unit is visited with reference to complain of Mr. A.C. Zala – Chairman, Indian Human Rights Association regarding noise pollution from M/s. Good Watts Private Limited through email. This Unit is located at S. No. 46/1, 46/2/p-1, 47, 48, 49/1, 49/2, 50/1, 50/2, 53, Village - Navagam (Ghed), Jamnagar. During visit it is observed that plant commissioning work is almost completed. This unit is engaged in generation of power from MSW waste. As per contacted person informed that after installation of plant machinery such as turbine, boiler etc. it is required to clean rust and dust from turbine before starting of plant. Hence it is required to clean with high pressure steam which creates noise. Till date total 37 nos. of cleaning cycles with steam has been performed. As per contacted person informed cleaning activity of turbine is completed. In future if steam cleaning with high $pressure\ steam\ is\ required\ they\ have\ first\ install\ silencer\ with\ steam\ ejector\ to\ control\ noise\ pollution.$ During visit it is observed that steam ejecting pipe for cleaning turbine is now disconnected and steam pipe is connected to turbine for generation of power. Unit is instructed to take necessary action immediately to control noise pollution and obtain CCA of the board. Unit has carried out trial run. During visit @ 250 MT of MSW waste is observed stored in the designated area and unit is observed not in operation. Unit has obtained CTE fresh from the board. Necessary written instruction is issued to the unit.

Gujarat Pollution Control Board Regional Office-Jamnagar Inspection Report

Place Visited:-	M/s. GoodWatts WTE Jamnagar Private Limited, (PCB ID- 44894) S. No. 46/1, 46/2/p-1, 47, 48, 49/1, 49/2, 50/1, 50/2, 53, Village - Navagam (Ghed), Jamnagar Ta. & Dist: Jamnagar.			
Reference:-	Telephonic complain received from Mr. P.C. Zala and Mr. Sanjayshin Chidasanas several telephonic as well as written complaints received which is raised from local residence. Corporator of JMC etc.			
Date and time of Visit:-				
Person Contacted:-	1.1 Cladesoma & others			
Observation:-	La montioned			

With reference to above mentioned complaint we, the under sign visited the above mentioned places and the observation are as follow:

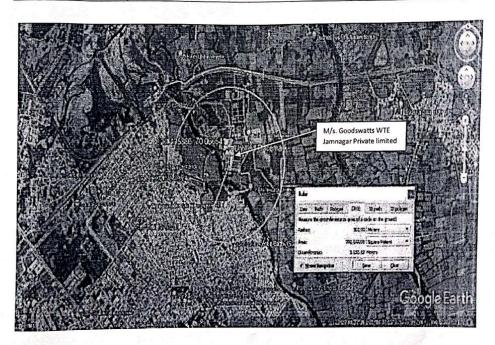
This unit is visited with reference to telephonic complain received from Mr. P.C. Zala, Mr. Sanjaysinh Chudasama and others residence of gandhinagar and nandanpark area, Jamnagar regarding Solid waste bad smell problem and noise pollution caused by M/s. Good Watts WTE Jamnagar Private Limited.(Lat & Long: 22.495886, 70.066541) This Unit is located at S. No. 46/1, 46/2/p-1, 47, 48, 49/1, 49/2, 50/1, 50/2, 53, Village - Navagam (Ghed), Jamnagar. This office has received several telephonic as well as written complaints which is raised from local residence, Corporator of JMC etc. hence we have earlier approached complainers after contacting telephonically to complainer as per regional officer's instructions and we have visited residence area of complainers with Jamnagar Municipal corporation team on dated 18/12/2021 @23:00 hours. During visit First of all we met complainers (@15 to 17 people) at Nandan park- 2 society. They informed that right now they are not facing any noise pollution as well as smell of solid waste problem issue a unit is not operated regularly. After that complainer informed that whenever the plant is operated in full fledge they will inform the Regional officer as well as JMC. As per complainers requested that if at this time if plant inspection is carried out with reference to complain then actual problem of the complaint is not pitcturised to concern authority so they request to cancel the visit.

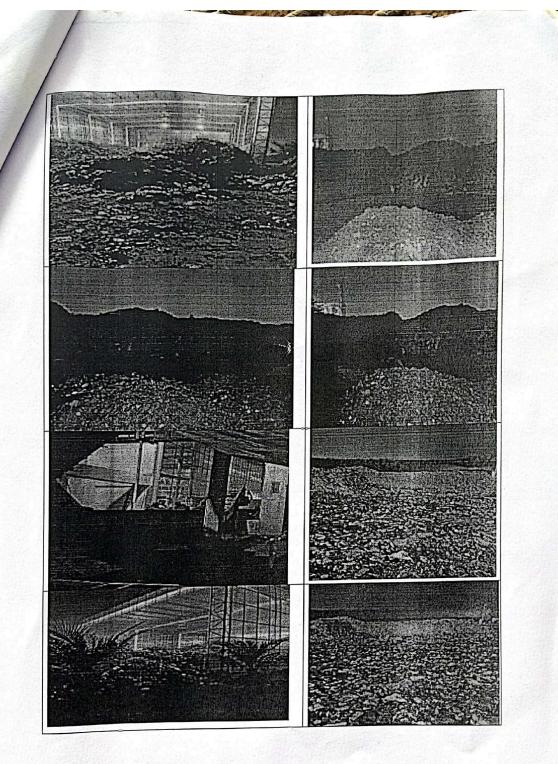
Then after telephonic complain received from Mr. P.C. Zala and Mr. Sanjaysinh Chudasama on dated 28/12/2021 @ 23:00 hours (Night Monitoring) regarding smell of solid waste from industry. First of all complainers @ 20 people are met near Ashapura provision store located at nandan park -2 area, Jamnagar (Lat: 22.493283, Long: 70.064063). Representative of complainer Mr. P.C. Zala and Mr. Sanjaysinh chudasama has explained that due to this industry they are suffering from very bad smell as well as noise pollution. Now a days noise pollution is not a major problem as industry has installed silencer in plant but we are facing problem of very bad smell from this industry. Our family members are also disturbed from this issue. More than @2000 Residences are residing in this cluster and they all are facing same problems. Arial distance from this location (Lat: 22.493283, Long: 70.064063) to plant is @ 250 meter. Then several areas of this locations are visited with complainers i.e. (1) Street no. 3, Nandanpark 2, (2) Street no.2, Jalaram park (3) Street no. 1,2,3 & 4, Dwarkesh park. This all area are located @ 150 meter to @ 300 meter vicinity area from this plant. This areas are visited during night hours and during visit solid waste smell is sensed. Then by inquiring residence people of that area Mr. Dharmendrasinh Jadeja (Mo No: 9376466388) and Miss. Hinaben Shukla they also informed that very bad smell of solid waste is sensed in our residential area.

Then after unit is visited 29/12/2021, @01:00 hrs (Night Monitoring). This unit is engaged in production of Electricity-7.5 MW from Municipal solid waste and Refused Derived Fuel (RDF). This unit is a municipal solid waste to energy plant, electricity is generated by combustion of MSW & Refused Derived Fuel (RDF) in a furnace, with the help of boiler and turbine. Unit has installed silencer to control noise pollution. Unit is obtained CTE Fresh of the board which is valid up to 11/07/2023. Unit has applied for CCA fresh application on online XGN but unit has not paid fees. During visit plant is observed not in operation due to maintenance work is going on in SMBC conveyer belt but segregation of waste is observed in operation. This unit is procured municipal solid waste and store it in dedicated Solid waste storage area which is under the shed. During visit @

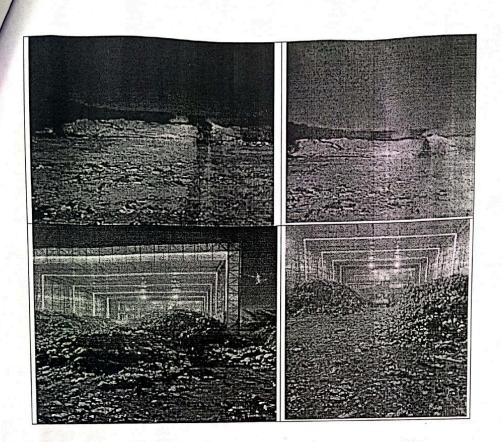
500 MT of solid waste is observed stored in closed MSW shed but @ 600 MT of the solid waste is observed stored in outside of the MSW shed within premises, hence unit is instructed to store Solid waste within shed. During visit it is observed that manually sprinkling of perfume through one pump on solid waste to mask odour is going on however solid waste smell is sensed in premises and also sensed above mentioned area. It seems that sprinkling of perfume with only one manually pump is not in sufficient quantity compare to solid waste quantity and this unit is handling Municipal solid waste unit is instructed to take all the necessary precautionary actions to control odour generated from solid waste. Unit is handling solid waste and at the starting phase of process after screening activity inert is generated. This inert material generated from solid waste is disposed to Hapa Solid waste handling site. Necessary written instructions are issued at the time of visit. All complainers are waiting outside of the premises of unit. After that Mr. P. C. Zala took us to back side of the premises and informed that unit or JMC is dumping solid waste/RDF material on outside of the premises. It is observed that more than @ 2000 MT of Solid waste/RDF material observed stored and solid waste smell is sensed.

Visited by:-	- wetak	7/2
	(C H Chauhan)	(J M Jadav)
	AEE	AEE





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SHOW CAUSE

PCB ID: Legal ID

Paryavaran Bhavan, Sector-10/A, Gandhinagar - 382010 (079) 2323 2152 Website: www.gpcb.gov.in

Gujarat Pollution Control Board

https://gpcbxgn.gujarat.gov.in

Show Cause Notice DATE: 15/12/2021

WHEREAS, the Officials of the Gujarat Pollution Control Board (hereinafter referred to as the Board, in short), conducted inspection on 16/11/2021 in order to verify the statements made by you in your application for Consent to Operate under the Air Act / to ascertain the Compliances of Conditions specified in Consent Order.

WHEREAS during the inspection it was observed that:-

Reason: 1. Unit has after installation of plant machinery such as turbine; boiler etc. is clean rust and dust from turbine with high pressure steam without any precaution/APCM and created noise pollution. 2. Unit has carried out total 37 nos. of cleaning cycles with steam. 3. Unit shall apply for CCA of the Board immediately.

NOW THEREFORE, in exercise of the powers vested with this Board Under section 31(A) read with section 21 of the Air (Prevention and Control of Pollution) Act, 1981 notice is hereby served on you, to show cause within 15 days from the date of receipt of this show cause notice in view of the non compliance observed above and why legal action should not be initiated as per the provision of the Acts which may include rejection of your application and suspension/ closure of your unit.

For and on behalf of Gujarat Pollution Control Board

S V Bhargava, DEE

NO: SCN-608932, 15/12/2021

Goodwatts Wte Jamnagar Private Ltd, S. No. 46/1, 46/2/p-1, 47, 48, 49/1, 49/2, 50/1, 50/2, 53,, Village - Navagam (Ghed),, Jamnagar,

Navagam (Ghed),

Dist : Jamanagar, Tal : Jamnagar, SIDC : Not In Gidc

Phone: 919909006605

COPY TO :-

The RO Head(P.C.B.), Jamanagar

With a request to carryout monitoring and send the detailed I.R. & A.R. for the sample collected to this office immediately.

Printed On: 15/12/2021

1 - Through XGN

NIG

3. Video evidence and media coverage

- a. https://www.divyabhaskar.co.in/local/gujarat/jamnagar/video/over-waste-to-energy-plant-started-in-gandhinagar-129237367.html
- b. https://youtu.be/k0hPBjachME?si=vTNdLEjQkXqxQSEZ
- c. https://youtu.be/0cCp9FMS7dQ?si=ie5CD66Yigqbkakp
- d. https://www.youtube.com/watch?v=pFH3BkLxFPA