WRIT PETITION IN PUBLIC INTEREST UNDER ARTICLE 32 FOR VIOLATION OF RIGHTS GUARANTEED UNDER ARTICLE 14 AND 21 OF THE CONSTI-TUTION SEEKING A WRIT OF MANDAMUS OR ANY OTHER APPROPRIATE WRIT DIRECTING THE UNION OF INDIA TO IMPLEMENT THE RECOMMEN-DATIONS OF 'NATIONAL ELECTRIC MOBILITY MISSION PLAN, 2020', AND NITI AAYOG'S POLICY FRAMEWORK ON 'ZERO EMISSION VEHICLES' FOR ADOPTION OF ELECTRIC VEHICLES TO MITIGATE THE IMPACT OF CLI-MATE CHANGE AND AIR POLLUTION

To,

The Hon'ble Chief Justice of India and His Companion Judges of the Hon'ble Supreme Court of India

## MOST RESPECTFULLY SHOWETH:

1. That the present writ petition has been filed in public interest under Article 32 for violation of rights guaranteed by Article 14 and Article 21 of the Constitution of India. The petitioners have no direct or oblique interest in the matter except as responsible members of the citizenry. The petitioners are *inter alia* seeking a Writ of Mandamus or any other appropriate writ directing the Union of India to promote the gradual adoption of electric vehicles in order to mitigate the severe crisis of air pollution that is violating the citizens fundamental rights to breathe, health, and clean environment. Government's failure to enact a suitable regime of incentives and disincentives to promote the adoption of 'zero emission' vehicles is without cogent reasons, arbitrary, a result of bureaucratic inertia, and severely risks the health of the citizens and the environment of the country.

Article 39 (e), 47 and 48 of Constitution of India collectively cast a duty on the State to secure the health of the people, improve public health and protect and improve the environment. The lack of effort on the part of the enforcement agencies, notwithstanding adequate laws has resulted into spiralling pollution levels. The quality of air is steadily decreasing and no effective steps have been taken by the administration in this behalf.

This Hon'ble Court in *M.C Mehta v. Union of India* Writ Petition 13029 of 1985 (CNG Case) observed, "*it is clear that the alternative fuel of CNG, LPG* 

and <u>electricity</u> is a preferred technology which critically polluted cities like Delhi need as a leapfrogging technological option".

Today, electric vehicles are the preferred technology to alleviate the effects of pollution both in terms of the total 'life cycle' cost of ownership and 'life cycle' emission of pollution vis-a-vis fossil fuel based vehicles, and the Hon'ble Court's intervention is not only maintainable to protect citizens fundamental rights, but necessary.

1A. About the Petitioners:

Petitioner's introduction

## THE DUTY TO INTERVENE

## 2. GLOBAL WARMING & CLIMATE CHANGE:

2.1 The burning of fossil fuels has led to a rapid build up of Carbon and related green house gases into the atmosphere leading to the problem of Global Warming, Climate Change, and Air Pollution. This has been the subject matter of several reports of the Intergovernmental Panel on Climate Change (IPCC). The latest report of IPCC warns that there are only a dozen years for Global Warming to be kept to a maximum of 1.5 degree celsius, beyond which even half a degree will significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people. The report points out that urgent and unprecedented changes are needed to reach the target. IPCC makes it clear that climate change is already happening, has upgraded its risk warning from previous reports, and warned that every fraction of additional warming would worsen the impact. The report recommends four pathways to limit Global Warming to 1.5 degrees, one of which is a shift to electric transport systems.

Copy of a report in *The Guardian*<sup>1</sup>, dated \_\_\_\_\_ on IPCCs latest report is marked and annexed as **ANNEXURE 1 at Pages** \_\_\_\_\_ to \_\_\_\_\_

2.2 In October of 2016, India ratified the Paris Agreement on Climate Change that requires the member countries to make binding commitments to curb carbon dioxide (CO2) emissions to keep global average temperatures from rising above 1.5°C as compared to the pre-industrial years. India has committed to reduce its carbon emission intensity —emission per unit of GDP —by

<sup>&</sup>lt;sup>1</sup> https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report

33-35% from 2005 levels over 15 years. India also committed to producing 40% of its installed electricity capacity by 2030 from non-fossil fuels.

Copy of a report in the *Hindustan Times*<sup>2</sup>, dated \_\_\_\_\_ on India's ratification of *Paris Agreement* on Climate Change is marked and annexed as **ANNEX-URE 2 at Pages** \_\_\_\_\_ to \_\_\_\_

2.3 Whereas, India is reportedly on track to meet its commitment as regards generation of electricity from renewable sources, India has been failing to curb its emissions. The Global Carbon Project has reported in December, 2018, that in India, which is already the third biggest emitter in the world, the carbon dioxide emissions in 2018 are likely to be 6.3 per cent more than in 2017, and expected to touch 2.62 billion tonnes. India's growth in emissions was the maximum of all major emitters year on year. The unchecked increase in emissions is partly attributable to emissions from fossil fuel based vehicles.

Copy of a report in the *Indian Express*<sup>3</sup>, dated \_\_\_\_\_ on the report of Global Carbon Project is marked and annexed as **ANNEXURE 3 at Pages** \_\_\_\_\_ to

3. AIR POLLUTION:

3.1 This Hon'ble Court has held 'sustainable development' to be an essential facet of the right to life. Governmental apathy and inaction thus far is directly responsible for virtually turning our cities into 'gas chambers'. World Health Organization's (WHO) *Global Air Pollution Database, 2018,* shows that 14 of the 15 most polluted cities globally in terms of 2.5 particulate matters are in India.

Copy of a report in the *Times of India*<sup>4</sup>, dated \_\_\_\_\_ on the report of the Global Air Pollution Database is marked and annexed as **ANNEXURE 4 at Pages \_\_\_\_\_ to \_\_\_\_** 

3.2 The total number of fossil fuel burning vehicles registered in India as of 2015 was about 210 million as per the latest data from Ministry of Statistics. However, the Society for Indian Automobile Manufacturers (SIAM) has reported that domestic sales in 2016, 2017, & 2018, were 20.4 million, 21.8 million, 24.9 million respectively taking the total vehicles in India to about 266 millions.

<sup>&</sup>lt;sup>2</sup> https://www.hindustantimes.com/india-news/what-signing-the-paris-climate-change-treaty-means-for-india/story-RsDH1IAohQNEqRxb426YbM.html

<sup>&</sup>lt;sup>3</sup> https://indianexpress.com/article/india/india-drives-global-rise-in-co2-emissions-report-5480529/

<sup>&</sup>lt;sup>4</sup> https://timesofindia.indiatimes.com/city/delhi/14-of-worlds-15-most-polluted-cities-in-india/articleshow/63993356.cms

SIAM has reported a growth of 14.2% in domestic sale of fossil fuel based vehicles between 2017 and 2018. This was despite the fact that the Indian economy had slowed down. As the economy revives, the sale of vehicles is bound to pick up. If nothing is done to promote the adoption of EVs and sale of fossil fuel based vehicles continues unchecked, the crisis of Air Pollution and Climate Change is bound to worsen having deleterious effect on the health of citizens.

Copy of the relevant pages from Ministry of Statistics, *Statistical Yearbook of India, 2018*<sup>5</sup>, are marked and annexed as **ANNEXURE 5 at Pages** \_\_\_\_\_ to

Copy of data taken from the website of Society for Indian Automobile Manufacturers<sup>6</sup> is marked and annexed as **ANNEXURE 6 at Pages** \_\_\_\_\_ to

## 4. VIOLATION OF RIGHT TO HEALTH:

Very briefly, just a few studies by credible organisations are highlighted to draw the attention of the Hon'ble Court to the manner in which citizens fundamental rights are being violated on account of governmental apathy and inertia especially those of India's next generations requiring Hon'ble Court's intervention to uphold the principle of 'inter-generational equity' which is an essential facet of 'sustainable development'.

4.1 A study by the *Lancet Commission on Health & Air Pollution* shows that in India 1.9 million premature deaths occur due to outdoor and indoor air pollution. In 1990, COPD (chronic respiratory disease) was ranked 13th among leading causes of illness and lost life years. But this has now shot up to rank 3. Similarly, Ischemic heart disease that is greatly influenced by air pollution has gone up from rank 5th to 1st. A further 2017 study by the Lancet shows that 1 out of every 8 deaths or 12.5% of all deaths in 2017 were attributable to Air Pollution

Copy of a report in *Down to Earth*<sup>7</sup> on the findings of the Lancet Commission on Health & Air Pollution, dated \_\_\_\_\_ is marked and annexed as **Annexure 7 at Pages \_\_\_\_\_ to \_\_\_\_** 

<sup>&</sup>lt;sup>5</sup> <sup>5</sup> http://mospi.nic.in/sites/default/files/statistical\_year\_book\_india\_2015/Table-20.1\_0.xlsx

<sup>&</sup>lt;sup>6</sup> http://www.siamindia.com/statistics.aspx?mpgid=8&pgidtrail=14

<sup>&</sup>lt;sup>7</sup> https://www.downtoearth.org.in/news/air/air-pollution-retards-lung-growth-in-delhi-children--59115

Copy of a report in *Indian Express*<sup>8</sup> dated \_\_\_\_\_ on Lancet's study is marked and annexed as **Annexure 8 at Pages \_\_\_\_ to \_\_\_\_** 

4.2 It is reported in *Journal of Indian Pediatrics* that Indian children have slower growth of lungs and reach a final size that is lower than that of Caucasian White children in the US. Air pollution retards lung growth in children. Even Indian adults have smaller lungs than their US counterparts. Smaller lungs mean poorer exercise capacity and greater vulnerability to respiratory symptoms and diseases.

Copy of a report in *The Hindu*<sup>9</sup> dated \_\_\_\_\_ on the study published in Journal of Indian Pediatrics is marked and annexed as **Annexure 9 at Pages \_\_\_\_\_ to** 

4.3 World Health Organization's report titled '*Air Pollution and Child Health: Prescribing Clean Air*' shows that nearly all Indian children—98 per cent breathe unsafe air that exceeds WHO guidelines. Early exposure to air pollution affects brain and neurological development, and lung function. Children's lungs, which are still in formative stages and are maturing, are deeply affected by air pollution that impedes lung function growth. Even at lower level of exposure children can develop lasting deficit in lung function. This deeply affects their quality of life and leads to long lasting chronic conditions including asthma and chronic obstructive pulmonary diseases.

A copy of a report in *The Wire*<sup>10</sup> dated \_\_\_\_\_ on the findings of the WHO report is marked and annexed as **Annexure 10 at Pages** \_\_\_\_\_ to \_\_\_\_

5. That from the aforementioned it is clear that the intervention of the Hon'ble Court is required to mitigate the twin problems of Climate Change and Air Pollution. In *M.C. Mehta v Union of India, 2018 SCCOnline SC 2122,* this Hon'ble Court while directing that no sale of BS IV vehicles would be permitted from April, 2020, onwards held,

"It is an established principle of law that the right to life, as envisaged under Article 21 of the Constitution of India includes the right to a decent environment. It includes within its ambit the right of a citizen to live in a clean environment. With regard to vehicular traffic, this Court has issued

<sup>&</sup>lt;sup>8</sup> <sup>8</sup> https://indianexpress.com/article/india/one-in-8-deaths-in-india-due-to-air-pollution-report-5481063/

<sup>&</sup>lt;sup>9</sup> https://www.thehindu.com/news/cities/Delhi/delhi-kids-have-smaller-lungs-compared-with-childrenin-us-due-to-air-pollution/article20446761.ece

<sup>&</sup>lt;sup>10</sup> https://thewire.in/health/india-pollution-related-deaths-children

a number of directions to ensure a clean environment and reduce pollution. It has been held that the right to clean environment is a fundamental right. The right to live in an environment free from smoke and pollution follows from the "quality" of life which is an inherent part of Article 21 of the Constitution. The right to live with human dignity becomes illusory in the absence of a healthy environment. The right to life not only means leading a life with dignity but includes within its ambit the right to lead a healthy, robust life in a clean atmosphere free from pollution. Obviously, such rights are not absolute and have to co-exist with sustainable development. Therefore, if there is a conflict between health and wealth, obviously, health will have to be given precedence. When we are concerned with the health of not one citizen but the entire citizenry including the future citizens of the country, the larger public interest has to outweigh the much smaller pecuniary interest of the industry, in this case the automobile industry, especially when the entire wherewithal to introduce the cleaner technology exists."

## ADOPTION OF EVs NECESSARY TO MITIGATE CLIMATE CHANGE & AIR POLLUTION

NITI AAYOG'S CASE FOR ADOPTION OF EV'S:

6. Historically, mobility and fossil fuels have been inextricably linked, with electric vehicles being successful only in a few niche markets. However, over the last decade, a collection of circumstances have conspired to create an opening for electric mobility to enter the mass market. As per Niti Aayog's, *Policy Framework on Zero Emission Vehicles, 2018,* these forces include:

"(i) Climate change: The prospect of rapid global temperature increase has created the need for a reduction in the use of fossil fuels and the associated emissions. India has committed to cutting its Green House gas emissions intensity by 33% to 35% percent below 2005 levels by 2030.

(ii) Advances in renewable energy: Over the last decade, advances in wind and solar electricity generation technologies have drastically reduced their cost and introduced the possibility of clean, low-carbon and inexpensive grids. India proposes to add 175 GW of renewable energy capacity by 2020 and to achieve 40 percent of its electricity generation from non-fossil sources by the same year.

(iii) Rapid urbanization: Economic development, especially in emerging economies, is creating a wave of urbanization as rural populations move to cities in search of employment. While urbanization is an important component of the process of economic development, it also stresses upon the energy and transport infrastructure leading to congestion and pollution. According to a recent study by WHO, India is home to 14 out of 20 most polluted cities in the world. Electric vehicles (EVs) can improve that scenario by reducing local concentrations of pollutants in cities.

(v)Battery chemistry: Advances in battery technology have led to higher energy densities, faster charging and reduced battery degradation from charging. Combined with the development of motors with higher rating and reliability, these improvements in battery chemistry have reduced costs and improved the performance and efficiency of electric vehicles.

(vi) Energy security: The petrol, diesel and CNG needed to fuel an internal combustion engine (ICE) based mobility system requires an extensive costly supply chain that is prone to disruption from weather, geopolitical events and other factors. India needs to import oil to cover over 80 percent of its transport fuel. That ratio is set to grow as a rapidly urbanizing population demands greater intra-city and inter-city mobility."

A copy of the relevant pages of Niti Aayog's *Policy Framework on Zero Emission Vehicles, 2018*<sup>11</sup>, are marked and annexed as **ANNEXURE 11 at Pages** \_\_\_\_\_ to

6A. **Falling Costs of Renewable Energy:** The Ministry of New & Renewable Energy has informed the Cabinet that record low Solar and Wind tariffs at Rupees 2.44/ unit have already been achieved<sup>12</sup>. This is in contrast to reported average tariff of between Rupees 3.7 - 4.0 per unit for energy derived from coal<sup>13</sup>. As of March, 2018, total installed capacity of renewable energy is 69.2 GW whereas total installed capacity of conventional sources of energy as of June, 2018, is 346 GW. India is on course to meet the target of commissioning 175 GW of renewable energy including 100 GW of solar and 60 GW of wind power by 2022<sup>14</sup>.

A copy of Ministry of New & Renewable Energy's note for the Cabinet dated \_\_\_\_\_\_ is marked and annexed as **ANNEXURE** \_\_\_\_ **at Pages** \_\_\_\_\_ **to** \_\_\_\_\_

A copy of a report in *Quartz* dated \_\_\_\_\_ on the falling costs of solar and wind energy is marked and annexed as **ANNEXURE** \_\_\_\_ **at Pages** \_\_\_\_ **to** \_\_\_\_

12 12 https://mnre.gov.in/file-manager/UserFiles/

<sup>&</sup>lt;sup>11</sup> https://www.niti.gov.in/writereaddata/files/document\_publication/EV\_report.pdf

Monthly%20Summary%20for%20the%20Cabinet%20for%20the%20period%20of%20August, %202017%20to%20March,%202018.pdf

<sup>&</sup>lt;sup>13</sup> https://qz.com/india/1272394/cheap-solar-and-wind-energy-prices-are-killing-indias-coal-power-plants/

<sup>&</sup>lt;sup>14</sup> <sup>14</sup> https://powermin.nic.in/en/content/power-sector-glance-all-india

A copy of data available on the Ministry of Power's website on the installed capacities of renewable and conventional sources of energy is marked and annexed as **ANNEXURE** \_\_\_\_ at Pages \_\_\_\_ to \_\_\_\_

7. Global Community is adopting EVs fast: That as a result of the above factors coming together, developed economies such as EU, USA, Japan, Nordic Countries, as well as developing economies such as China and India have all included EVs in their policies to lower their carbon emissions while providing convenient and costeffective mobility. As per the International Energy Agency's, *Global Electric Vehicles* Outlook, the number of electric and plug-in hybrid cars on the world's roads exceeded 3 million in 2017, a 54% increase compared with 2016. China remained the largest electric car market in the world, accounting for half sold last year. Nearly 580,000 electric cars were sold in China in 2017, a 72% increase from the previous year. The United States had the second-highest, with about 280,000 cars sold in 2017, up from 160,000 in 2016. Nordic countries remain leaders in market share. Electric cars accounted for 39% of new car sales in Norway, making it the world leader in electric vehicle (EV) market share. Electric mobility is not limited to cars. In 2017, the stock of electric buses rose to 370,000 from 345,000 in 2016, and electric two-wheelers reached 250 million. The electrification of these modes of transport has been driven almost entirely by China, which accounts for more than 99% of both electric bus and two-wheeler stock.

A copy of a report by International Energy Agency titled *Global Vehicles Outlook*<sup>15</sup>, dated \_\_\_\_\_ is marked and annexed as **ANNEXURE 12 at Pages** \_\_\_\_\_ to \_\_\_\_\_

#### INDIA'S ELECTRIC VEHICLE POLICY:

8. **NEMMP-2020**: Broadly, the comprehensive *National Electric Mobility Mission Plan, 2020* (NEMMP-2020), prepared after extensive research and consultation with all stakeholders, promulgated by the nodal agency for the automobile sector i.e. the Ministry of Heavy Industries in 2012, already recommends the necessary incentives and disincentives. It aimed to achieve national fuel security by promoting hybrid and electric vehicles in the country. There was an ambitious target to achieve 6-7 million sales of hybrid and electric vehicles year on year from 2020 onwards. The policy was to provide fiscal and monetary incentives to kick start the ZEV industry.

9. **BENEFITS OF ADOPTING NEMMP-2020 RECOMMENDATIONS**: NEMMP-2020 estimated in detail the likely benefits accruing from adoption of it's recommendations. Today, on account of the falling costs in manufacturing of EVs and renewable energy sources, these benefits are likely to be higher. Nonetheless, the benefits even in 2012 were significant and it was estimated that,

- i) By achieving the targeted sale penetration levels for electric vehicles by 2020, the electric mobility initiative was likely to not only result in significant savings in liquid fuel consumption thereby lowering the petroleum import bill but would also result in mitigation of impact of mobility on the environment. There were likely to be significant reductions in emissions and also net decrease in CO2 emissions on a 'well to wheel' basis.
- ii) By 2020 the total new vehicle sales of 6-7 million xEVs (Hybrids/Electric Vehicles) was expected to result in cumulative total liquid fuel savings to the tune of 7-8 MT by 2020.
- iii) Total cumulative net benefits from electric vehicle initiative would be in the range of Rs. 39,000-43,000 Crores of Rupees by 2020. 65,000 direct jobs in the electric vehicle manufacturing industry and about 200,000 jobs in ancillary industries were expected.
- iv) The reductions in CO2 emissions as a result of the projected shift to electric vehicles were calculated using the 'well to wheel' approach. As per this, the CO2 emissions on account of emissions related to materials (production), electricity generation (well to tank), and fuel efficiency (tank to wheel) were all considered. It was estimated that, for all vehicle segments, achieving the potential demand for electric vehicles by 2020 would have helped result in potential reduction of 1.3% - 1.5% in CO2 emissions, compared to status quo scenario by 2020.

10. **SALIENT RECOMMENDATIONS OF NEMMP-2020**: The thrust of the policy was to allow hybrid and electric vehicles to become the first choice for the purchasers so that these vehicles could replace the conventional vehicles and thus reduce liquid fuel consumption in the country from the automobile sector. To this end, recommendations were made as regards four key areas which are briefly summarised below:

#### 10.1. DEMAND CREATION:

- (i) Creating assured demand by mandating government fleets and public transportation to adopt electric vehicles.
- (ii)Promoting sale of electric vehicles by bridging the gap in initial cost of acquisition. While the 'life cycle' cost of acquisition is lower for electric vehi-

cles on account of running and maintenance costs, the initial cost of acquisition is higher as compared to fossil fuel based vehicles. Therefore, the initial cost of acquisition needs to be subsidised enough to incentive the consumer to purchase an EV.

(iii) Tax incentives and peripheral measures such as waiving road tax, toll tax, incentivised parking.

10.2. INFRASTRUCTURE CREATION FOR CHARGING OF EV's

- (i) Augmentation of existing infrastructure of Power Generation & Transmission and also setting up of Charging Infrastructure for EVs.
- (ii) It was estimated that for four wheelers between 1,75,000 to 2,27,000 charging stations would be required to be set up with a mix of fast chargers and regular chargers.
- (iii)Significant Charging Infrastructure would be required to be set up particularly for buses. Charging stations should be located in the bus depots.
- (iv) For charging infrastructure, the aim should be to develop this as a commercially viable business opportunity that attracts private investment.
- (v) Mandating charging infrastructure in public buildings
- (vi)Introducing standards for charging equipment.
- (vii) Amending building laws to mandate provision for charging outlets.
- (viii) Providing speedier access to land for setting up of charging infrastructure.
- (ix) Allowing private retailing of power.
- (x) Uninterrupted electricity at reasonable costs for EV recharge.
- (xi) Speedy clearances
- (xii) Undertaking pilot projects for testing the efficacy of the various charging infrastructure models that can be adopted.

10.3. SUPPLY SIDE MEASURES TO ENCOURAGE DOMESTIC MANUFAC-TURING

- (i) Linking demand incentives to certain minimum level of localisation of electric vehicle components
- (ii)Local value addition as a qualifying pre-condition for manufacturers.

(iii)Other incentives such as tax holidays, accelerated depreciation etc

#### 10.4. RESEARCH & DEVELOPMENT

- (i) Research into India specific solutions and greater localization of EVs be encouraged and funded.
- (ii)The R&D effort will require investments from both the government and the automobile industry. As a part of this initiative, consortium building approach or direct grant models can be examined, as some of the funding mechanisms to support and ensure a strong local R&D base yielding tangible results.

A copy of the relevant pages of the *National Electric Mobility Mission Plan,* 2020<sup>16</sup> (NEMMP-2020), are marked and annexed as **ANNEXURE 13 at Pages** \_\_\_\_\_ **to** \_\_\_\_\_

## 11. FAME INDIA'S FAILURE TO ADOPT RECOMMENDATIONS:

11.1. That the scheme to implement NEMMP-2020, i.e. the *Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India* scheme (FAME India), promulgated in April of 2015, fell woefully short of adopting the recommendations of NEMMP-2020. The direct result of which is that the entire object of NEMMP-2020 stands defeated as is evident from the latest data made available by FAME India itself. Whereas NEMMP-2020 had envisioned that by 2020 India would adopt close to 7 million electric vehicles if it's recommendations were adopted, as of January, 2019, only 0.263 million electric vehicles have been adopted in India pursuant to FAME India scheme. The main reason for this is that whereas NEMMP-2020 had called for an investment of about 14,500 crores from the government to achieve the stated targets, on 12th of December, 2018, the government informed the parliament that the total funds allocated thus far were <u>579 crores</u> as against a total outlay of 850 crores.

A copy of the reply of the government<sup>17</sup> to parliament dated \_\_\_\_\_\_ is marked and annexed as **ANNEXURE 14 at Pages** \_\_\_\_\_ to \_\_\_\_\_

A copy of the data available on FAME India website<sup>18</sup> regarding adoption of EVs is marked and annexed as **ANNEXURE 15 at Pages** \_\_\_\_\_ to \_\_\_\_\_

<sup>&</sup>lt;sup>16</sup> https://dhi.nic.in/writereaddata/Content/NEMMP2020.pdf

<sup>&</sup>lt;sup>17</sup> http://pib.nic.in/newsite/PrintRelease.aspx?relid=186277

<sup>18</sup> https://www.fame-india.gov.in/

11.2. From the budget allocated, FAME India primarily restricts itself to the Demand Creation focus area and that too at limited levels. The purchasers of electric and hybrid vehicles are given an upfront reduction in purchase price by the dealer at the time of purchase of Electric Vehicles. Since inception of the scheme & till 6th of December 2018, the Government has given financial support (demand incentive) to only about 2,61,507 electric/hybrid vehicles. 119 models of vehicles of 27 OEMs got registered under FAME-India Scheme for availing demand incentive. Though electric buses were added to the scheme to support electrification of public transport, so far only 455 electric buses for 9 cities in a pilot scheme have been sanctioned.

The Gazzette Notification<sup>19</sup> pertaining to the *Fame India Scheme* dated \_\_\_\_\_\_is marked and annexed as **ANNEXURE 16 at Pages \_\_\_\_\_ to \_\_\_\_\_** 

11.3. Whereas, the government under **National E-Mobility Program**, mandated Energy Efficiency Services Limited (EESL) to procure 500,000 vehicles for government use. Thus far only tenders for procurement of 10,000 vehicles have been awarded to Tata & Mahindra and tenders for 10,000 more are expected soon. As per the government, the per kilometer cost for an electric car is just 85 paisa against Rs 6.5 for normal cars. Further, these 20,000 cars are expected to save over 5 crore litres of fuel every year leading to a reduction of over 5.6 lakh tonnes of annual CO2 emission.

A copy of *PIB Press Release*<sup>20</sup> dated \_\_\_\_\_on the procurement by EESL is marked and annexed as **ANNEXURE 17 at Pages** \_\_\_\_\_to \_\_\_\_

11.4. Despite the limited support offered by the government, the benefits of even the modest number of electric vehicles are evident. FAME India's data shows that the 0.261 million electric vehicles sold thus far have resulted in total fuel savings of 39358338 Litres and total reduction in CO2 emissions of 98270937 Kg.

# 12. CONSUMER PREFERENCES SHOW THAT REASON FOR NON ADOPTION OF EV'S IS LACK OF DEMAND INCENTIVES AND LACK OF CHARGING INFRASTRUCTURE:

12.1 That of the 14,500 crore outlay envisioned by the NEMMP-2020, 50% was to be for demand side incentives *inter alia* in the nature of direct subsi-

<sup>&</sup>lt;sup>19</sup> https://www.fame-india.gov.in/ViewNotificationDetails.aspx?RowId=5

<sup>&</sup>lt;sup>20 20</sup> http://pib.nic.in/newsite/PrintRelease.aspx?relid=177134

dies to consumers, 45% was to be for creating the requisite charging infrastructure, and 5% was to be allocated for R&D.

12.2 That this is pertinent as in 2017, the United Nations Environment Program's (UNEP) Centre on Energy, Climate and Sustainable Development, published a study titled, Study on Electric Mobility in India, reporting that analysis of consumer perspective in India shows that the primary barriers to large scale adoption of EVs are lack of charging infrastructure and high initial cost of the vehicle. That both these issues were to be addressed according to NEMPP-2020 by providing for adequate financial support by the government and are the main reason for the lack of interest on the part of consumers. The government's total outlay for the creation of charging infrastructure thus far is a less than 50 crores. A consumer who is even predisposed to purchase of electric vehicles would not purchase the same if the adequate charging infrastructure is not made available and if the initial cost of acquisition is high.

12.3 As per the government's own calculations, the total 'life cycle monetary costs' as well as the 'life cycle pollution emissions' of electric vehicles are significantly lower as compared to vehicles that run on 'fossil fuels'. There are significant advantages to be had on account of adoption of electric vehicles as detailed above. What is required is for the government to provide for adequate support for charging infrastructure and support for reducing upfront acquisition costs of electric vehicles. In light of the same government's failure to enact a suitable regime of incentives and disincentives to promote the adoption of 'zero emission' vehicles is without any cogent reason, arbitrary, a result of bureaucratic inertia, and severely risks the health of the citizens and the environment of the country.

A copy of the relevant pages of *Study on Electric Mobility in India*<sup>21</sup>, published by UNEP dated is marked and annexed as **ANNEXURE 18 at Pages** \_\_\_\_ to \_\_\_\_

13. 'FEEBATE': That Niti Aayog in its Policy Framework on Zero Emission Vehicles, 2018, has recommended a system of 'feebate' on IC engine manufacturers on the 'polluter pays' principle, which would be used to create a fund to finance the transition towards e-mobility. The decision on feebate is important because without it there will not be enough funds to promote the adoption of EVs. Even a modest 'feebate'— a combined "fee" and "rebate" where a fee is levied on one player to

<sup>&</sup>lt;sup>21</sup> http://www.unepdtu.org/-/media/Sites/Uneprisoe/Publications-(Pdfs)/India-Transport/Reports/ Study-on-Electric-Mobility-in-India\_Final.ashx?

la=da&hash=7ACFD37E4D155A7E442424A8509064ACE69C8D83

provide a rebate to another —would generate enough funds to enable the EV sector to take off.

14. The *Society for Manufacturing of Electric Vehicles* has recommended the following suggestions for faster adoption of electric vehicles,

- i. Front Loading of Incentive, at least for first 1-2 million EVs
- ii. Mandating the use of EVs in the e-commerce, courier, food delivery and such companies to convert their entire fleet into green mobility over a period of three years.
- iii. Enlarging the subsidy pool by imposing the marginal cess on polluting ICE vehicles ('feebate').
- iv. Mandate nationalised banks for preferential and priority sector funding of EVs.
- v. Installation of metered charging sockets in all parking, malls, multi storage apartments through mandating/amending laws.
- vi. Dedicated budget allocation for EVs awareness program like other Govt schemes.
- vii.Opportunity battery swapping for 2W/3W as it will reduce the cost of ownership and remove the sticker as well as the range anxiety.
- viii.Uniform GST rate for EV and Battery and also lower GST rate for OE and replacement battery

#### 15. INTERNATIONAL POLICY FRAMEWORK

Countries that have been successful in adoption of EVs such as Norway, Netherland, Sweden, China, USA and United Kingdom provide some of the following salient incentives to promote EVs:

<u>Norway:</u> No purchase/import taxes, Exemption from 25% VAT on purchase, No annual road tax, No charges on toll roads or ferries, Free municipal parking, Access to bus lanes, 50 % reduced company car tax, & Fiscal compensation for scrapping of fossil vans when converting to a zero emission van. The country aims to sell all zero (battery electric or hydrogen) emission vehicles by 2025. The country has decided to reach this goal by strengthening green tax system, not a ban.

<u>Netherlands</u>: EVs are exempt from the registration tax and from the annual road tax. Electric and hybrid Leased cars are also given some tax concession on income tax. Tax relief regulations exist for purchasing commercial electric vehicles. The city of Amsterdam grants subsidies up to 5,000 Euros to purchase EVs which are being used for business and up to 10,000 Euros for pur-

chasing electric taxis and courier cars. Entrepreneurs can receive a subsidy for installing charging infrastructure.

<u>United Kingdom</u>: EVs are exempted from vehicle excise duty. Employees and employers exempt from company car tax. Along with this, exemption for electric vans from income and national insurance contributions (maximum of £3.000). Electric Vehicles also exempted from fuel benefit charge. Some local authorities in U.K. provide exemptions or a reduced parking charge for electric cars. Many of the EV types (not all) gets 100% discount in London Congestion Charging. Other incentives like Plug-in car grant and plug-in-van grant were also introduced to provide subsidy to electric cars and light truck vehicles respectively.

<u>U.S.A:</u> Tax credits are provided on infrastructure investment like charging infrastructure. Along with this, consumer tax credit and purchase incentives also exist. Other than these, EVs and PHEVs are free to enjoy HOV lanes, designated parking space etc.

<u>CHINA:</u> China is the clear global leader in the production and sale of electric vehicles (EVs). Last year, 770,000 EVs were manufactured and sold in the country, a 53% increase over 2016 and almost four times the number sold in the United States. With EVs still at a cost disadvantage to vehicles made with traditional internal combustion engines (ICE), rapid growth in EVs has been made possible by China's very generous subsidy policy. To encourage the growth of the industry, China has provided manufacturing incentives to EV companies, as well as subsidies to consumers who purchase EVs. Substantial incentives for the production of electric buses have propelled electric bus sales in China from just over 1,000 in 2011 to a high of 132,000 units in 2016. As a result of cuts in the electric bus subsidy program, 99% of the 352,000 electric buses on the road globally are running on China's streets and roads.

16. That Union of India is currently in the process of working on the FAME India -II Scheme. In light of the facts stated above and arguments advanced, the petitioner's prayer is for directions to the Union of India to suitably implement the recommendations made under *NEMMP-2020* and those of Niti Aayog in its *Zero Emission Vehicles* policy framework so as to mitigate the severe impact of emissions from fossil fuel based vehicles on Climate Change as well as Air Pollution that violates the citizens fundamental rights to health and clean environment under Article 14 and Article 21 of the Constitution of India. 17. The petitioners have not filed any other writ, petition, application, claim, or suit regarding the above matter in this Hon'ble Court or any other court throughout the territory of India. The petitioners have no better remedy available.

## <u>GROUNDS</u>

A. Because Article 39 (e), 47 and 48A of Constitution of India collectively cast a duty on the State to secure the health of the people, improve public health and protect and improve the environment.

B. Because government has abdicated it's duty to protect the citizens right to health and clean environment under Article 14 and Article 21. Governmental apathy in suitably implementing the recommendations of it's own agencies has led to spiralling emissions from fossil fuel based vehicles contributing to the problems of Climate Change and Air Pollution turning our cities into virtual 'gas chambers'.

C. Because 'Precautionary Principle' demands a gradual phasing out of fossil fuel based vehicles and adoption of electric vehicles as recommended in the various reports of IPCC as well as reports of the government itself to mitigate Climate Change on account of emissions from fossil fuel based vehicles.

D. Because principle of 'Inter-Generational Equity' demands that the health of our younger generation is protected against the scientifically documented lasting and long term impact of breathing polluted air.

E. Because 'Polluter Pays' principle demands that a system of 'Feebate' as recommended by the Niti Aayog is implemented to provide for incentivising the adoption of EVs and at the same time discouraging the use of fossil fuel based vehicles.

F. Because the total 'life cycle' costs of ownership as well as 'life cycle' emissions from electric vehicles are far better than that of fossil fuel based vehicles. Costs of producing energy from renewable sources such as Solar and Wind has drastically fallen as per the government's own reports and are now lower than cost of energy from fossil fuel based sources such as coal.

G. Because lack of adoption of EVs is no longer on account of lack of options for consumers to choose from. Per the government itself, Indian consumer already has 119 variants of EVs from 27 Original Equipment Manufacturers from.

H. Because surveys on consumer preferences show that the lack of demand for EVs is on account of lack of consumer awareness, lack of suitable demand incentives, and lack of adequate charging infrastructure, which are all a result of governmental apathy.

#### <u>PRAYER</u>

In these circumstances, it is therefore most respectfully prayed that your Lordships may graciously be pleased to:

- a. Issue Writ of Mandamus or any other appropriate writ directing the respondent to adopt and implement the recommendations made under *NEMMP-2020* and those of Niti Aayog in its *Zero Emission Vehicles* policy framework which are more specifically mentioned in Paragraphs 7 and 13 above specifically pertaining to Demand Creation, creation of requisite Charging Infrastructure, and system of 'feebate'. These would include mandating assured demand, providing demand side incentives to consumers to bridge the gap in initial cost of acquisition, setting standards for charging infrastructure, creating requisite charging infrastructure for buses at bus depots, creating requisite charging infrastructure in appropriate densities in the cities etc.
- b. Issue directions to the respondents to adopt the best practices of the international community incentivising Demand Creation and Charging Infrastructure such as preferential parking, exemption from paying toll, subsidising private ownership of charging infrastructure, providing for fast as well as normal charging infrastructure at parking spaces, mandating charging infrastructure in private apartments etc. The best practices are more specifically mentioned in Para 15 above.
- c. Pass such other orders or directions as this Hon'ble Court may deem fit and proper in the facts and circumstances of the present petition.

AND FOR THIS ACT OF KINDNESS, THE PETITIONERS AS IN DUTY BOUND SHALL EVER PRAY.

New Delhi

Filed on: of January, 2019

DRAWN & FILED BY: Prashant Bhushan (Advocate for the Petitioners) \*