

Delhi Greens, NMML, LEAD India, FODRA, SAYEN/UNEP, TCP-I, The YP Foundation

**Delhi Youth Summit on Climate 2008**  
**“Because Our Future should be in Our Hands”**

28-29 May, 2008 | Teen Murti Bhawan | New Delhi | India

**Delhi Youth Charter on Climate 2008**

**Waste** **29<sup>th</sup> May 2008**

This declaration was developed from the 28<sup>th</sup> to the 29<sup>th</sup> of May, 2008 at Teen Murti Bhawan during the Delhi Youth Summit on Climate. The drafting process involved over 80 participants including youth & young professionals of ages 16-30 and observers above that age group. Participants mostly hailed from Delhi and the NCR region, with quite a few representatives from across India who are also concerned about the climate issues of Delhi. The conference was supported by Delhi Greens, LEAD India, Fountain of Development Research & Action (FODRA), The Climate Project-India, Nehru Memorial Museum & Library (NMML), The YP Foundation and the South Asia Youth Environment Network under the patronage of the United Nations Environment Programme.

We the youth of Delhi and those from other Indian cities concerned about our climate hereby endorse this Youth Charter on Climate and urge the Delhi Government to ensure that our proposals are taken into account in their decision making processes regarding Delhi's development. Climate change is a generational problem that requires an immediate response. If Delhi is to become a “world class” city, as indeed envisioned by the city's planners then it must incorporate mitigation and adaptation measures in response to climate change to be prepared for the challenges that lie ahead. Outlined below is a youth perspective on the kind of measures we would like the Delhi government to undertake to ensure a clean and green Delhi, one that is able to develop sustainably in the backdrop of a climate constrained world.

**Delhi Youth Declaration**

*There should be at least one youth representative of Delhi Greens (age 18-30) on the Delhi Master Plan Reviewing Committee. After all, it is our future that is being planned.*



## **URBAN PLANNING**

Haphazard planning has already led to inefficient use and distribution of resources around the city. The challenges that have resulted from such haphazard planning will only be magnified as the city reels under the pressure of a changing climate. Thanks to inefficient planning and lack of effective public transport, Delhi loses hundreds of crores in Rupees worth of fuel as vehicles are left idle waiting at the traffic lights. Unless better planning is not incorporated to reduce commuter time from home to work and mixed-use planning encouraged, the economic losses will continue to increase.

### *Solutions*

Encouraging sustainable communities (townships) through micro-management based on city-level guidelines. These communities must be well integrated into the larger cityscape

Urban planning needs to invite public responses to draft legislations which result in a flexible statement, not a law. Further it needs to encourage public-private partnership with due process and verification. Also, it needs to explore seeking strategic consultation from extra governmental bodies like the Defense establishment

Strengthen Environment Impact Assessment (EIA) regulations

Central Pollution Control Board is required to have awareness campaigns across jurisdiction as per the EPA 1986

Reviewing the population growth rates and projections for the city and incorporating this into the plans

Taking the population census on a timely basis and making projections accordingly for more efficient use of resources

Mandate green cover on parking lots and also have multistory/underground parking

Encourage self-sustainable community gardens and city farming

Upgrading infrastructure to meet the immigration needs of the city

Rehabilitating slums to meet adaptation needs

Tax incentives for builders & developers to incorporate increased energy efficiency and water efficiency into the plans

Progressive taxing directly proportional to the relative “green content” of a building

### *Urban Transport Infrastructure*

Progressive taxation of vehicles directly proportional to their horse power and fuel efficiency.

“Triangulation” for better traffic management through use of sound (this works especially well for pedestrian crossing zones).

Implement use of permeable concrete or other sustainable materials through subsidies.

We must increase the frequency and extend timings of mass public transportation systems such as the metro and the Delhi Transit Bus system. This must match the demand of peak hours.

Delhi has a very well planned multi-modal integrated transit system and not following through with the completion of the BRT project will disrupt this well-planned extensive mass transit system for the city.

Encourage use of ring-rail as an alternative use of transportation in the NCR area to decrease congestion. This could include increasing frequency and “modernization of local railway stations.”

### *Parks and Open Spaces*

Maintaining the green cover of Delhi and undertaking eco-restoration of the Delhi Ridge Forest.

Encourage urban-ecotourism to get people interested in the green spaces of the city.

Encourage mixed use planning that supports open green spaces by use of skyscrapers.

## **WATER**

There is a shortage of over 1290 million liters of water per day (MLD) in Delhi, a city of which at present requires 3,324 million liters of water a day (MLD). The average water consumption in Delhi is estimated to be 240 liters per capita per day. Over-exploitation has contributed to depletion which has drastically affected the availability of water the city. It is currently extracting 1.7 times more groundwater for fulfilling its potable water consumption demand.

Climate change predictions suggest long-term and permanent alteration in the availability of potable water for the city of Delhi and beyond. The waters of the Yamuna along with levels of precipitation are expected to fluctuate. As a result, Delhi must prepare itself to handle possible acute water shortages in the future. This situation will be compounded by increasing population, further depletion of groundwater sources and lack of effective management of our water supply.

### **Recommendations:**

#### **ADAPTATION TO A WATER CONSTRIANED DELHI**

- Water tariff to be based on consumption on a Willingness To Pay (WTP) model for potable drinking water; Implementation of the Water (Cess) Act on NDMC
- Up gradation and maintenance of existing water supply system
- Using IT Technology and GIS applications in water resource management
  - Water Audits
  - Energy consumption analysis in water distribution
- Review existing Rain Water Harvesting Mandate for new structures and subsidize rainwater harvesting structures for old structures; provide tax incentives for rainwater harvesting.
- Explore opportunities for public-private partnership for water supply Demand side management in the water supply system
- Preparing for floods including emergency rescue services

## SOLUTIONS FOR MITIGATION

Installing decentralized and community based Sewage Treatment Plants (STPs)

Examining the possibility of water credits for industries for sustainable water management

Awareness and sensitization towards sustainable use and disposal of water

Effective utilization of financial resources for cleaning of the Yamuna.

## **WASTE**

Currently Delhi produces approximately 6,000 tonnes of waste per day. By 2021 the city plans to accommodate approximately 15,000 tonnes per day. Lack of accountability, lack of segregation, inefficient process of collection and processing, lack of awareness on the issue, increased non-biodegradable content of the waste, lack of recycling infrastructure are major impediments in the process. Furthermore lack of awareness and social barriers along with non compliance with laws has led to ineffective management of e-waste, bio medical and industrial waste. Absence of waste collection system in illegally settled localities compounds the problems. Furthermore waste in landfills and burning of trash generates greenhouse gas emissions.

### **Recommendations:**

Individual and local composting

Use waste to energy processes

R&D funding for university research on waste technology solutions Recycling polythene into other handicraft products

Policy recommendation for ensuring safe and non-toxic recycling and dumping processes

Paper recycling

Support entrepreneurs in bio-plastics and biodegradable utensils

Converting Delhi's per day production of 6,000 tonnes of biodegradable waste into organic fertilizer

Formalizing the informal waste collection sector

Create entrepreneurs and sustainable business models out of waste

- Creating projects in schools, colleges, communities, which generates awareness
- Implement fines for failure to recycle
- Creating linkages between industries (industrial ecology: waste of one industry is the input of another)
- Policy to refuse to remove trash from households/businesses if not segregated
- Policy for Extended Producer Responsibility to hold corporates responsible for the entire life-cycle of a product
- Encourage retailers to charge for plastic bags and give discounts for cloth/jute bags
- Create eco business lobby group to influence policies
- Public recycling infrastructure

## **ENERGY AND TRANSPORT**

Delhi's energy situation is rapidly worsening due to unavailability of sustainable power leading to frequent power cuts. This situation has arisen because of increased dependence on conventional fossil fuel based power sources, causing increased congestion, fuel inefficiency, negation of gains achieved due to CNG usage because of rising number of vehicles, decreased green space due to infrastructure growth particularly power and transport, and resources being impacted due to greater power generation. Declines in energy availability and increases in traffic congestion both have greatly decreased productivity of the city. Furthermore, the rapid growth of both of these sectors has direct impact on the carbon emissions of Delhi, as most electricity is generated from coal-based power.

### *Solutions*

#### Energy

Increase consumption of renewable energy and decrease fossil fuel usage by subsidizing renewables and removing subsidies on non-renewables; creating renewable portfolio standards for energy companies; increasing awareness of

available renewable energy appliances, particularly solar; utilizing methane capture and decentralizing biogas plants at household level; and implementing effective and best practices towards efficiency in power generation and distribution to reduce transmission losses

Improve Delhi's energy metering systems by using Time-of-Day metering and charging higher electricity costs for higher consumption

Use government buildings and infrastructure as examples of clean technology and energy efficiency by converting government buildings to green buildings; installing solar PV and water heating technology in government buildings; and increasing public infrastructure efficiency, such as ensuring that streetlights are not operated during daytime and using LEDs for traffic signals

Create and implement energy efficiency standards for buildings by curtailing financing for non green buildings and by mandating ECBC and increasing awareness about energy efficient systems among architects, engineers and consumers, providing incentives for green buildings to developers, home-owners and architects such as through faster building approval, decreased property tax, subsidized materials; for appliances by expanding Energy Star system and potentially including energy licenses or implementing a leadership program in efficiency such as in Japan; in lighting, particularly by encouraging the LED system; and by subsidizing cost of more expensive and efficient technologies

Encourage efficient lighting through regulatory programs or taxation on inefficient lighting; government subsidies; and awareness programs

Address biomass usage in Delhi for cooking through provision of more efficient cook stoves, solar cookers, LPG for cooking or household biogas collection and generate CDM financing for such projects and wherever possible

Bundle urban energy efficiency programs in Delhi for CDM credits such as mass solar street lighting, energy efficiency in buildings, fuel switching on large and small-scale, and energy efficiency in power plants

*Transport*

*The burgeoning economic prosperity of Delhi has empowered many citizens to purchase personal vehicles. This increase in vehicular numbers is resulting in greater emissions from the transport sector. Coherent and realistic solutions need to be found and adopted in order to control GHG emissions from transportation.*

Increase fuel switching through increased availability of CNG filling stations:

Increase fuel switching through increased availability of CNG filling stations and other low-carbon fuels, subsidization of low-carbon fuels while removing subsidies from petrol and create standards for fuel efficiency of vehicles

Increase effectiveness of public transportation through public-private partnerships to create multi-modal transportation systems, with a particular focus on quantity and frequency buses and metros; public-private partnerships in public transport, quality, comfort and safety; and connectivity

Create disincentives for vehicle purchase, such as staggered pricing for used cars, efficiency of vehicles and passenger numbers, increased parking fee in all parking areas and impose congestion charges, and increase age for driving licenses

Encourage cycling and walking by creating designated zones

Promote public-private partnerships with the government demonstrating leadership. Companies could contribute by increasing transport related employee services such as chartered buses, and create opportunities employees to work from home, thereby reducing personal vehicles and need to travel

Encourage alternative fueled or more efficient vehicles, including electric cars, blended biofuels, solar cars and hybrid vehicles through eliminating barriers

Decreasing number of vehicles owned by government and vehicles in VIP convoys; also, increasing alternative vehicles within the government

Disallow financing by major Delhi banks for high fuel use vehicles, and enforce stringent fuel standards and corresponding penalties for non compliance