

namma auto

Promoting the switch to a
greener city



THE PROJECT IS IMPLEMENTED BY:



FUNDED BY:



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Sustainable Intermediate Public Transport (IPT): Voluntary Guidelines on Corporate Social Responsibility (CSR) & Sustainability

ABOUT THE NAMMA AUTO PROJECT

Auto-rickshaws play a significant role in the transport sector of India. In some cities, it works as formal transport, and in few others, it acts as an intermediate transport (IPT) or feeder to public transport. In the cities of Bengaluru and Chennai, it runs as an IPT catering to 10% of mode share every day. Namma Auto project fosters the scaling up of a replicable and integrated model of sustainable auto-rickshaw transport, based on clean technologies, which will efficiently induce passengers' and operators' (auto-rickshaw drivers and service providers) to shift and adopt SCP practices related to mobility.

In India, ACRA leads a consortium consisting of Enviu Foundation, Women Health and Development (WHAD) and The Energy and Resources Institute (TERI). The consortium received a grant support from the European Union under their Switch Asia Programme for implementing a project that aims at switching to a sustainable urban transport system in the cities of Bangalore (Karnataka) and Chennai (Tamil Nadu).

SPECIFIC GOALS OF THE NAMMA AUTO PROJECT:

- The auto-rickshaw becomes environmentally, economically, financially and socially efficient for passengers, including tourists, and operators (auto-rickshaw drivers and service providers) thus, evolving into a credible green business proposal.
- Increase demand for eco-friendly auto rickshaws in the cities of Bengaluru and Chennai.
- Aids in improving the regulatory framework to promote the use and purchase of eco-friendly auto-rickshaws.



For scaling up this project and its positive impacts, collective business action was identified as a major enabler. An important step in this direction was to promote consultation and engagement with Automotive manufacturers (functions such as Marketing, Operations, CSR, Supply Chain, etc.) and other relevant stakeholders. During these consultations, we witnessed rich discussions with diverse viewpoints. More importantly, the output of these consultations were used to develop the voluntary guidelines for the IPT sector.

One key point which was highlighted in all consultations was the increasing role of corporations and their power as well as influence to bring change in the area of Sustainable IPT. To reduce carbon emissions and enable Sustainable IPT, there is a strong need for increasing focus, promoting dialogue and enhancing engagement related to this sector. In India, IPT has been an integral part of our regular transportation system and is expected to continue for another three to four decades (in some form or the other).



CONSULTATION PROCESS FOR DEVELOPING THE GUIDELINES

In Bengaluru, Pune, Chennai and New Delhi

ORGANIZERS

These consultations were organised by Fondazione ACRA and were facilitated by Manju Menon (Project Manager, Namma Auto Project) and Rishi Sher Singh (Sustainability Expert)

The consultations were organised in four cities- Bengaluru, Pune, Chennai and New Delhi where a total of 75 participants came together.

CITY	PARTICIPANTS	HOST OR SUPPORTER
Bengaluru	13	IIM-B
Pune	13	Boat club
Chennai	16	IIT-Chennai
New Delhi	33	Global Compact India Network (GCNI)

The approach: To enable high quality discussions, a human centric approach was used, where participants were provided with a comfortable space to share their views.

SPECIFIC OBJECTIVES OF THESE CONSULTATIONS WERE TO

- Collect diverse inputs for developing a voluntary guideline for Sustainable Intermediate transportation in India-
 - Strengthen linkages of Sustainable development goals (SDGs), CSR, National Guidelines with Sustainable Transport
 - Provide a platform for industry experts and stakeholders for in-depth discussions on Sustainable transport systems and its social impact
- Identify key business drivers-
 - Create an understanding of opportunities and challenges that automotive companies face to enhance sustainable transport
 - Collect inputs of stakeholders involved in this sector

The facilitators minimised power dynamics by using alternative seating layouts and open-ended questions. Principles of these consultations were laid down and shared in each session. It was ensured that everyone was able to participate in an open and constructive manner. These consultations were under confidentiality and Fondazione ACRA sought verbal consent on use of respective company names and taking of pictures. To respect individual positions, it was agreed not to use respective names in this report. This in-turn ensured minimum bias by using a multi-stakeholder approach.



THE NEXT SECTION COVERS A SUMMARY OF THE POINTS DISCUSSED DURING THE CONSULTATIONS. IT IS DIVIDED INTO 6 THEMES.

- STRENGTHENING THE CASE FOR SUSTAINABLE IPT
- ACCESS TO FINANCE AND RELATED CHALLENGES
- TRAINING & CAPACITY BUILDING
- DIVERSITY & INCLUSION
- INFRASTRUCTURE & TECHNOLOGY
- POLICY LEVEL SUGGESTIONS



STRENGTHENING THE CASE FOR SUSTAINABLE IPT

“Time is running short to cut our emissions”

KEY TAKE-AWAYS

VALUE CHAIN FOCUS

For making IPT sustainable and reducing emissions, every stakeholder in the entire value chain of this sector should benefit (auto drivers, commuters, original equipment manufacturers (OEMs), fuel providers, operators, financiers, mass transit network and other relevant stakeholders).

- From an ecosystem point of view, it is about travelling in the most convenient way
- Sustainable IPT using Electric Vehicles (EVs) has outcomes beyond environmental factors. Drivers can have more savings, feel less fatigued and sleep better. In addition, the ride becomes more comfortable for users (lesser vibrations, vehicle smoke and noise)



- Due to being at the bottom of pyramid, at an auto-driver level there is a narrow focus on their daily earnings. Thus, there is a need to enhance their understanding around Sustainable IPT as an enabler for their economic and personal welfare
- EV's are a major step for Sustainable IPT in India. However, there is a need for alternative fuels as well. There should be considered in future discussions on Sustainable IPT
- An expert commented that "Sustainability leads to corporate immortality"; thus, OEMs should create a long-term strategy for IPT. Since every technology has a finite lifespan, it is important to consider intermediate and future steps

COLLABORATION AND COLLECTIVE ACTION

To scale up Sustainable IPT, all stakeholders have to come together, especially the various OEMs and policy makers.

- Corporate involvement is imperative and essential to bridge the gap between auto drivers and major transport providers (possibly through digital platforms)
- There is a need for increasing the business case of Sustainable IPT for an auto driver. Business case should consider all forms of fuels and technology (Compressed Natural gas (CNG), Liquefied petroleum gas (LPG) or electric)

FINANCE RELATED

"People like to buy things which are cost effective"

KEY TAKE-AWAYS

RESTRUCTURING

There is a need for restructuring of the entire financing model for Sustainable IPT (i.e. loan provisions, interest rates, repayment process, financial literacy, awareness raising, etc.).

- Financial restructuring has to be linked with overall policy development of this sector.
- The pace of technology advancement is very fast, which poses a challenge for financial institutions to understand product life cycle (i.e. resale value) and associated risks.



LOAN INTEREST RATES

Access to finance has been a challenge for players in the IPT sector. Traditionally, repayment default rates are high, leading to low profitability of banks. There is a need to understand why default rates are high in IPT sector.

- Due to high default rates, interest rates for IPT are higher than any other industry (>20%), which puts an additional burden on the auto drivers.
- The ratio of unorganised financiers is higher in this sector, extracting much higher interest rates (>30%). Since EV options could cost more than traditional autos, this exacerbates the situation.

COST BARRIERS

There are entry level cost barriers for Sustainable IPT (especially for EVs and related battery costs). There is a need to address these barriers and enable adoption of new technology, especially when this sector is highly cost sensitive.

- For an existing driver, initial cost of buying an EV or retrofitting is higher than an engine (internal combustion) overhaul. Due to high interest rates and lack of knowledge, auto drivers chooses low cost and low risk options, which would be to go for an overall.
- For those who take the EV option, owners are not fully aware of inclusive costs- such as charging, range, battery replacement and maintenance. Thus, in order to highlight financial benefits of Sustainable IPT, there is a need to calculate and consider total cost of ownership.

BEHAVIOURAL ECONOMICS

Banks have started using 'nudges' and collecting daily or weekly repayments, reducing the load on the drivers, thus lowering defaulting rates. However, these initiatives are limited to some banks and should be embraced by all financial institutions linked with IPT.

- To increase repayments, there is a need to reward disciplined paying drivers (by both financial and non-financial mechanisms).
- Banks have large CSR budgets and it was debated whether these could be used to waive off bad loans (considering auto drivers face numerous social challenges). The use of CSR budget of banks for such provisions requires more understanding and discussion.

- LEVERAGING E-PAYMENTS: Existing payment methods such as 'Metro cards' and other e-payment method could be extended to paying auto drivers as well, which could increase the uptake of IPT services. This can make Sustainable IPT appealing and easier for a commuter to use.

TRAINING & CAPACITY BUILDING

KEY TAKE-AWAYS

"There is a need to break stigma around auto drivers"

UNDERSTATING TRAINING NEEDS

Auto drivers are most often stuck in a poverty mindset, which makes them focus only on survival. However, auto drivers are entrepreneurs as well. This creates an interesting mix of training needs.

- There is a need for developing an induction programme for drivers. This induction could include a mix of general awareness raising (including social problems), technical and basic business concepts. Training and sensitising of the auto driver community should include vehicle maintenance (to prevent misuse), financial literacy, behavioural aspects, awareness of technology, road safety, customer service, etc.
- Need to ensure ethical conduct by auto drivers- as basic as having a driving license.
- OEMs are expected to lead these training initiatives and build their business case. Importantly, drivers need support for training on vehicle maintenance, which is currently a limiting factor for proper use of vehicles and switching over to new technology such as EVs. In addition, OEMs need to develop 'nudges' for drivers to change their risk averse behaviours for new technology and enable long term thinking (which is essential for adoption of EVs).





- IPT owners need training on making right vehicle choices and financial planning. OEMs are in the driving seat for developing these training. However, other stakeholders also have the responsibility to develop engagement programmes with auto driver groups.
- As part of Fondazione ACRA's project in Bengaluru, engagement with drivers is currently being done through cooperatives and by circulating a code of conduct (for drivers). This Bengaluru project could to be scaled up in other cities as well, thus creating a level playing field.
- There is a need to think alternatively about training locations since auto-drivers cannot afford a long down-time. Charging and refuelling stations could be an important place for engagement and training of auto drivers. To identify more locations where drivers can be engaged, various actors of the value chain will have to collaborate.

CHANGING MIND-SETS

Existing vehicle owners have perception issue around Sustainable IPT.

- There is a need to change the image of an auto driver and this profession. This intervention can be included in CSR programme of large companies (for example, Ford India is engaging with cab drivers in Chennai by using stress balls). Good deeds of the auto drivers should be acknowledged. This will help to improve their attitudes, make the drivers feel that their service to people is important and indispensable. In this project, Fondazione ACRA has witnessed positive results with autorickshaw drivers in Bengaluru with smaller behavioural nudges.



- Need for dialogue with users (commuters) of IPT for raising their awareness– segment and understand needs of different users based on demographics (i.e. it was noted that needs of men and women might be different. Also, it might depend on the age group).

- Media campaigns could be used around the entire process of Sustainable IPT- policy, ground reality, corporate role, customers, etc.

SCALE UP

Government has to play an active role in promoting training- by acknowledging the induction programmes, support to develop modules, recognising cooperatives and raising awareness in the masses. Hand-holding by the government will bring a change in attitudes of all stakeholders.

DIVERSITY & INCLUSION

“Having females as auto pilots can alleviate security perceptions of females”

PROMOTING GENDER EQUALITY

Currently, IPT is a male-dominated sector. In addition, auto industry is predominantly male-dominated, and the unions are very much male-driven as well. There is a need for gender balance and inclusion in this sector.

- Though some women possess driving licence and want to work as drivers, they are not encouraged to take up the job. One start-up in Chennai is encouraging women drivers (called ‘pilots’) to take up the job as auto

KEY TAKE-AWAYS



drivers (they are convinced and satisfied with their safety as well as the resultant value addition).

- The participants felt that perception issues of IPT is holding back women enrolment. Encouraging female drivers by conducting training programs, providing additional funding in order to help the ladies buy their own vehicles, reducing the interest rates and more such incentives. Financing is the major problem which holds back women from getting into this field. There is a need to break barriers created by stereotypes.

- Transgenders can be employed in the transportation sector, which can give them formal employment and growth opportunities.
- There is a strong need to add gender into the Sustainable IPT narrative (understand the role of women in the whole value chain). For other projects in the space, suggestion is to include gender expert in discussions related to Sustainable IPT and its development.

TRIP-CHAINING

Travel patterns and needs of women and senior citizens can be different. Thus, we need a better understanding of commuter segmentation and related needs.

- Women-centric innovation is needed to support women commuters for using IPT at odd hours.
- To make vehicles safer, a 'Vehicle-Tracking' system has been introduced by the Government, however, it's application and impacts on the IPT sector are yet to be understood. It is expected that the extra cost of installation will increase the cost burden on auto drivers.

INFRASTRUCTURE & TECHNOLOGY

"There should be inclusion of Sustainable IPT to smart cities programme"

KEY TAKE-AWAYS

ECOSYSTEM HAS TO EVOLVE

Experts commented that Internal Combustion engines will not die overnight; it is estimated that a complete changeover will need 10-20 years. Thus, we need to look at a broader range of technologies for Sustainable IPT- for example, Bio-CNG fuel can be used to replace petrol or CNG before the shift to electric happens.

- Electric vehicle infrastructure will take another 15 years to set up. Right now, the trend is shows use of LPG in Bengaluru and diesel in other parts of Karnataka.
- In LPG vehicles, there is an ease of service but the same is not in the case of EVs. Maintaining an EV will require hand holding from OEMs in the short term.
- Related EV infrastructure is also not yet developed- such as parking space while charging, charging points, maintenance centres, etc. There is a need for low cost and efficient service models from OEMs, which will reduce reliance on unorganised mechanics. This will reduce product misuse and increase life of vehicles.
- Standardisation issues- different manufacturers having different charging norms, which will create problems and hence some standardisation is required.
- Developments in charging infrastructure- some corporates are providing infrastructure in their campus for charging of EVs. Similarly, auto stands can be facilitated by corporates to provide charging stations. Last mile connectivity would mean charging stations can be at metro stations as well. There are many possibilities in placing charging stations- tea stalls, malls, etc.
- Retrofitting to EV- this is tough in existing vehicles due to high replacement of elements, cost, safety issues, lack of Regional transport office (RTO) approval and substandard kits.
- Electricity from alternative method such as solar panels near the roads and electricity generating pathways can help in charging of vehicles.

BATTERY TECHNOLOGY

Some OEMs are offering innovative battery related technologies, such as battery swapping, battery on lease and full life cycle support.



- Due to minimal down time, charging time for IPT is very important. There will be a need for quick charging and innovative methods to ensure least low time for drivers.
- Range anxiety is also a major issue with drivers. OEM's need to present clear messaging on range and use of new technologies (which effects range).



CIRCULAR ECONOMY

There is a need for more case studies and dialogue related to new technologies and their impacts on environment (at city, state and regional level).

- For IPT vehicles there is a need for OEMs improving design for enhanced safety, comfort and circular economy (reduce, reuse and recycle).
- A strategy is required to phase out and scrap older vehicles (in the next 10-15 years), especially the 2-stroke vehicles (these can be unauthorised) and high polluting 4 stroke vehicles. In the coming year more formal vehicle scrapping facilities will be required. Subsidy should be not only to buy EVs but also for setting up recycling facilities.
- Battery is a major element of EVs, and various models have emerged to enhance maintenance, reuse old batteries and increasing life of existing ones. More innovation and new players are required in this space.
- To address end of life stage of EVs, there should be a mandate that batteries should be given back to manufacturer under Extended Producer Responsibility (EPR). The batteries should be mentioned in E-Waste management rules.



AESTHETICS

Design aspects of IPT can be important, wherein an aesthetically better-looking IPT can be more attractive for commuters.

- When it comes to Sustainable IPT, there is need for strong product differentiation and appeal. Increase quality of EVs and reach out to classes that can afford premium pricing.

POLICY RELATED

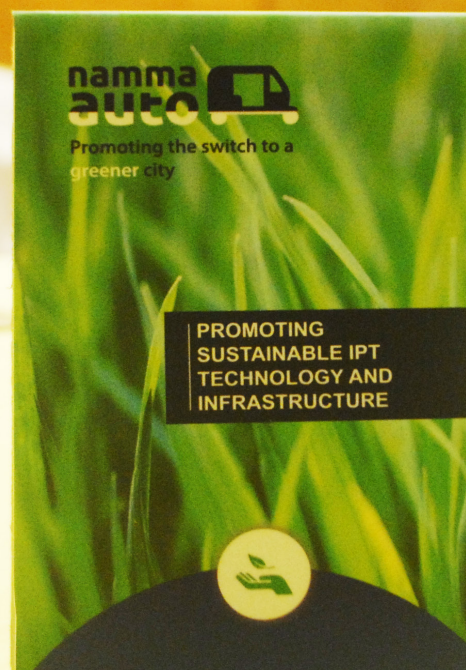
"Market demand & Government mandate has direct relation"

KEY TAKE-AWAYS

STRONG POLICY PUSH NEEDED

Policy development should look at all themes (such as access to finance, gender equality, recycling, etc.) of this report as well, since these are intertwined. Importantly, policy development should consider integration of the whole transportation network of cities in India. Government has to play a major role in calibration, promotion (innovation and awareness), standardisation and adoption of new technologies for IPT.

- There is a need for consistent policy on quality of new sustainable vehicles and batteries. Homologation should be available for all type of new vehicles (small, medium or large).
- For older autos, there should be scrapping policies and related subsidies. For example, vital changeover from 2 to 4 stroke should have encouragement through subsidy. Since the initial cost of EVs is higher, there is support needed from policy makers and financial institutions. Willingness of auto drivers to switch over to better technology should be rewarded. Some participants felt there should be no retro-fitment allowed (due to safety, cost, quality and approval issues). Scrapping of old vehicles should be mandatory, which will lead to faster changeover to EVs. This topic is debateable and needs more discussion.





- India should take a regional approach (with other countries) for its policy development, considering IPT of Indian brands is sold in other countries as well.
- To scale up Sustainable IPT, better understanding and development of charging infrastructure is required. Government policy to mandate apartment complexes to include charging facilities is welcomed. Similar strong push in other areas is required to increase uptake of EVs.
- Experts commented that the Municipal corporation is most often not involved in transportation planning activities and that remains a large institutional gap. There is a need for institutional coordination (at state and city level) and holistic approach for IPT.

ENFORCEMENT AND VOLUNTARY ACTION

Experts expressed that the Government needs to come out with a clear directive on when all IPT should shift to EV.

- Market for EV will scale up only when the government gives a clear and strong directive (as an example, new vehicle should be only EVs, cities should have min 40% EVs, etc.). Companies will start producing more when the market is there, and customers will fall in line. For example, the way that emission norm of BS-VI directive was issued, and things started falling into line in the vehicle value chain.
- There is a need for consistency in government policy- for example, currently Chennai does not register EVs, however allows retro-fitment, which can be different for other cities

- Government should strengthen grievance mechanisms- for both consumers and auto drivers.
- There should be zero tolerance for sexual harassment. This should be supported by extensive sensitisation programmes and awareness raising of citizens.
- More recognition should be given to collective platforms- such as auto driver cooperatives and union. This should also be supported by the OEMs as well.
- Tariff barriers for substandard electric kits being imported into India for retro-fitment (these kits mostly have no safety or quality certification). Although retrofitting is debatable, however this can be encouraged from local manufacturers through 'Make in India'.
- RTO should provide formal recognition for drivers with complete a formal induction training. This will increase enrolment in induction programmes, increasing quality of service.
- Local municipal can create special zones and areas within cities where only Sustainable IPT can be used. These zones can link into the mass transit hubs or city centres.

BASED ON THE ABOVE KEY INPUTS, THE VOLUNTARY GUIDELINES HAVE BEEN DEVELOPED

ABOUT THESE GUIDELINES:

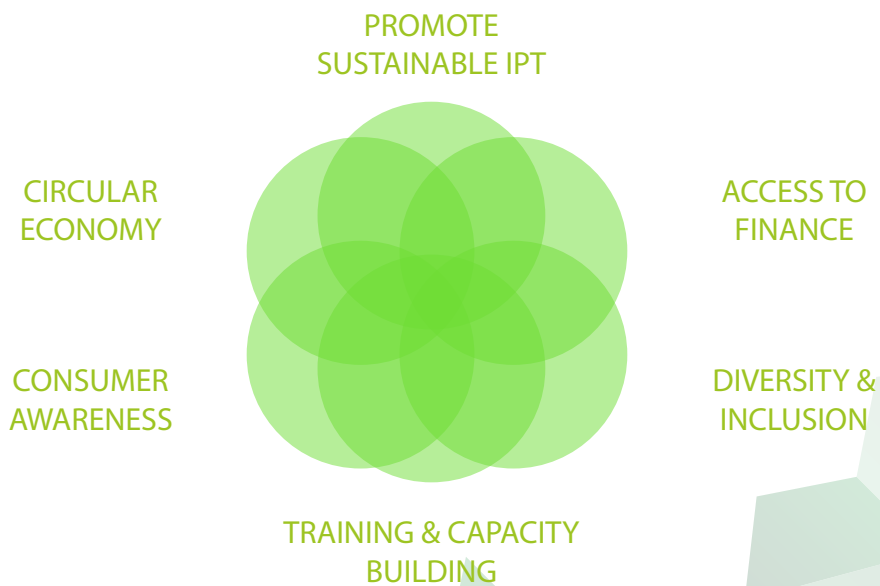
In September 2015, the 2030 Agenda for Sustainable Development brought into force the seventeen Sustainable Development Goals (SDGs) with a 15-year roadmap. The Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The 2030 Agenda for Sustainable Development is strongly founded in international human rights standards. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another. It has been widely commented that half of these goals will be achieved if India can show its commitment and progress on SDGs. The target is to achieve all SDGs by 2030.



SUSTAINABLE DEVELOPMENT GOALS



Inspired by the SDGs and based on the feedback from the various consultations, the project developed the voluntary guidelines on CSR & Sustainability for organisations operating in the auto-rickshaw ecosystem in India. The main objectives of these guidelines are to promote Sustainable Development Goals (SDGs), enhance sustainable development, enable industry collaboration and build ownership on driving change in the IPT value chain. These guidelines are primarily focused at OEMs and supply chains; however, these are relevant for various stakeholders linked with IPT sector. We expect companies will be proactive, transparent & innovative for effectively enabling these guidelines.



PRINCIPLE 1- PROMOTE SUSTAINABLE IPT (FOCUS ON SDG- 8,11)

Business should use long term strategy for sustainable transport and enable all forms of green technology (Electric vehicles (EVs), Biofuel, Compressed Natural Gas (CNG), etc.) Strengthen business case for auto drivers and enhance value proposition of Sustainable IPT as a social enabler (capture benefits of IPT by including both social and environmental indicators). Success factors of IPT should include improving livelihood of auto drivers and convenience of consumers. Promote product & services standardisation to reduce maintenance cost burden on auto drivers.

PRINCIPLE 2- DIVERSITY & INCLUSION (FOCUS ON SDG- 5,8)

Develop vehicles, technology and services such that all genders are able to drive and use Sustainable IPT. Proactively create safety & security features in vehicles. To enable inclusion, enhance visual appeal of vehicles and improve comfort & ergonomics. Promote dignity & respect in the IPT value chain and take steps to create a positive image of this sector. Proactively seek opportunities to include marginalised sections such as third gender, disabled individuals, etc.

PRINCIPLE 3- ACCESS TO FINANCE (FOCUS ON SDG- 8,10)

Business and banks should collaborate to restructure financial services, focus on needs of auto drivers and ensure competitive interest rates. Use behavioural methods (such as nudges) to reduce default payments, thereby increase profitability of financing institutions. Create financial and non-financial rewards to promote responsible payment behaviours from drivers. CSR programmes of banks could extend to include financial packages for auto-driver communities.

PRINCIPLE 4- TRAINING AND CAPACITY BUILDING (FOCUS ON SDG- 4,8)

Leverage skill development programmes and CSR (OEMs, banks and linked businesses) to develop induction training modules for auto-driver community on topics (but not limited to) such as vehicle maintenance, financial literacy, entrepreneurship, positive behaviours and customer service. Hand-hold drivers opting for Sustainable IPT by providing advice and guidance, which can enable wise choices of adoption of new technology, selection of finance options and ways of improving livelihood.

PRINCIPLE 5- CONSUMER AWARENESS (FOCUS ON SDG- 5,12)

Create an understanding of consumer needs (end-users and commuters) based on demographics (especially gender) and develop effective consumer complaint and grievance mechanisms. Adopt a policy for zero tolerance for sexual harassment in the IPT value chain. Use media or marketing campaigns to increase awareness and uptake of Sustainable IPT. Develop various dialogue platforms to capture ongoing needs and concerns of commuters and driver communities.

PRINCIPLE 6- CIRCULAR ECONOMY (FOCUS ON SDG- 12)

OEMs should champion circular economy through innovative vehicle designs, improved production systems and maintenance procedures. Collaborate for setting up formal facilities for scrapping and recycling of end of life or redundant vehicles. Engage and work with informal recycling communities to develop a model which can provide social upgradation and prevent exploitation of people (especially at the bottom of the pyramid) and environment.

PRINCIPLE 7- COLLABORATION (FOCUS ON SDG- 17)

To promote and respect Human Rights in the IPT value chain, OEMs (other private sector actors) should explore and create collaborative platforms for stakeholders linked with IPT sector. Banks and financial institutions should collaborate to create financial services which are a win-win for all stakeholders. To enable last mile connectivity, collaborate with mass transit and commercial operators (i.e. Metro, Ola, Uber, etc.) Due to fast changing nature of this sector, continuously engage and support policy makers for creating a positive change in this sector.



Promoting the switch to a greener city

CONTRIBUTING ORGANISATIONS

- Atul Auto Limited
- Bajaj Auto Limited
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- Climate Bonds Initiative
- Chennai Metro Rail Limited
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- CSR Consultants
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ABOUT FONDAZIONE ACRA

Fondazione ACRA (ACRA) is an international NGO with over 5 decades of experience in implementing social development projects in countries across the world. In India, ACRA leads a consortium consisting of Enviu Foundation, Women Health and Development (WHAD) and The Energy and Resources Institute (TERI). The consortium received a four-year grant support from European Union under Switch Asia Programme for implementing a project that aims at Switching to a sustainable urban transport system in the cities of Bengaluru (Karnataka) and Chennai (Tamil Nadu).

ABOUT SWITCH ASIA

With nearly 300 million Euro in funding over the last decade, SWITCH-Asia is the largest Programme supported by the European Union (EU) to promote sustainable consumption and production (SCP) in Asia: since 2007 it has been supporting more than 90 demonstration projects and policy support actions across 18 Asian countries .





BANGALORE



PUNE



CHENNAI



DELHI

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- TERI report on estimating vehicular emissions from auto rickshaws plying in Bengaluru
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