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Ref. No. RP/ FY/16-17/087/087

Dated: 3rd April 2017

To,

**Advisor (NSL),
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
J.L. Nehru Marg, Old Minto Road
New Delhi – 110002**

Subject: Consultation Paper on Approach towards Sustainable Telecommunications.

Reference: TRAI Consultation Paper dated 16th January' 2017

Dear Sir,

This is with reference to your above mentioned consultation paper. In this regard, please find enclosed our response for your kind consideration.

Thanking You

Yours Sincerely

For Bharti Airtel Limited

A handwritten signature in blue ink, appearing to read 'Ravi P. Gandhi', with a blue horizontal line underneath it.

Ravi P. Gandhi

Chief Regulatory Officer

Bharti Airtel's response to consultation paper on "Approach towards sustainable telecommunications"

We are grateful to the Authority for providing us with an opportunity to give our comments on the consultation paper "Approach towards sustainable telecommunications".

The broad objectives of the consultation paper are to streamline the methodology of the Carbon footprint and to review the Renewable Energy Technology (RET) targets. Based on TRAI's recommendations issued in 2011, DoT had fixed multiple targets for telecom service providers (TSPs) with respect to the greening of telecommunication networks. However, the experience we have gained over the past few years indicates that it is not practically feasible for the telecom industry to achieve the RET targets as per DoT's directive. Similarly, the issues related to the revision of the Carbon footprint intensity methodology and the alignment of the measurement formula in line with international practices have yet to be addressed.

Globally, the Information and Communication Technology (ICT) sector contributed 0.7% of greenhouse gas (GHG) emissions in 2015, which is expected to increase to 1.43% by the year 2020¹. India's contribution to the ICT sector is much less than the global average. On account of the non-availability of continuous power, telecom operators are forced to make use of diesel generators (DGs) as an alternative sources of power in order to be able to run telecom operations on a 24x7 basis. The grid supply is able to meet only 40% of the demand of the telecom sector. However, the percentage share of diesel consumption by mobile towers is a mere 1.54% of the total diesel consumption in India², and yet, the telecom sector has been inordinately targeted under the green telecom policy. Our key submissions are as under:

1. Reduction in Carbon emission targets has been achieved by modes other than Renewable Energy Technology (RET) deployment:

The targets for reduction in Carbon footprint were fixed by DoT in 2012. It is noteworthy that the reduction in Carbon footprint has far exceeded the targets defined

¹ *Green ICT: India and the World Future Information & Communication Technology* by Om Pal Singh and Pratibha Singh

² PPAC report, 2014

<http://ppac.org.in/WriteReadData/Reports/201411110329450069740AllIndiaStudyonSectoralDemandofDiesel.pdf>

by the Government. The year-wise reduction in Carbon footprint vis-à-vis the targets is shown in the table below:

Year	Average subscribers	Total CO ₂ emission (Tons)	CO ₂ per Subscriber (Kg)	% Reduction achieved	DoT targets
2011-12	171,741,388	3,147,821	18.33	Base year	Base year
2012-13	185,330,086	3,247,018	17.52	-4.4%	-5%
2013-14	195,089,944	3,459,054	17.73	-3.3%	Not specified
2014-15	213,627,237	3,542,832	16.58	-10.5%	-8%
2015-16	238,627,338	3,740,791	15.68	-14.5%	Not specified
2016-17 H1	256,078,080	1,947,731	7.61	-16.9%	-12%

Notably, this reduction has been achieved by adopting a series of measures other than the RET solutions. In fact, the entire industry has adopted such initiatives, which were seen as viable alternatives to RET solutions and have served the same purpose which was to be achieved by the deployment of RET solutions. Some of the initiatives undertaken are given below:

- **Use of advanced battery backup solutions:** We use advanced battery backup solutions, such as VLRA and Li-ion, at over 26,720 sites. This has led to a 25% reduction in diesel consumption.
- **Conversion of indoor sites to outdoor sites:** Over 33,400 sites have been deployed outdoors, representing about 22% of our total sites, resulting in a 25% energy reduction.
- **Installation of Auto TRX shutdown feature:** The Auto TRX shutdown feature has been installed at nearly 80% of our sites. This ensures that equipment remains switched off during non-peak hours.

- **Green power wheeling for MSCs and Data Centres:** Airtel has made green power wheeling arrangements for the procurement of green energy, under open access of 65 mn units per annum for Data Centres in Chennai, Bangalore and Noida, and at one MSC location in Pune. This has resulted in emission reduction to the tune of 36,000 tons of CO₂ per annum.
- **Site sharing:** 47% of the total sites deployed in FY 2015-16 were on a sharing basis, resulting in a 30% reduction in energy used.

Airtel has achieved this reduction despite the wrong formula being prescribed by TRAI for the evaluation of Carbon emissions, i.e., Carbon intensity measurement on a per subscriber basis instead of a per terabyte (TB) basis. As shown in the table above, the reduction achieved by Airtel has exceeded the targets prescribed as per DoT directives or License conditions; thereby obviating the need to deploy any RET solutions. Therefore, the RET targets prescribed in the License Agreement consequent to TRAI's recommendations dated 12th April 2011, should be removed.

Thus, we firmly believe that since the alternate solutions adopted by the industry have yielded the desired outcome, there is no need to mandate any specific solutions for the achievement of the desired targets. Instead, a neutral approach is needed towards the measures to be adopted by the industry. A reduction in Carbon footprint per TB should be the sole focus. Therefore, there should not be any mandate for the installation or deployment of any particular type of infrastructure to achieve the targets. The Unified License had adopted TRAI's recommendations on RET deployment. Clause 24.2 of Unified License agreement is reproduced below:

24.2 *"The Licensee shall adopt Renewable Energy Technologies (RETs) for powering the Telecom Network, deploy energy efficient equipment and reduce the carbon footprint as per prevailing directions/ instructions and shall abide by further directions / instructions as may be issued in this regard by Licensor/ TRAI from time to time."*

From the above clause, it is clear that the License envisages the reduction in Carbon footprint as the end goal. Therefore, the deployment of RET solutions should not be mandated as the only means to achieve the desired reduction. In order to bring the much-needed clarity towards achieving the end goal, we believe that the review exercise should logically lead to a modification in the relevant clause of the License Agreement, as given below:

24.2 *"The Licensee shall deploy energy efficient equipment and reduce the carbon footprint as per prevailing directions/ instructions and shall abide by further directions / instructions as may be issued in this regard by Licensor/ TRAI from time to time."*

2. Technical non-feasibility and operational challenges related to RET solutions:

The deployment of RET solutions (such as solar power, wind energy or biomass) for the telecom sector is a technical challenge in itself, due to the peculiar cellular architecture (BTS installations) of a telecom network, which requires the provision of a certain power capacity at each location on a continuous basis to be able to run telecom operations seamlessly. The technical solution also needs to be economically viable. Thus, RET solutions face challenges from a techno-commercial perspective. Additionally, although an RET solution may, in theory, be technically and economically feasible at certain locations, the operational challenges in running these solutions can still make them unviable.

There are many technical constraints regarding RETs, such as inadequate or variable power output, shortage of space, logistical issues related to raw material, etc. For instance, it is very difficult to deploy solar panels on rooftop towers due to a lack of space. Solar solutions also require shadow-free zones in the southward direction, which are very difficult to locate in urban areas. Further, there are operational risks in terms of theft and damage to solar panels. Wind energy is also not a reliable source of power and requires high capex. There are operational risks in terms of variability in wind speed as well. Biomass-based solutions face challenges in terms of supply sustainability. Fuel cell solutions require high capex and face challenges related to fuel supply as well. Due to the abovementioned challenges, the installation of RETs is still not a techno-commercially viable solution for the industry.

Further, the core strength of a telecom service provider (TSP) would always lie in the efficient and smooth running of telecom operations. A TSP cannot be expected to gain expertise in the generation and supply of power for own consumption, which rightfully comes under the domain of the Power sector.

In view of the situation described above, there is an immediate requirement to remove the RET target requirements related to TSPs.

3. Inefficient mode of Carbon reduction for telecom network:

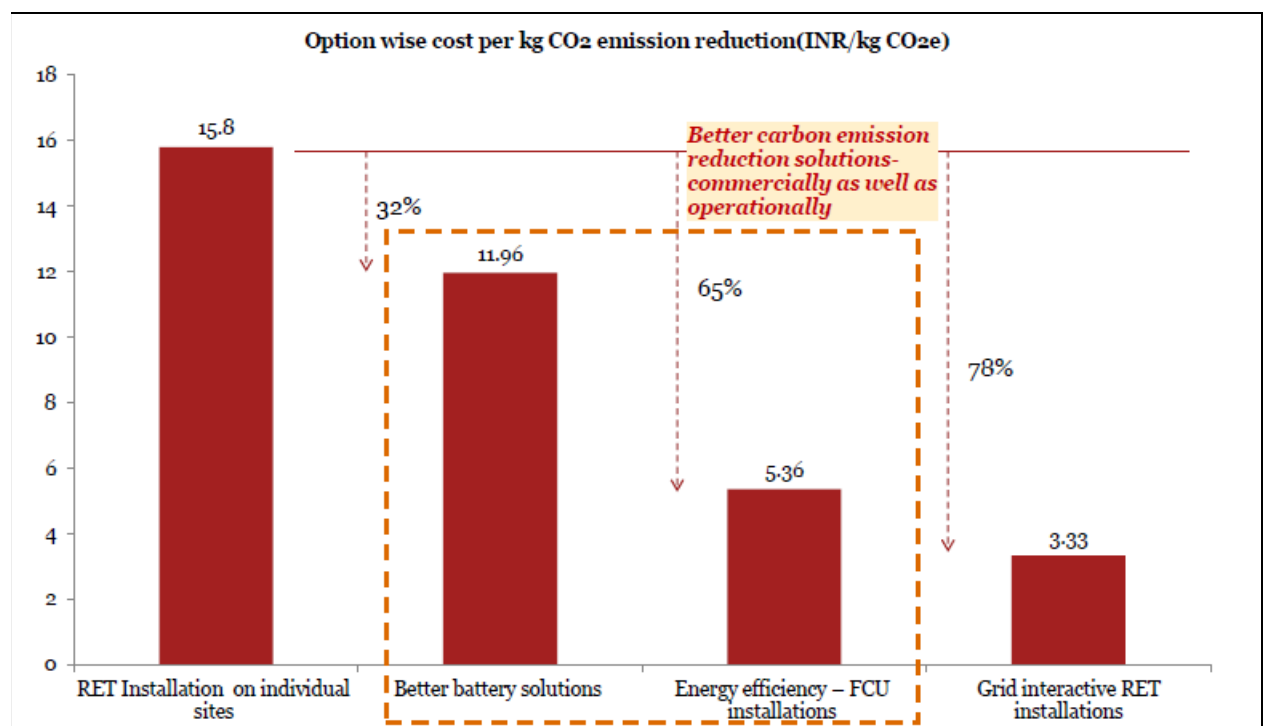
As stated above, the telecom network consists of a cellular architecture with thousands of Base Transceiver Stations (BTSs) spread across a service area. The power requirement of each BTS ranges from 5–25 kW, and at such a low scale, the deployment of RET solutions is not efficient or economically viable since RET technologies are still evolving. The economic viability of RET-based power solutions can be ensured only through the use of these technologies in a commercial power plant, due to economies of scale. In fact, Power distribution companies are being mandated to purchase a certain percentage of Power from

renewable energy sources, under the Renewable Power Obligation. Further, as a telecom operator, we are supposed to invest capex in the telecom network rather than in power solutions.

Further, RET-based power solutions require heavy capex investments. At an estimated amount of Rs. 1 Lakh per kWh for solar power solutions, the total capex requirement till the year 2020, in order to achieve the RET targets set up by the Government, comes to Rs. 66,000 Cr.³

It would be a wastage of the sector’s already scarce financial resources, when the same capex could instead be deployed for the proliferation of broadband services in rural areas.

If the cost per kg of CO₂ reduction is compared, solutions such as FCU installation and the use of efficient storage batteries are much more effective than RET solutions. It has been observed that these solutions result in far more CO₂ reduction at the same level of capex as compared to RET solutions, on individual sites. A comparison is shown in the table below:



Source: PwC’s “Technical and Financial Feasibility report”, 2014

³<http://www.taipa.in/sites/default/files/COAI%20&%20TAIPA%20representation%20%20to%20DoT%20%20reg-%20RET%20%20dt%2024th%20July%202013.pdf>

4. Expansion in power distribution infrastructure would make the RET Capex redundant:

The current situation of grid power crunch is being faced by TSPs because the power distribution network has not kept pace with telecom industry's expansion in the recent years.

The power distribution network is yet to catch up with the gap between the supply and demand of power in the country, as there is still a shortfall and only about 40% of the electricity requirements of the telecom sector are currently being met by the Grid.⁴

To address these distribution concerns, the Government of India has launched the "Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)" to promote rural electrification. The Rural Electrification Corporation (REC) is the nodal agency for the implementation of DDUGJY. REC has set up aggressive targets for the electrification of un-electrified villages and the intensive electrification of partially electrified villages. We believe that through the implementation of these schemes, the availability of power to the telecom sector would also get better. Therefore, the continued insistence on meeting RET targets could result in a redundancy of capex investments made by the telecom sector. Our detailed issue-wise response is as follows:

Question 1: What accuracy level may be set for collecting the data and also, what should be the basis for arriving at this threshold level? Please comment with justification.

Bharti Airtel's response:

The data used for the measurement of the Carbon footprint is fairly accurate as it is based on invoices which are auditable and duly verified through various internal audits apart from the checks and balances that have been inducted by the TSPs themselves. Considering the fact that energy costs constitute about 25% of the total cost of network operations⁵, cost control and accurate reporting of energy expenses is intricately linked with operational efficiency. Energy consumption is being

⁴ <http://www.tsmg.com/download/article/Green%20Telecom%20Towers.pdf>

⁵ <http://www.gsma.com/membership/wp-content/uploads/2013/01/true-cost-providing-energy-telecom-towers-india.pdf>

continuously monitored for performance metrics, which also ensures the accuracy of the data for energy consumption.

Question 2: Is there a need for auditing the carbon footprint of a telecom network by a third party auditor? If yes what is the mechanism proposed? Please comment with justification.

Bharti Airtel's response:

- There should not be a mandate for the independent audit of the Carbon footprint report. However, we recommend that the operators should be encouraged to undertake self-certification of the reported Carbon footprint.
- Being a responsible operator, Airtel has been reporting the drop in Carbon emissions based on ITU methodology (on a per TB basis). As part of the sustainability report and CSR initiatives, the Carbon emission report is being duly audited by Ernst and Young.⁶

Question 3: Do you agree with the given approach for calculating the carbon footprint? If not, then please comment with justification.

Bharti Airtel's response:

- We are broadly in agreement with boundary conditions defined by TRAI in the consultation paper. Accordingly, activities such as the extraction of raw material and the manufacture of finished telecom equipment have been rightly excluded.
- TRAI has opined that only the emissions from combustion of fossil fuels and the usage of purchased electricity be taken into account. We are in agreement with this approach.

Question 4: Whether the existing formulae for calculation of Carbon footprints from Grid (given in paras 1.16, 1.17 and 1.1.8) of Chapter I need to be modified? If so, please comment with justification.

⁶ <http://www.airtel.in/sustainabilityreport2016/92.html>

Bharti Airtel's response:

We suggest the following:

- In the existing formula for the measurement of emission from grid power, a static emission factor had been considered. We are in agreement with the revised formula as per Para 1.22 [$C_{gridpower} = (EF \cdot A)$], which reflects a revision in the emission factor from time to time.
- The current formula for the calculation of carbon footprint [$CDGSET = 0.365(0.528 \cdot Y \cdot Z)$] is based on the DG set capacity. It is submitted that this formula should be allowed to continue.

Question 5: Which emission factors as mentioned in Table 1.2 of Chapter I need to be used for the calculation (Average/OM/BM/CM)? Is there any other factor(s) needs to be considered in the calculation? Please comment with justification.

Bharti Airtel's response:

- The average emissions of all stations in the grid, weighted by net generation needs to be considered.
- The remaining emission factors: Simple Operating Margin (OM) and Build Margin (BM), consider emission from certain grid stations on the basis of the chosen criteria.
- Combined Margin (CM) is simply the weighted average of Operating Margin (OM) and Build Margin (BM) emission factors. Since the use of OM and BM emission factors is not considered appropriate, their weighted average emission factor, i.e., CM should not be considered either.
- Hence, it is submitted that the average emission of all the stations in the grid, weighted by the net generation capacity, needs to be considered.

Question 6: Is the formula mentioned in para 1.22 of Chapter I suitable for calculation of Carbon footprints from Grid supply? Please comment with justification.

Bharti Airtel's response:

Yes, we are in agreement with the revised formula since the revised formula would take into account the dynamic nature of emission factor of grid.

Question 7: Which of the formula, (i) or (ii) as given in para 1.23 of Chapter I is to be used for the calculation of carbon footprints from the Diesel generator along with views on possible values of Φ and η ? Please comment with justification.

Bharti Airtel's response:

As submitted above, we believe that the current formula for the calculation of Carbon footprint from diesel generators (DGs), as given in Para 1.17, (based on power capacity of DG set in kVa, efficiency and running time of DGs) holds good and should be allowed to continue.

Question 8: For calculation of average carbon footprint, which of the options mentioned in para 1.25 of Chapter I is to be used? Please comment with justification.

Bharti Airtel's response:

The present formula for averaging the Carbon footprint is on a per subscriber basis. Carbon footprint intensity should be measured on the basis of consumption rather than on a per subscriber basis. The measurement of Carbon footprint on a per terabyte basis would, therefore, be a much more relevant metric for Carbon intensity.

Question 9: What are the options available for renewable energy solutions which may be harnessed to their maximum potential to power the telecom sector? Please comment with justification.

Bharti Airtel's response:

1. TSPs have to run their operations on a round-the-clock basis. The telecom network consists of a large number of BTSs that have a very low power requirement, ranging from 5–25 kW. At such a small scale, no RET solution would be economically viable as its true potential cannot be harnessed. Therefore, RET solutions should only be mandated for a commercial power plant that can provide supply to the Grid and can achieve the economic viability due to its scale of operations. In a large farm deploying an RET solution, as opposed to a single

BTS/telecom tower, considerable efficiency is achieved due to economies of scale, which leads to a lower cost of production of power per unit.

Thus, RET deployment is not technically feasible on account of the distributed nature of the telecom network. Further, the inadequacy and variability of power output, the availability of space, and the variation in seasons, geography and terrain across the country affect the technical viability of RET solution for a telecom network. To run a network on a 99.99% uptime basis, telecom operators require a highly reliable power backup solution. As a result, TSPs will have to continue to make investments in DG sets in parallel.

Additionally, there are operational challenges in the running of RET installations as solar installations are prone to damage and theft, and there are logistical issues in the supply of bio fuel. Further, the capital investment worth Rs. 66,000 Cr, which would be needed to achieve RET targets by the year 2020, would be a colossal wastage of resources since the technology will ultimately not be able to serve the end objective. Such huge capex could instead be put to much better use, e.g., to provide broadband in rural areas, which would indirectly lead to a reduction in Carbon footprint due to reduced transportation/travel requirements.

2. Solar panels cannot be deployed on rooftop towers due to a lack of space. Solar RET solutions require shadow-free zones in the southward direction. Rooftop sites cannot be supported by any other technology, such as bio-mass, etc. Tower sites are variable in terms of GBT/RTT, urban/rural, indoor/outdoor, number of tenants and technologies, etc. In view of this, the RET solution should be scalable to serve at least two or three service providers that share the same tower. The situation gets further complicated, as most of the service providers have now deployed multiple technologies (2G, 3G and 4G) in many locations. Thus, there are challenges related to the deployment of RET solutions, based on the techno-commercial viability of the RET solution deployed.
3. The following concerns are associated with the various RET installations proposed by TRAI:
 - a. **Solar option for Green Telecom:** In case of solar RET solutions, technical feasibility is a challenge since the availability of space and shadow-free zones in the southward direction are pre-requisites. Solar solutions also work best during the daytime only and, therefore, capex is required for the storage of power as well. The availability also depends on

geographical conditions, terrain and seasonal variations. Besides this, there are operational and maintenance challenges as well.

- b. **Fuel cell option for Green Telecom:** In case of fuel cells, fuel availability and logistics is a big issue. The solution requires higher capex and operational expenditure as well.
 - c. **Biomass as an alternative to Green Telecom:** Sustainable arrangement of fuel is quite challenging for adopting this solution. There is a high degree of risk associated with this solution as it requires a great degree of manual intervention.
4. We believe that, going forward, battery-based technologies would play a major role as the other RET solutions are not technically feasible due to the distributed nature and cellular architecture of telecom installation. Battery-based technologies have a considerably lower requirement of capex per installation.
5. In view of the continued non-viability of RET solutions at many locations, the installation of RET solutions should no longer be enforced. Instead, the industry should be mandated to work proactively towards reducing its Carbon footprint, and the License conditions should be amended accordingly to facilitate the same.

Question 10: If electricity generated by a RET project (funded/ maintained by TSP) is also used for community, should it be subtracted from overall carbon emission of a TSP? Please comment with justification.

Bharti Airtel's response:

TSPs are not in the business of generating power. Therefore, Carbon emission reduction targets should not be linked with the generation of power, whether from an RET or non-RET source.

Question 11: If the RET project is funded/ maintained by other agency, should that emission be counted? Please comment with justification.

Bharti Airtel's response:

The benefits of the usage of green energy should be available to a TSP – whether it is through a reduction in grid emission or through the buying of green power from

another producer – since the cost of utilised green energy would be borne by the TSP itself.

Question 12: Please comment with justification on the approach suggested by the DoT committee.

Bharti Airtel's response:

1. The DoT should prioritise reduction in Carbon footprint by allowing TSPs to adopt the most feasible practices to achieve the proposed reduction. Hence, the RET targets fixed as per DoT's direction dated January 2012 should be removed. The License conditions related to RET deployment should be revised accordingly.
2. RET solutions may be deployed after being reviewed for technical feasibility, and considered as one of the many possible means to achieve the ultimate goal of the reduction in Carbon footprint.
3. The replacement of 5-year-old DG sets is not recommended, as there are many tower sites where DG usage is only as per exigency. Also, this move would end up increasing the financial burden on the telecom operators. *(Our detailed comments on the DoT report are attached as Annexure I.)*

Question 13: For effective implementation of RET/Energy efficient solutions in telecom sector, how can the industry be supported? Should incentives be provided to licensees (TSPs)? If yes, what should be the milestone? Please comment with justification.

Bharti Airtel's response:

1. Import subsidies and accelerated depreciation benefits for energy-efficient solutions should be provided.
2. The telecom industry is an end user for the power industry. The onus of power generation should, therefore, lie solely on the power sector.
3. The telecom sector had been accorded infrastructure status way back in 2012. Therefore, in line with DoT's advisory guidelines on the installation of towers, power companies should be mandated to provide power on a priority basis to telecom operators for their BTS installations.

4. Telecom operators should be allowed to continue using alternate power sources such as DG sets, till the time that 24x7 power is made available to facilitate the smooth running of the industry's round-the-clock operations.

Question 14: What methodology can be proposed for setting new Renewable energy targets in the telecom sector? What should be the timeframe for achieving these targets? Please comment with justification.

Bharti Airtel's response:

It has been established by the telecom industry that a reduction in Carbon footprint is achievable through alternate solutions that have evolved due to recent technological advancements. Thus, **there is a need for a neutral approach towards the measures to be adopted by industry to achieve the desired outcome.** Since the targets for reduction in Carbon footprint are already being achieved, there should not be any RET-specific targets. **Therefore, there should not be any mandate for the installation or deployment of any particular type of infrastructure to achieve the targets in the Unified License. The Unified License should, be amended** so that it enables TSPs to reduce their Carbon footprint without mandating measures such as RET installation.

Annexure I

Comments on DOT committee recommendations

S. No.	Committee Recommendations	BAL comments
1.	The overall objective of a green telecom policy should aim towards reducing the diesel consumption of the telecom networks and achieving the overall carbon reduction targets for the mobile network at 8% by the year 2014-15 and 17% by the year 2018-19 from base 2011-12.	The overall objective of a green telecom policy should be the reduction of the Carbon footprint.
2.	The methodologies for measuring carbon emission should be aligned with international practices.	Agreed.
3.	The directives issued by DoT in 2012 may be calibrated taking into account current status of RET deployment & learnings and significant changes in technologies including optimum energy solutions now available for telecom networks.	Agreed. In fact, the consultation paper seems to have been issued for this purpose only. In view of the detailed submissions made above, the RET targets need to be removed.
4.	In new mobile tower installations, the backup power to grid shall be based on Energy Efficient solutions/ RET power to the extent feasible such as to make the site diesel free.	Agreed. However, this should not be mandated.
5.	In urban areas, the outdoor BTS installations should be made diesel free to the extent feasible with	Agreed. However, this should not be mandated.

	required capacity of efficient storage battery backup and RET systems.	
6.	In the first phase, the Non-EB (Non-Electricity Board) sites & the sites having grid power availability up to 8 hours and DG set more than 5 years old may be converted to RET by 2015-16.	It should be on a “best effort” basis and not be mandated in any form. The replacement of 5-year-old DG sets is not recommended as there are many tower sites where DG usage is only as per exigency.
7.	The diesel free sites that contribute to the overall objective of reducing diesel consumption in telecom networks may be recognized as contributing towards the overall objective of the policy.	Agreed.
8.	Telecom Service Providers (TSP) and Internet Service Providers (ISP) may optimize their power requirements by adopting more energy efficient strategies in the BTSs and ensure that the total power Consumption of each BTS does not exceed 500 W by the year 2020 for 2+2+2 configuration of BTS.	Agreed.
9.	In line with the objective of National Telecom Policy 2012, use of outdoor DAS (Distributed Antenna Systems) in uncovered, isolated, scattered and small locations including buildings is recommended.	It should be on a “best effort” basis and not be mandated in any form.
10.	Active sharing of network infrastructure, which involves the sharing of antennae systems, backhaul transmission systems and base station equipment, is recommended as this will allow operators to save an additional 40% beyond available savings from passive infrastructure sharing.	Agreed.

11.	All projects being implemented with funding from USOF should be powered by Grid/RET only.	USO money should be spent purely for the growth of telecommunication services.
12.	The industry may compile the location of all tower sites with Latitude/Longitude. Other details, such as electrification status of the site, broad data of the cluster i.e. diesel consumption, RET power generated, if any etc. may be collected and this information may be provided to DoT TERM for creating a database within six months	We agree with the recommendation. Power companies should be asked to lay the distribution infrastructure for the telecom sector on a priority basis in order to be able to provide power round-the-clock.
13.	The industry shall develop a monitoring & management system for efficient monitoring, controlling and optimizing the use of power consumption in to the network.	Agreed.
14.	A web based Centralized Energy monitoring system needs to be developed in DoT for monitoring of various parameters and generation of reports.	No comments.
15.	TERM cells need to monitor compliance of RET objectives of DOT.	The TERM cell should monitor the carbon footprint targets; RET targets should be removed.
16.	The committee is, however, of the view that the penalty should not be linked to achievement of RET target at present	Agreed.
17.	In order to ensure that RET adoption in telecom networks is viable and sustainable, the service providers may adopt cluster based, long term agreements indexed to Total Cost of Operation (TCO) where-ever implementation of RET is through Renewable Energy Service	We are in agreement with the Recommendation; however, there should not be any mandatory targets for the deployment of RETs.

	Companies (RESCOs) or power management companies.	
18.	In order to enable industry to access resources for deployment of RET power solutions, DoT should facilitate in processing the industry's proposals for financial assistance, if required under various government schemes such as MNRE cluster based scheme for providing micro-grids and mini-grids with telecom as anchor load and Ministry of Power capital subsidy scheme under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).	We agree with the Recommendation; however, no RET targets should be mandated.
19.	In the event of a proposal being received from industry, the Government may consider support through (National Clean Energy Fund) NCEF or bilateral financing agencies like World Bank or (Asian Development Bank) ADB to fund capital requirements for green telecom initiatives.	We agree with the Recommendation; however, no RET targets should be mandated.
20.	For realizing the impact of inclusion of Telecom as an Infrastructure sub-sector in the harmonised master list, the benefits for accelerated depreciation and concessional loans with longer tenure may be extended to telecom companies, so that the Service Providers qualify for claiming depreciation on the capital cost of PV system with associated tax benefits. This would support in faster deployment of RET in telecom sector.	Agreed.
21	The Committee while taking into consideration the objectives of NTP-	Agreed.

	<p>2012 (National Telecom Policy) which inter-alia includes enhanced and continued adoption of green policy in telecom and incentivization of the use of renewable resources for sustainability, recommends that performance based incentives be provided to telecom licensee/operators who deploy RET solutions in their networks.</p>	
22	<p>The Committee recommends a rebate of 1%, 2% and 3% in license fees in the financial year subsequent to installation to licensees (TSPs) which deploy RET solutions in 20%, 35% & 50% of their total BTS's in India respectively.</p>	<p>Considering the technical unfeasibility, non-viability and colossal Capex requirements, the proposed rebate may end up being completely insufficient. Instead, power companies should be mandated to provide continuous power on a priority basis to the telecom sector.</p>