



## Perceptions of eco hazards with specific focus on cell phones

Findings from a research done to assess  
what users feel about eco hazards per se  
and specifically of cell phones

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An AZR initiative

## Cell phones are an eco hazard. Radiations they emit are health hazards and cell phone disposal impacts the eco system rather seriously.

In India today, one of the fastest growth categories of durables is cell phones. New age icons for connectivity, cell-phones are fast replacing landlines as basic communication device. But apart from being a basic communication device, cell phone is also an entertainment source, a mass media device, a fashion accessory, all rolled into one. The resultant boom in the cell phone market in India has made India the fastest growing cell phone market in the world.

In the euphoria of the boom, nobody has paused to consider the eco hazards of cell phones. We are creating a Frankenstein who is likely to gobble us up, if not controlled and in time.

Enough has been written about the hazards of EMR emitted by cell phones. These radiations emitted by cell phone and phone towers are exactly on the same frequency as microwaves. Continuous exposure to these radiations can lead to several health hazards related to reproductive system, central nervous system or even cancer. A recent survey done in Delhi by a leading media house, showed that most of the schools and hospitals in the capital are radiation unsafe zones. Like most other eco problems, this cannot be solved by the government alone. Unless an average phone user realizes the problem and rations cell phone usage as much as possible, EMRs cannot be controlled.

Then there is the less spoken of hazard of discarding cell phones. With lifecycle of cell phones coming down to 6 months or so, even considering second hand sale / resale of handsets, we are generating lots of handset garbage which is discarded away.

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## Cell phones are an eco hazard. Radiations they emit are health hazards and cell phone disposal impacts the eco system rather seriously.

Cell-phones contain elements like cadmium, lead, lithium, arsenic, mercury and beryllium, which are a potential threat to the eco system if not discarded properly. Lots of cell phones are discarded by just throwing away, wherein these hazardous elements in the cell phones come into direct contact with earth's eco system. Some of their elements become toxic over time or when they are in contact with water over long time. The immediate impact is contamination of the earth and any water source that may come in contact with the cell phone waste.

Proper disposal of cell phones is an easy way to ensure that that is eco hazard is avoided. Proper disposal would just mean that the discarded cell phones are broken down and re-cycled as much as possible. Whatever elements cannot be re-cycled should then be discarded in a way that they do not get in contact with eco system. Handset manufacturers who are raking in the moolah because of the cell phone boom, owe it to the humanity to focus on the eco hazards of cell phones.

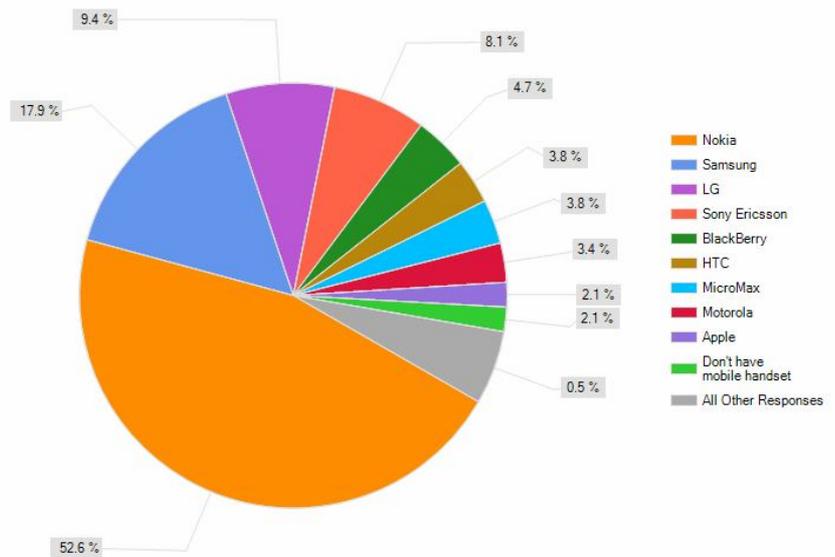
This made us question if the common user realizes the eco hazards of cell phones. And if so, what aspects of this is the user aware of and is he willing to pay a premium for a more eco friendly phone.

This survey was conducted by AZ Research Partners to understand salience of eco hazards amongst cell phone users. 1100 respondents participated in this survey that was done primarily online and on phone calls.

1100 respondents were covered as part of this research – more than half of them owned a Nokia handset

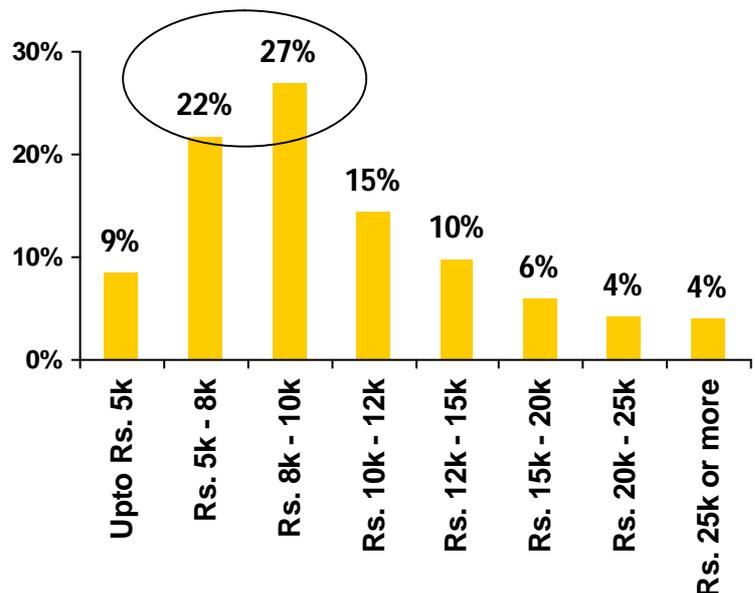
Apart from Nokia, Samsung, LG and Sony Erickson are the other key brands owned by the users covered in this study. 18% of the respondents owned Samsung and 9% owned LG phone.

**Chart – Mobile handsets owned by the participants**



Half of those interviewed are willing to spend between Rs. 5,000 to Rs. 10000 for their **next** cell phone. Close to 40% are willing to spend more than Rs. 10000 on their next mobile.

**Chart – Price willing to pay for the next phone**

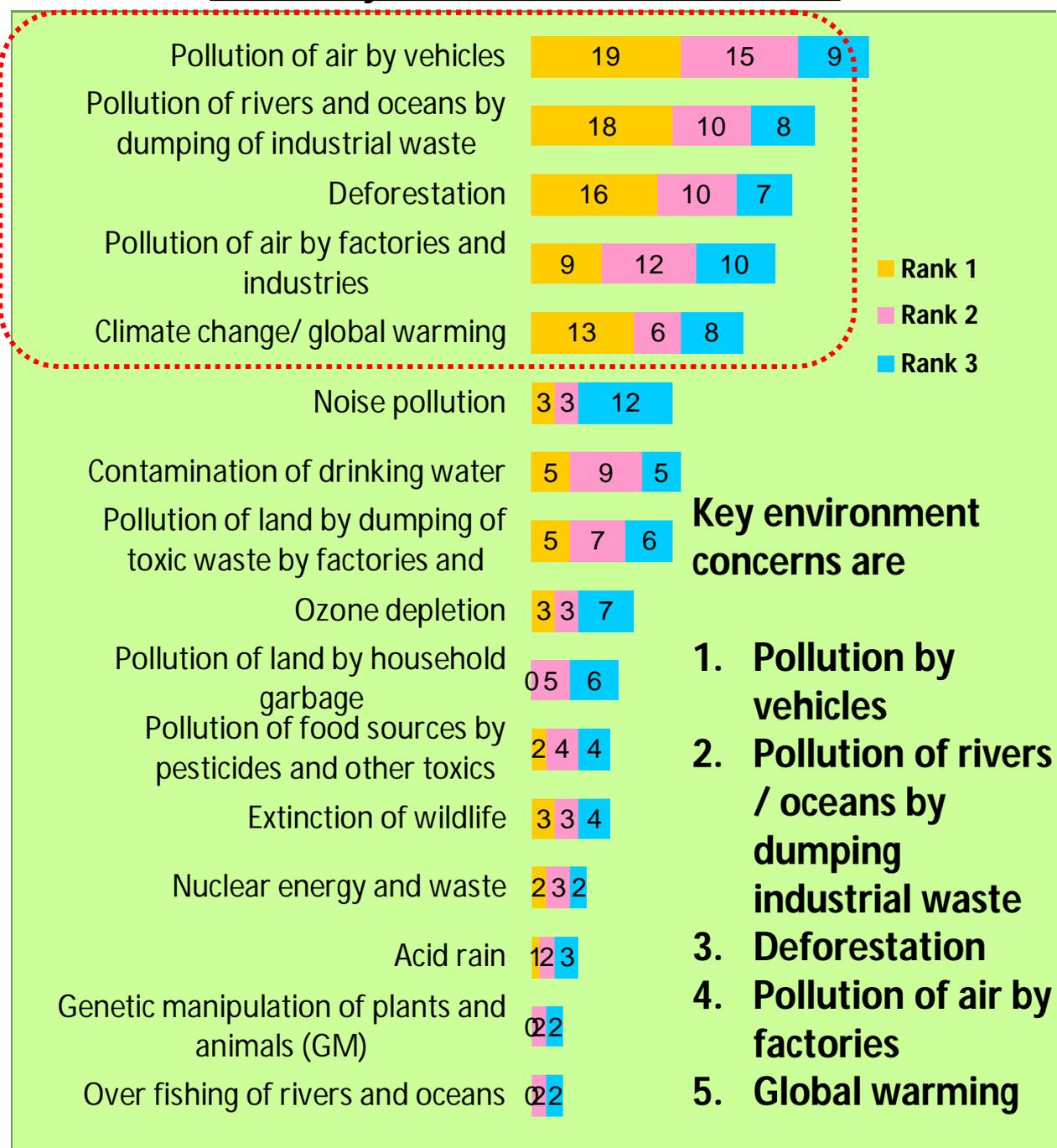


25% of participants said they are extremely concerned about environment – main concerns being air pollution & rivers / oceans pollution

**Are you concerned about environment**

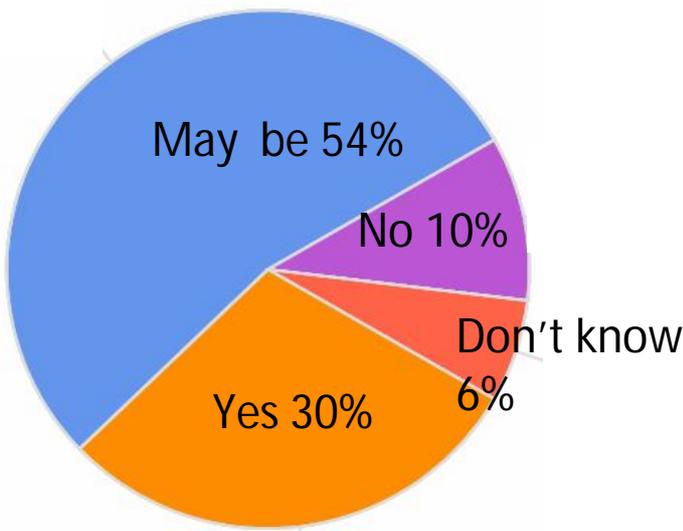
Extremely concerned – 25%      Not much concerned – 10%  
 Somewhat concerned – 62%      Not at all concerned – 3%

**Chart – Key environment related concerns**



# High awareness of eco hazards of cell phones. 30% of users know that cell phones are an eco hazard – most are concerned about EMRs

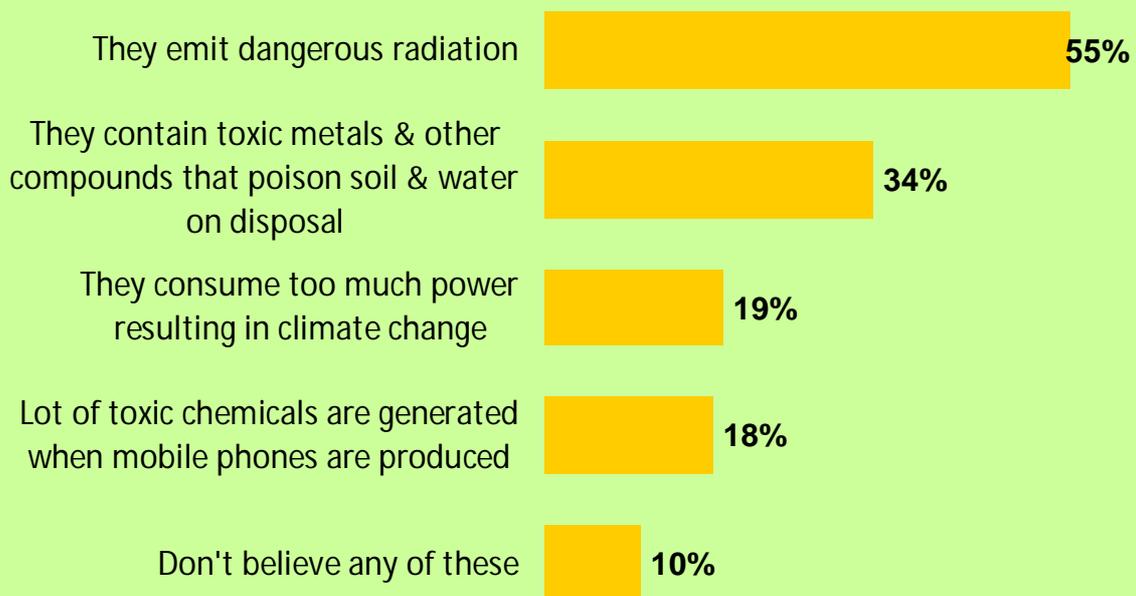
**Chart – Are mobile handsets an eco hazard**



30% of participants claimed to know that cell phones are an eco hazard while another 54% said 'may be' they are eco hazards.

55% of those who feel cell phones are eco hazard, know of dangerous radiations. ~1/3<sup>rd</sup> know that cell phones contain toxic materials which poison soil & water on disposal.

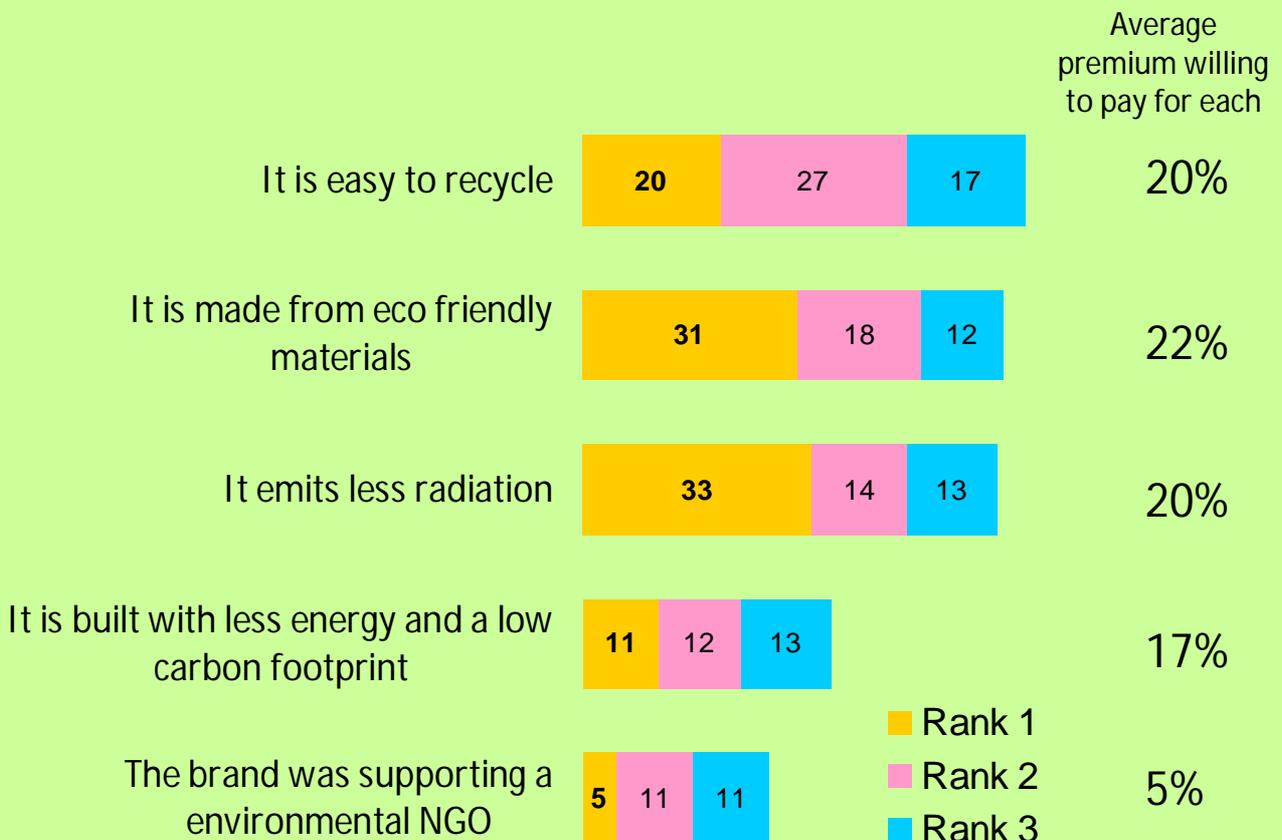
**Chart – Eco concerns regarding cell phones**



## 'Made from eco friendly materials' & 'emits less radiations' are the most sought eco benefits in cell phones – customers willing to pay upto 30% premium for these

33% of participants felt that low radiation handset is the most important eco benefit for them and close to this, 31% felt that 'made from eco friendly materials' is the most important eco benefit in cell phone. These two are closely followed by 'easy to recycle' which in essence is same as made from 'eco friendly materials'. These 3 benefit propositions can charge a premium of upto 20% over normal phones.

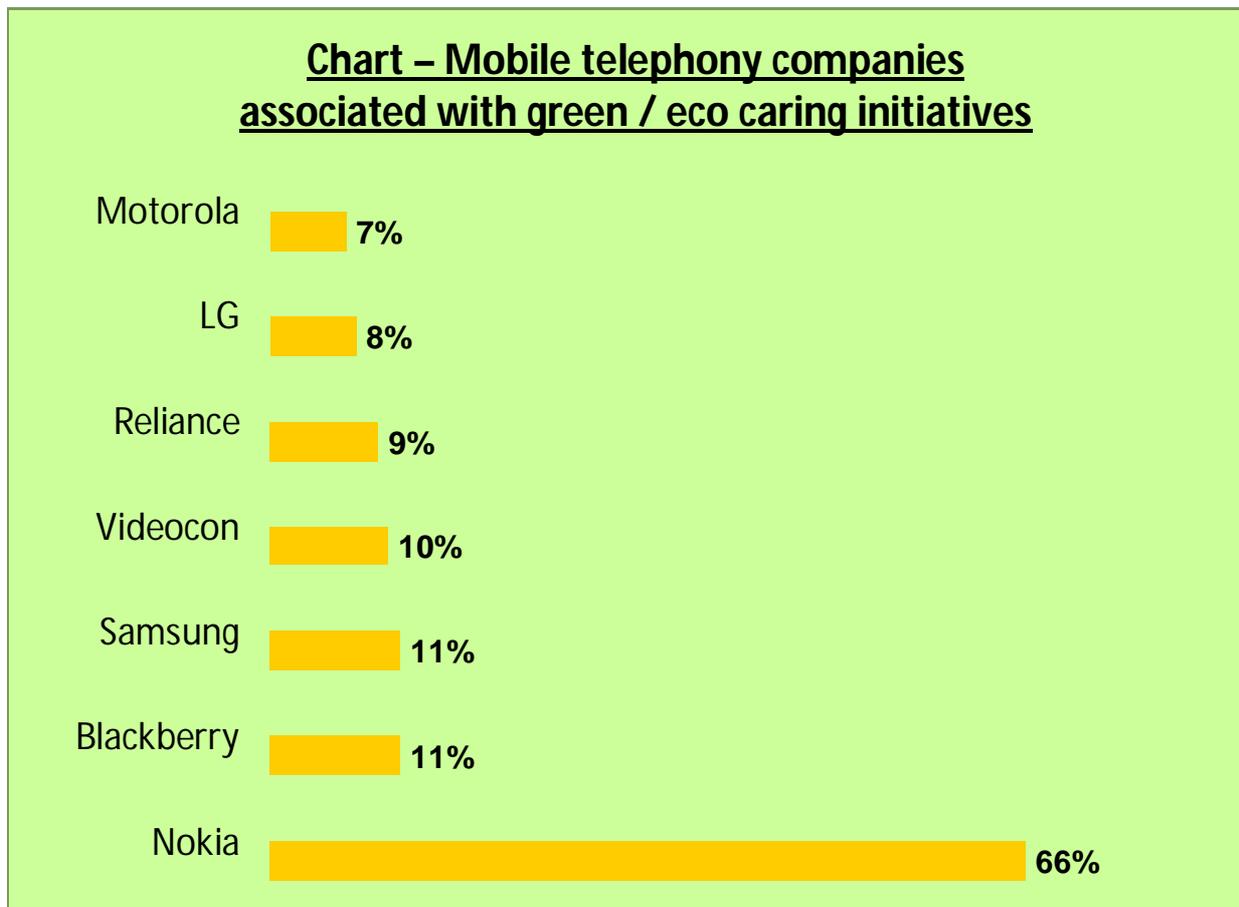
**Chart – Eco benefits sought in handsets & premium willing to pay**



## 51% of the participants claimed to know of mobile telephony company having green /eco caring initiatives

When asked which companies do they associate with green / eco caring initiatives, 66% of them, mentioned Nokia. This shows that the eco caring campaign of recyclable handsets run by Nokia was registered well by the potential customers, who still associate Nokia with the drive.

Apart from Nokia, host of brands emerged but none was a very significant association.



About the participants – 70% are graduates and ~50% are executives / SEP. ~3/4<sup>th</sup> are upto 35 years of age

16y - 20y	17.8%		
21y - 25y	15.9%		
26y - 30y	20.7%		
31y - 35y	18.1%		
36y - 40y	14.1%		
41y - 45y	5.4%	Female	28.6%
45y+	8.0%	Male	71.4%
Literate but no formal education		2.9%	
School up to 4 years		3.3%	
School - 5-9 years		1.4%	
School – SSC/ HSC		12.3%	
Some college but not graduate		9.4%	
Graduate / Post graduate – General		43.1%	
Graduate/Post graduate – Professional		27.5%	
Petty trader		1.1%	
Shop owner		3.3%	
Businessman/Industrialist		10.5%	
Self employed professional		8.0%	
Clerical/Salesman		5.4%	
Supervisory level		4.3%	
Officer/Executive – Junior		14.5%	
Officer/Executive – Middle/Senior		30.4%	
Housewife		2.5%	
Student		19.9%	