



# "A CRITICAL STUDY ON BRAND AWARENESS OF ENERGY EFFICIENT APPLIANCES AMONG THE RURAL CONSUMERS"

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## **ABSTRACT**

Energy proficient machines are turned into the need of the time. As India is growing financially, pay of the center and upper working class is rising reliably. Rising pay additionally lead to ascend needing individuals. Thus, it reflected in the interest of electric machines. Request of electric machines is reliably expanding step by step. By implication interest of power is expanding. Current review was restricted to rustic regions. It likewise manages the energy proficient apparatuses and its inclinations by clients, various brands in these energy saving machines and clients' inclinations for it and so on. Significant extent of the review was to comprehend the degree of mindfulness among provincial purchasers with respect to energy saving apparatuses.

## **KEYWORDS**

Brand ,Branding , Brand awareness , Brand perception, Brand equity.

## **1. INTRODUCTION**

Energy productive machines are turned into the need of the time. As India is growing monetarily, pay of the center and upper working class is rising reliably. Rising pay likewise lead to ascend needing individuals. Thus, it reflected in the interest of electric machines. Request of electric machines is reliably expanding step by step. By implication interest of power is expanding. Individuals are utilizing numerous electric machines particularly home apparatuses which consume power at more elevated level. It makes the shortage of power

and particularly in provincial region where individuals deal with the issue of power load concealing. Consequently least utilization of power turns into the need. However, expanding electric foundation, machines it appears to be unrealistic. Consequently there is a need to utilize energy proficient machines to decrease the power utilization by the clients.[1]

How to diminish the power utilization? This may be the inquiry before clients, and strategy producers. This can be achieved by utilizing power or energy effective machines. Individuals are generally utilizing the home apparatuses like Television, fridge, electric iron, Drove, engine siphon, water warmer, electric stove, AC, clothes washer, fan, cooler and so forth these are the normal electric machines that are tracked down in working class family. Utilization of power is change from machine wise. However, utilization of power can be decreased without diminishing any of the previously mentioned electric machines. Energy productive apparatuses would be the solution for this large number of machines.[2-4]

Indian government has proactively set a few principles for electric productivity in home machines. Thus, clients can purchase new one or supplant the old electric apparatus with energy saving electric types of gear. This will assist with diminishing the power bills, longer existence of apparatuses and consume less energy. Yet, in country regions there is next to no attention to these energy saving home machines as well as there are numerous different elements that affect purchasing demeanor of these types of gear. [5]

#### **Mindfulness and utilization of energy productive electric machines: -**

From last ten years it has been seen that working class is ascended with their expansion in pay. So thusly there is an expansion in their need as well. This increment need is seen in different everyday require machines like electric apparatuses. By and large, in country regions clients purchase these machines from the closest shop. Around then comfort and accessibility of the items as well as value these three elements influences on their purchasing choice. Thus, clients purchase these machines with screening on above said three variables. In any case, clients barely think for less electric utilization or in perspective of less power bills.[6-7]

#### **Brand Awareness: -**

Brand assumes a significant part in any purchasing choice of the clients. Whether the machines are energy saving or customary however some place in the psyche clients recall the brand during their buy choice. Brand mindfulness in energy saving machines is likewise having same significance or equivalent significance as clients are supposed to know about energy saving apparatuses. [8]

Since standards of energy reserve funds machines are for the most part seen in marked items. As well as these items are exorbitant subsequently when clients are paying additional expense for these machines then they can put minimal additional sum and can buy the marked energy saving apparatuses. Consequently for that they ought to be very much aware about the brands that are accessible on the lookout. They ought to have the option to look at the changed boundaries of the brand before buy choice.[9-10]

## 2. MATERIAL AND METHODS

To comprehend the drivers of brand mindfulness, an orderly arrangement was made by the scientist. This plan is called as an examination plan. Research strategy is an approach to take care of the examination issue methodically. It is a study of concentrating on how examination is done deliberately. It has different sensibly taken on advances.

Information is any data that has been gathered or created for sufficient exploration discoveries and end. Information is of two kinds. Those types are essential information and auxiliary information. Both the kind of information is having their own significance. By adjusting both the kind of information enhances the endlessly research discoveries. In the momentum research essential as well as auxiliary information has been utilized suitably. Various wellsprings of essential and auxiliary information have been utilized. Essential information is the new and new hand information that has been gathered by the scientist for his exploration reason. It is that information which is pertinent to study. There are various wellsprings of essential information assortment. They are survey, interview, perception and so forth. Respondents were moved toward through actual type of survey. Balanced casual conversation was finished during information assortment. Auxiliary information which is now accessible information and related with the ongoing review has been gathered from various sources. Accommodation Testing has been utilized in the exploration. Tests were chosen from the rustic regions close by Jaipur. Accommodation of tests and their accessibility has been taken in to thought for moving toward the examples.

Populace is endless for the given review. Thus by keeping 95% of certainty level, for endless populace, Morgan table of test size recommend that there ought to be somewhere around 384 respondents include in the review with full reaction. 549 In this manner absolute 549 examples had taken part in the examination. Information investigation has been finished with the assistance of Microsoft Succeed and SPSS. Information was gathered through survey and handled in to succeed. Coding to each address has been finished in succeed. Then, at that point, succeed record traded to SPSS. Cronbach alpha test was run in SPSS and it were acquired to follow results.

**Table No. 1 Reliability Test Case Processing Summary**

		N	%
<b>Cases</b>	<b>Valid</b>	549	100.0
	<b>Excluded<sup>a</sup></b>		
	<b>Total</b>	549	100.0

### Reliability Statistics

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.976	110

Cronbach alpha is seen as critical as it is more prominent than 0.7 for example 0.976. Subsequently it shows consistency in information gathered and result determined.

## Respondents Profile

Respondents of the review were the clients who were involving energy productive apparatuses as well as customary electronic machines. These reactions were from the rustic regions. These respondents were ranchers, financial specialists, experts, Government workers, privately owned business representatives and so on. Orientation balance has been endeavored as both the sexes were taken part in the exploration. Pay bunch was thinking about higher pay bunch, center pay gathering and lower pay bunch respondents.

## Brands Considered in Study

Following were the brands thought about in the review for various items.

**Table No. 2 Brands Considered in research**

Sr. No.	Product	Brand
1	Fan	1. Orient
		2. Bajaj
		3. Usha
		4. Havells
		5. Crompton
		6. Luminous
		7. Gorilla
		8. Superfan
		9. Khaitan
		10. Polycab fans
		11. If any Other pls specify.....
2	LED Lights	1) Phillips
		2) Syska
		3) Wipro
		4) Eveready
		5) Bajaj
		6) Surya
		7) Moser Baer
		8) Kwaliti Photonics Pvt Ltd
		9) If any Other pls specify.....
		1. Samsung
		2. Sony
		3. LG
		4. Panasonic

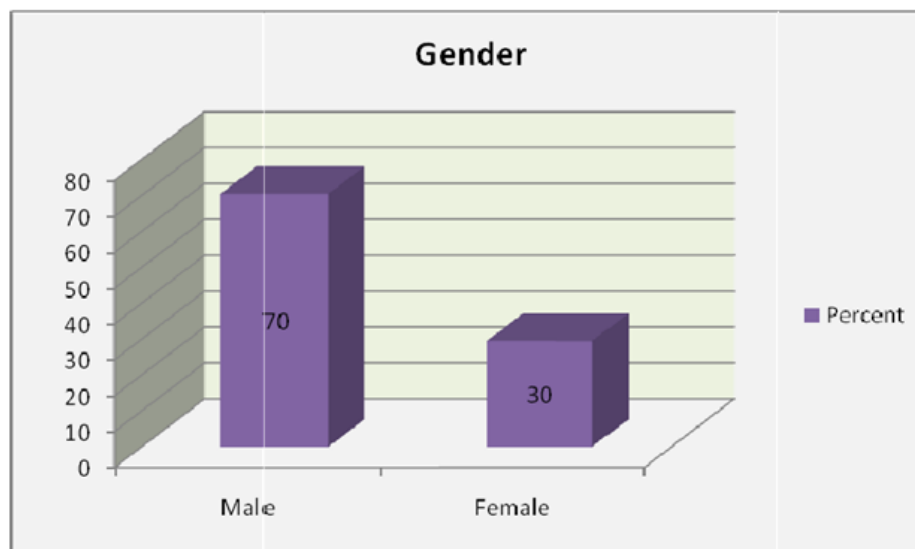
3	Television	5. Haier
		6. Micromax
		7. Philips
		8. Onida
		9. Videocon
		10. MI TV
		11. If any Other Pls Specify.....
4	Washing Machine	1) Whirlpool
		2) LG
		3) Haier
		4) IFB
		5) Bosch
		6) Samsung
		7) Videocon
		8) BPL
		9) Toshiba
		10) If any other pls specify.....
5	Refrigerator	1. LG
		2. Whirlpool
		3. Godrej
		4. Electrolux
		5. Videocon
		6. Siemens
		7. Samsung
		8. Bosch
		9. Panasonic
		10. If any other pls specify.....

### 3. RESULTS

In graphic part, recurrence circulation, tables, rate and likewise different kinds of outlines are utilized so it will give a more clear image of the separate inquiry. Inductions are drawn based on the outcome removed from each clear measurements. Following table shows orientation wise arrangement of the respondents took part in the review.

**Table No.3: - Gender wise frequency distribution of the respondents**

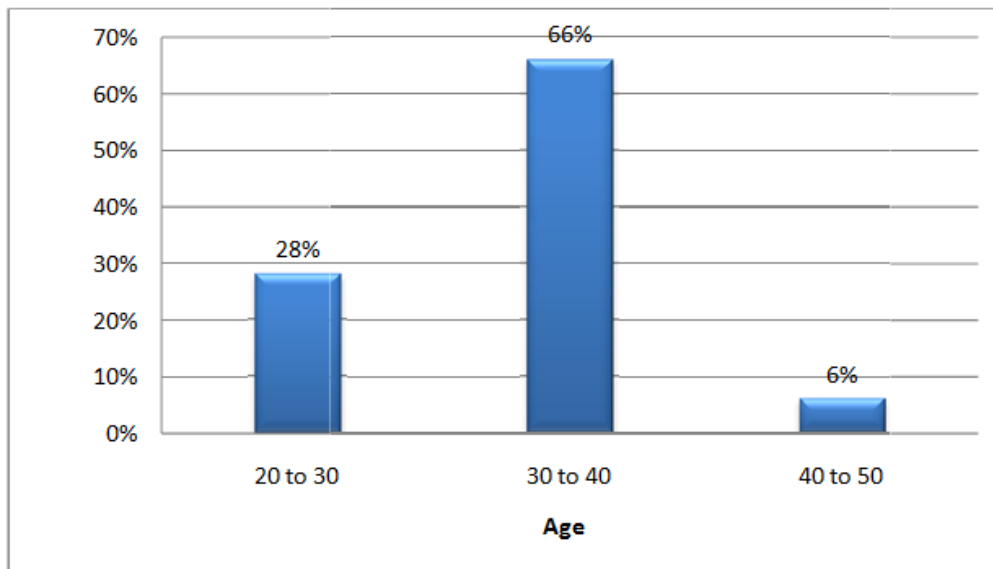
Gender	Frequency	Percent	Cumulative Percent
Male	387	70%	70%
Female	162	30%	100%
<b>Total</b>	549	100.00%	

**Fig 1: - Gender**

**Interpretation:** - In the ongoing review recurrence for orientation portrays that overview was ruled by male respondents as male respondents were more contrasting with female respondents. In the ongoing review there were all out 387 (70%) were male and 162 (30%) female respondents. An endeavor has been made so there won't be any orientation biasness. Reflecting age wise order of the respondents.

**Table No.4: - Age of the respondents**

Age	Frequency	Percent	Cumulative Percent
20 to 30	152	28%	28%
30 to 40	362	66%	94%
40 to 50	35	6%	100%
<b>Total</b>	549	100%	

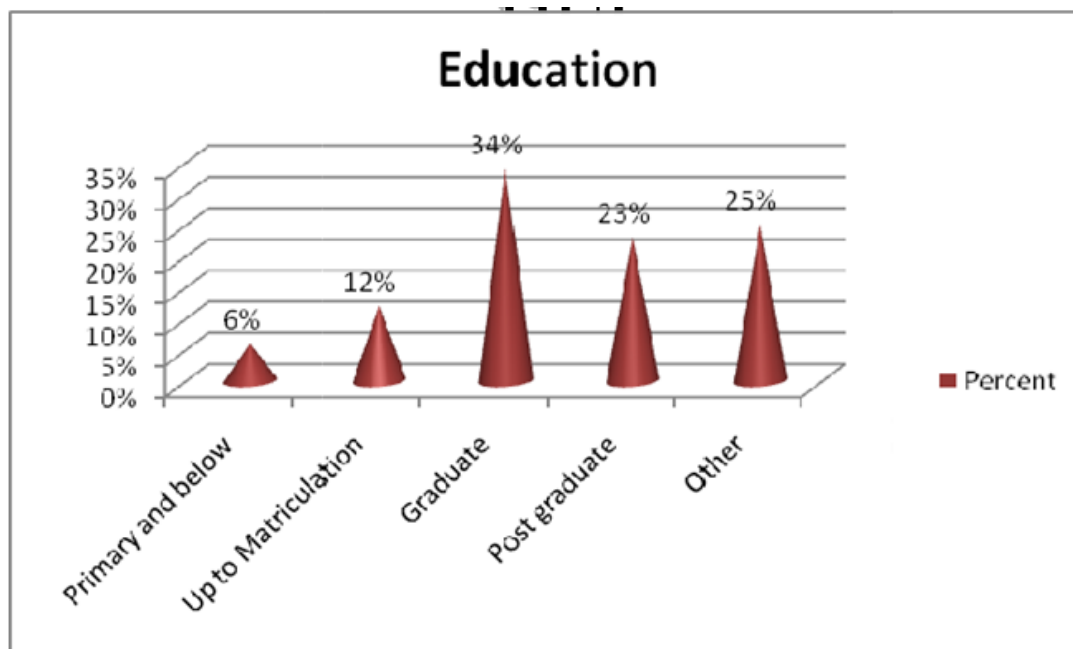


**Fig.2: - Age of Respondent**

**Interpretation:** - Age is one of the significant segment factors concentrated on through the overview. There were three gatherings old enough were made. Age gathering of 20 to 30, age gathering of 30 to 40 and age gathering of 40 to 60. Out of all out 549 respondents, it was seen that there were 66% of the respondents were has a place with the age gathering of 30 to 40 followed by the age gathering of 20 to 30 (28%) and just 6% of respondents were have a place with the age gathering of 40 to 50. Following table shows schooling of the respondents partook in the overview.

**Table No.5: - Respondents Education**

Education	Frequency	Percent	Cumulative Percent
Primary andbelow	31	6%	6%
Up to Matriculation	64	12%	18%
Graduate	185	34%	52%
Post graduate	132	23%	75%
Other	137	25%	100%
<b>Total</b>	<b>549</b>	<b>100%</b>	



**Fig. 3:- Education**

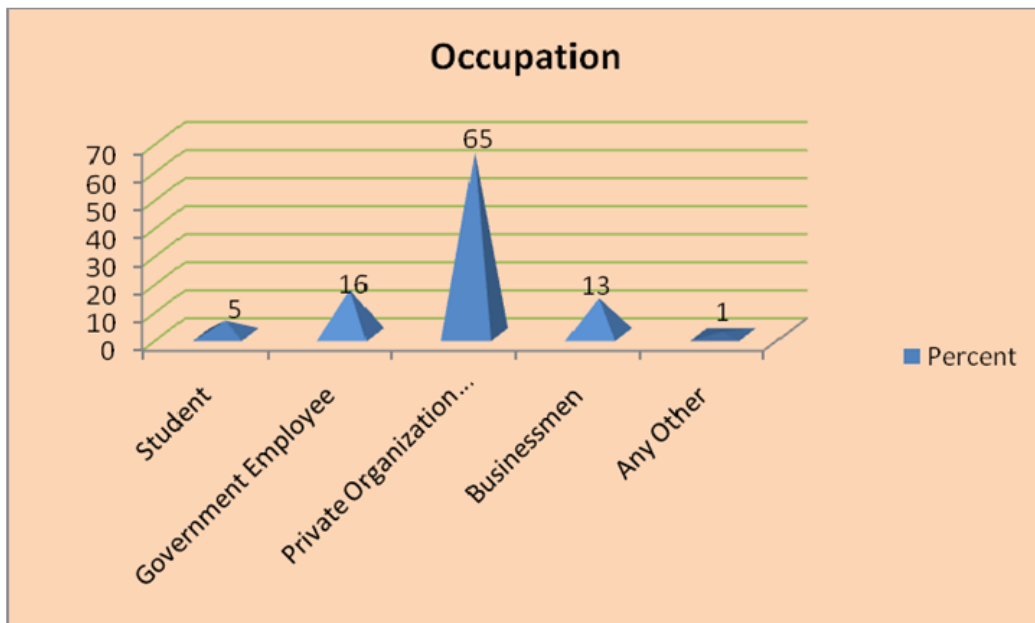
**Interpretation:** - Schooling assumes a significant part in buy choice in speciality items and shopping items. The vast majority of the items in electric home machines falls in a similar class. Subsequently, job of instruction was concentrated on through the review.

From the above recurrence conveyance, it was seen that there were 6 % of the respondents has a place with essential and beneath training, 12% has a place with up to registration, 23% respondents were post-graduate, 34% were graduate and 25% had the other training capability. Current table and diagram shows control of the respondents with their recurrence and rate.

**Table No.6: - Table displaying frequency of respondent's occupation**

Occupation	Frequency	Percent	Cumulative Percent
Student	25	5%	5%
Government Employee	90	16%	21%
Private Organization Employee	409	65%	86%
Businessmen	68	13%	99%
Any Other	6	1%	100%
<b>Total</b>	<b>549</b>	<b>100%</b>	



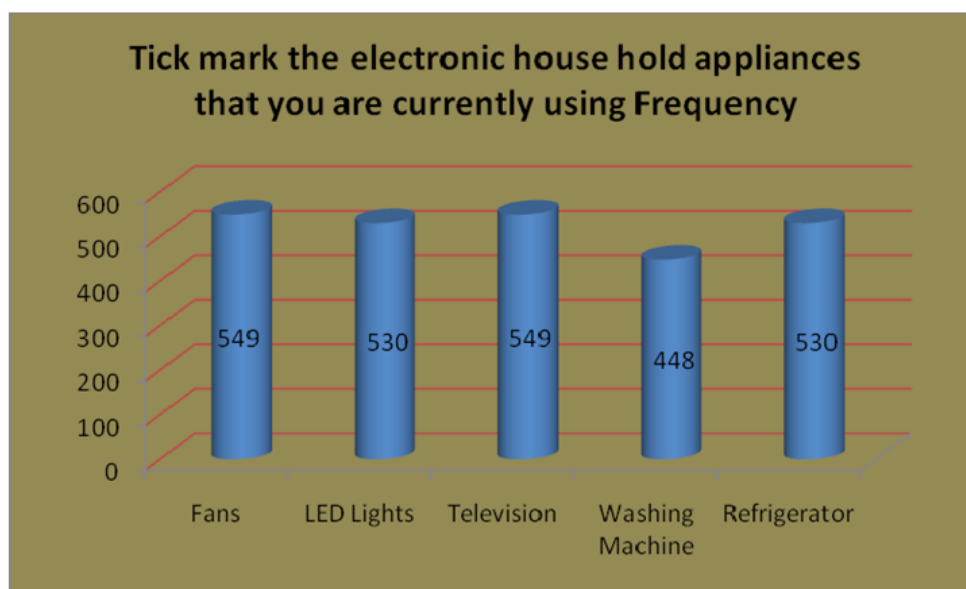


**Fig. 4:- Occupation**

**Interpretation:** -Control of the respondents was dissected during information assortment. Recurrence conveyance investigates that study was directed by moving toward various inhabitants. Out of absolute populace the greater part of the representatives were utilized. 65% of the populace were has a place with the layers of private association worker and it was followed by government association worker (16%). There were 13% money managers associated with the study. 5% of the understudy were engaged with the review as respondents. Just 1% of the respondents has a place with other occupation. Following table portrays the flow electric home machines respondents.

**Table No.7:- Electric house hold appliances currently using by therespondents.**

Electric Appliances	Frequency
Fans	549
LED Lights	530
Television	549
Washing Machine	448
Refrigerator	530



**Fig. 5: - Electronic house hold machines that you are right now utilizing**

**Interpretation:** - Current accessible electronic home machines were asked to respondents. From the recurrence it has been seen that practically every one of the normal machines were accessible in greatest family. Fans and TV were accessible in 100 percent respondents family. Driven lights and Cooler were seen in 530 respondents houses. Washing saw in 448 families. Flow table shows impression of the respondents towards power saving.

**Table No.8:- Following table shows consciousness of energy saving brands among country purchasers in Jaipur.**

Appliance	Brands	Mean Value of Brand Awareness	Overall Average
FAN	Orient	3.73	3.76
	Bajaj	4.12	
	Usha	3.71	
	Havells	4.14	
	Crompton	3.62	
	Luminous	3.76	
	Gorilla	3.57	
	Super Fan	3.67	
	Khaitan	3.72	
	Polycab Fans	3.51	
LED Lights	Phillips	4.00	
	Syska	3.89	
	Wipro	3.81	
	Eveready	3.77	
	Bajaj	3.75	

	Surya	3.70	3.76
	Moser Baer	3.57	
	Kwality Photonics	3.62	
WashingMachine	Whirlpool	4.13	3.98
	LG	3.97	
	Haier	4.14	
	IFB	4.05	
	Bosch	4.02	
	Samsung	3.81	
	Videocon	3.84	
	BPL	4.03	3.87
	Toshiba	3.79	
	Samsung	3.83	
		Sony	4.02
<b>Appliance</b>	<b>Brands</b>	<b>Mean Value of Brand Awareness</b>	<b>Overall Average</b>
TV	LG	4.05	3.88
	Panasonic	3.91	
	Haier	3.77	
	Micromax	3.88	
	Philips	3.89	3.87
	Onida	3.81	
	Videocon	3.83	
	MITV	3.74	
Refrigerator	LG	3.95	3.88
	Whirlpool	4.23	
	Godrej	3.98	
	Electrolux	4.28	
	Videocon	3.65	
	Siemens	3.72	
	Samsung	3.68	
	Bosch	3.67	
	Panasonic	3.78	

**Interpretation:** - Energy proficient home apparatuses are accessible in different brands. An endeavor has been made to comprehend the degree of brand mindfulness among the rustic buyers with each brand in every item section. There was all out five items with numerous brands taken in to thought. Reactions were gathered with a five Likert scale seethes from 1 to 5. Scale 1 addresses not mindful by any stretch of the imagination to 5-addresses completely mindful. From the information it has been seen that there means worth of this mindfulness level for Fan is 3.76, for Drove it is 3.76, for clothes washer it is 3.98, for TV it is 3.87 and for cooler it is 3.88. Looking towards all mean qualities is near the reaction 4 i.e., mindful. Thusly, from by and large mean qualities it tends to be portrayed that respondents are very much aware about the energy saving home apparatuses.

Under every item, 8 to 10 brands were considered for the review. Mean worth is determined to really take a look at the consciousness of these items among the respondents. Mindfulness was checked with a Likert size of mindfulness. Respondents' mindfulness information mirrors that there was a critical consciousness of energy saving machines was seen among country clients. 78. Mean worth of fan was 3.76, for Drove lights was 3.76, Clothes washer was 3.98, for television was 3.78 and mean incentive for cooler was 3.88. This multitude of values are close to 4 i.e., respondents know about energy saving home apparatuses.

#### 4. CONCLUSION

Flow research work infers that brand mindfulness considerably affects purchasing choice of energy effective home apparatuses. Brand mindfulness emphatically affects provincial regions clients. Ad and verbal exchange found significant drivers of brand mindfulness and segment factors decidedly influences on readiness to take on the energy saving machines.

#### REFERENCES

1. Charles K. Ebinger (2016), "India's Energy and Climate Policy Can India Meet the Challenge of Industrialization and Climate Change?", brookings energy security and climate initiative.
2. Claudia Morishita , EneDir Ghisi (2019) "Assessment of the impact of energyefficient household appliances on the electricity consumption in the residential sector of Brazil", <https://www.researchgate.net/publication/300005472>
3. Cristina Cattaneo (2019), "Internal and external barriers to energy efficiency: which role for policy interventions?", Energy Efficiency (2019) 12:1293–1311
4. Newell, and K. Palmer, Gillingham (2006) "Energy efficiency policies: A retrospective examination." Annual Review of Environment and Resources.
5. P. S. Mehta. (2017) "Why was India's Ecomark scheme unsuccessful?" CUTS, India.
6. Reddy, B.S. (2018) "Overcoming the energy efficiency gap in India's household sector." Energy Policy 31(11): 1117–27
7. The NEED Project (2018), "Energy Efficiency", Intermediate Energy Infobook [www.NEED.org](http://www.NEED.org)
8. Ting Yue, Ruyin Long (2019), "Empirical Study on Households' EnergyConservation Behavior of Jiangsu Province in China: The Role of Policies and Behavior Results.

9. Wei Yang, Kamiel S. Gabriel (2015), “A study on the impact of household occupants’ behavior on energy consumption using an integrated computer model”, Built Environ., <https://doi.org/10.3389/fbuil.2015.00016>
10. Rajan Rawal, Yash Shukla (2020), “residential buildings In India: energy use Projections and Savings potentials”, Global Buildings Performance Network GBPN Technical Report.

