



FUGO

Design Process

Aman

Abilities &Strengths

- 1. Creative thinking
- 2. Empathising with others
- 3. Helpful
- 4. Inquisitive nature
- 5. Attention to detail
- 6. Keen interest in sports/physical activity
- 7. Cooperative
- 8. Patient with people

Ananya

Passions

- 1. Interested in learning new things
- 2. UI/UX
- 3. Always trying new things
- 4. Connecting with people
- 5. Travelling
- 6. Photography
- 7. Drawing

Apeksha

- 1. Creative
- 2. In details
- 3. Ready for criticism
- 4. Curious
- 5. Cooperation
- 6. Good learning skills
- 7. Good at sports
- 8. Culturally inclined
- 9. Artistic sense
- 10. Aesthetic sense
- 11. Perfectionist
- 12. Organised
- 13. Flexible and accommodating, open to others
- 14. Curious

Arshad

- 1. Communication Skills
- 2. Work well in a team
- 3. Competent with tech
- 4. Multilingual
- 5. Public Speaking
- 6. Creative
- 7. Enthusiastic
- 8. Working well under pressure
- 9. Public speaking
- 10. Patient

Sushmita

- 1. Creative thinking
- 2. Empathize with others
- 3. Multilingual
- 4. Coding skills such as selective attention and auditory comprehension
- 5. Coding
- 6. Create awareness by volunteering at environmental organizations
- 7. Communicational skills such as public speaking and written communication.

USP

Is able to make friends and connect with them with ease

Being able to access situations from a practical point of view, listening to everyone in an unbiased manner and henceforth planning

Rooted to sustainable causes (advocating it and following it - both)

Able to communicate with people effectively and always ready to learn

My empathetic nature allows me to efficiently communicate and problem solve.

miro

PIXELATED HUES

Abilities & Strengths

Creative thinking

Empathize
with others

Cognitive skills
such as selective
attention and
auditory
comprehension

Contributing to
creating
awareness about
the climate crisis
and gender
inequality by
volunteering

Multilingual

Pragmatic
Thinking and
Problem Solving

Coding

Communication
skills such as
public speaking
and written
communication

Determined

Passions

Art in multiple
forms (literature,
visual arts, music)

The pursuit of
knowledge and
self-improvement

Giving back to
the community

Social justice/
Environmental
justice

Finding and
implementing
sustainable solutions
to problems arising
from the
aforementioned
situations

SUSTAINABLE DEVELOPMENT GOALS



5 GENDER EQUALITY



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



miro

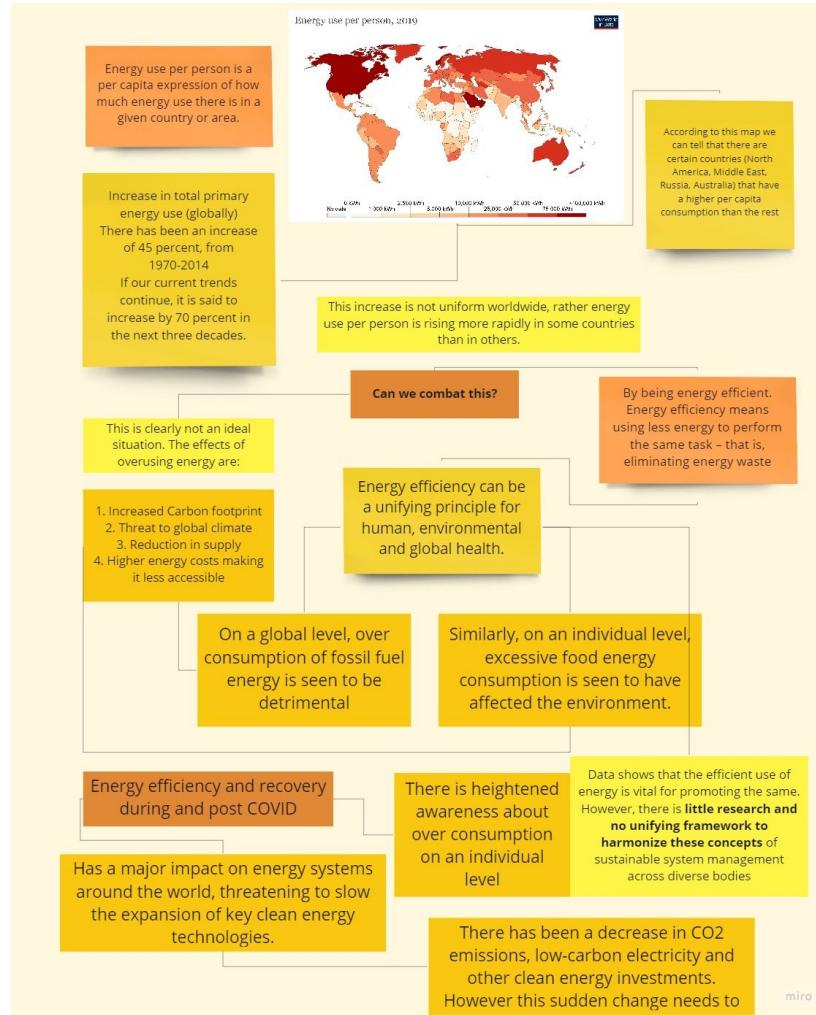
11 SUSTAINABLE CITIES AND COMMUNITIES



There is a rising need to switch to sustainable forms of energy as we can see the drastic effect it has on the environment. If we devise a solution to start from the very bottom we could make a big impact on how the world goes about tackling this issue.



Due to rapid changes happening in the environment and the climate crisis mounting up, the need to shift from non renewable exhaustible energy resources cannot be looked over. We will be looking at different renewable energy resources and ways to effectively reach the targeted communities keeping in mind the differences caused by economic, cultural and social status.



iRecycle

Currently only for the USA, iRecycle hopes to expand soon. This app helps you recycle virtually anything in your area. Have you ever tossed something in the garbage only to be plagued with the thought "Hmm, can that be recycled?" Most of the time, the answer is yes, but few of us know how or where to do it. Enter: iRecycle! It turns out, you can recycle anything from paint cans to old CDs. The simple-to-use app helps you figure out where and how!

GoodGuide

Good Guide allows users to evaluate products as they shop — from anywhere in the world. Scan bar codes or look up a product from their database and see its rankings on the spectrums of social performance, environmental, and health. With Good Guide, you can find out anything about a product, from whether a t-shirt was ethically produced to how your tomatoes were grown

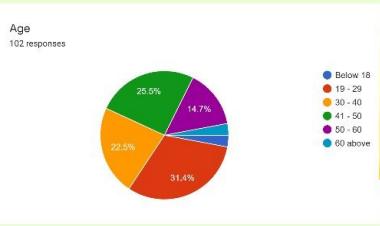
BlaBlaCar

Worldwide (mostly): website

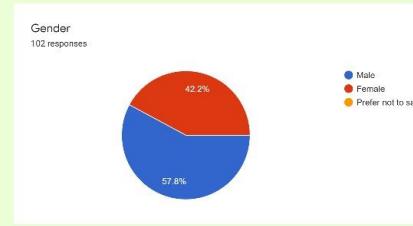
In some parts of the world, car sharing has really taken off. Several companies have launched in recent years, and all of them connect people driving to people looking for a ride. For example, say I was in Toulouse, France and I wanted to head north to Paris. I could easily skim BlaBlaCar's website (which was formerly CoVoiturage in France) and find people who are making the trip on my desired date. I then would pay a small fee to the driver — usually small and just enough to cover a portion of the petrol — and voilà! a cheap road trip and a new friend, just like that. Ride sharing hasn't taken off in the USA as much as it has in other parts of the world — it's quite common in parts of Southeast Asia, Europe and Australia.

106
Participants

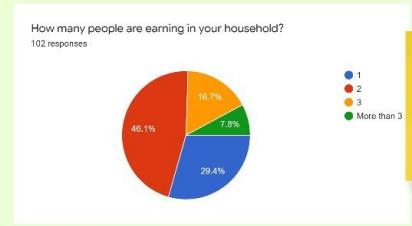
Survey Findings and Results



The distribution of participants according to age is almost evenly spaced out. The target demographic of young audience make up for 35% of the demographic (below 30 years of age).



The ratio of male:female of the participants is 2:3 which is not much skewed.



Most households have 2 people working, followed by households with only 1 person working.

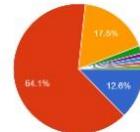
miro

OCCUPATION

29.4% - Government
29.1% - Private Sector
25.2% - Students
9.7% - Self Employed
4.9% - Stay At Home
1.9% - Retired

Do you feel the city you live in is sustainable in terms of environmental aspects?
103 responses

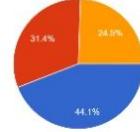
Most people think that their cities are non environmentally sustainable and contribute heavily to pollution, excessive use of resources and improper management that damages the environment



- Yes
- No
- Maybe
- To an extent yes, but housing is not affordable and to not live in the health...
- To some extent
- Some. Only in certain aspects
- No. Very little efforts are being made or nothing negated due to the cal...
- More or less

Do you feel the city you live in is sustainable in terms of economic aspects?
102 responses

Majority feel that their cities are economically sustainable but a decent number also say no and maybe.



- Yes
- No
- Maybe

maintaining something at a certain level

trying not to add more to the waste and use existing resources

Using resources in a way that doesn't harm the environment

All around development balancing around environment

Meeting basic needs without affecting future.

optimal use without exploitation

Long Lasting

Being able to use resources and also saving for the future

Existing together in harmony

What does "sustainable" mean to you?

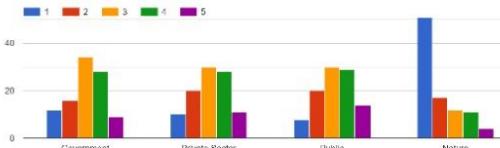
maintaining something at equilibrium

that doesn't dwindle the resources of our planet

Capacity of humans and biosphere to coexist

Inclusive growth

Rate in order of who you think is responsible for the effects of climate change. (1 being the least)

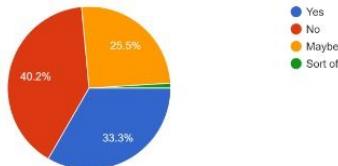


Majority of people blamed the government for the effects of climate change as the feel not has been done enough to protect it.

People equally blame private sectors and individual contribution to the degradation of the environment

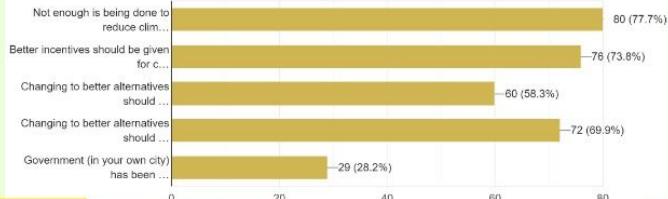
Most people agree that the climate change taking place right now would not have occurred naturally.

Do you feel the city you live in is sustainable in terms of social aspects?
102 responses



The participants seemed somewhat divided in terms of social sustainability

Please check the statements you agree with below.
103 responses



Most people agree (77%) that not enough is being done to reduce harmful effects of climate change and promoting sustainable living.

Only 30% people believe that government is doing something proactively to promote sustainability

73% feel better incentives should be given to bring about change for the better

While most people want mandatory changes for the private sector level (70%), there is less demand for mandatory changes at an individual level (60%)

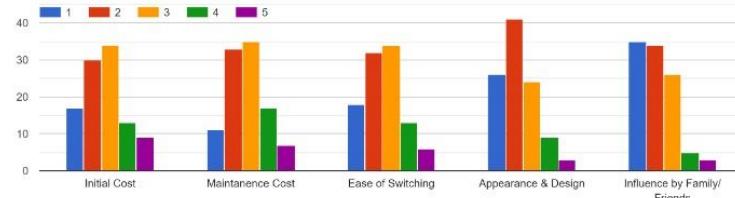
This can either mean that they feel individual changes are not enough or that they don't want to take responsibility for it.

not has been done enough to protect it.

degradation of the environment

have occurred naturally.

How much do the following effect your choice to switch to more sustainable alternatives/products for your household? (1 being the least)



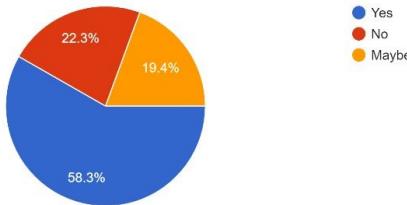
Initial costs are very important for people along with maintenance cost and ease of switching

Appearance and design comes next after these, meaning there is some room for adjustment

Influence by family and friends matters the least out of all of these.

Are you aware about the concept of sustainable cities?

103 responses



What is meant by sustainable cities?

Cities that are economically viable, with access to good education, health care, public transport, safety, housing, utilities without harming the ecosystem

Sustainable cities must maintain/uphold all the human requirements and must maintain the level of water resources, livable pollution level/environmental, career and business opportunity

Making cities sustainable means creating career and business opportunities, safe and affordable housing, and building resilient societies and economies. It involves investment in public transport, creating green public spaces, and improving urban planning and management in participatory and inclusive ways.

A city which sustains and develops with an organic approach i.e it keeps in mind the limited resources it has and need of its present as well as future generations.

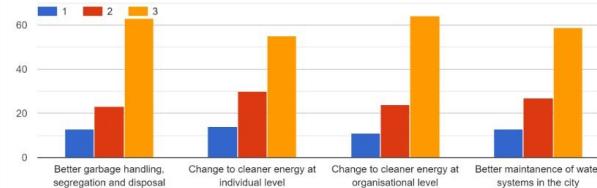
In sustainable cities and communities resources are utilised in such a manner so that the city can survive for very long without much dependence from out side.

Where the economic and environmental decisions are taken keeping the future generations in mind

Cities that is made keeling in mind the needs of people in the present and also keeping in mind about the needs of future.

Cities which produce their own power from solar, grow their own fuel, have adequate green cover, controlled population and do not contribute to carbon emission.

Rate in order of importance according to you that changes that need to be made in your city. (1 being the least)

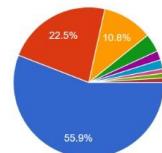


There is almost an equal number of people (60%) who feel that all the changes mentioned are important for the city and should be given equal attention.

Out of all, cleaner energy resources get the most focus (67%)

What medium would you be comfortable with to get updated on if new sustainable and cleaner alternatives are made available to you?

102 responses



- Mobile Application
- Website
- Workshops
- Institutional Gathering
- Media
- Govt. should make cities and their governance participative and deliberative...
- Newsletters
- Social media
- Loyalty Programs, Waste management...

Heavy preference for mobile application

Websites are preferred second, but can be used on multiple devices.

some other suggestions were given by the participants which can also be incorporated.

greener ideal



The greener ideal provides infographics, videos and tips on how to live a greener lifestyle, and of course on green tech and energy. Additionally, their news section is a great opportunity to learn about the latest developments in the renewable energy sector.

<https://greenerideal.com/>

miro

Environmental
News

Green
Living
publication

Original
content and
commentary
on daily basis

areas:
clean energy, sustainable
transportation, innovative
environmental
technologies, and ways that
people can 'go green'

passionate and
very critical of
all the changes
taking place in
our world

motivate
people to take
steps towards
a greener
ideal.



2 Green Energy provides everything from tips to the news on renewable energy. Coming from a business background, editor Craig Shields decided to use his skills to promote and educate people on green energy solutions. His blog includes guest posts and hence allows many different writers to share their ideas and thoughts.2 Green Energy provides everything from tips to the news on renewable energy. Coming from a business background, editor Craig Shields decided to use his skills to promote and educate people on green energy solutions. His blog includes guest posts and hence allows many different writers to share their ideas and thoughts.

help innovators find the right industry positioning, avoid hyper-competitive, low-margin business scenarios, and launch clean energy businesses

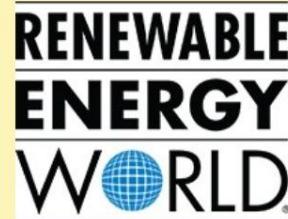
connect entrepreneurs and investors

help investors review clean energy technology and opportunities

how political, economic, and technology trends influence clean energy business strategies.

applying business skills to clients in renewable energy and other arenas within cleantech

Providing cleantech investment opportunities



Renewable Energy World was founded in 1999 by professionals who decided to turn their passion for renewable energy into their job. They cover everything from daily news, to green technology overviews and green events. Renewable Energy World's aim is to educate people about green energy solutions as well as assisting them in making the transition to sustainable energy.

<https://www.renewableenergyworld.com/#gref>

miro

passion and the desire to create a long-term sustainable business

source for Renewable Energy News and Information on the Internet

Original content and commentary on daily basis

Connecting like minded people with the help of blogs

provide access to Renewable Energy-focused news, case studies, technology trends, markets, companies

Assisting people transition to sustainable living methods



Greencleanguide's 'Energy' section provides commentary, information, and news on renewable energy. Their website aims to be easy to read and encourages readers to participate in the comment section. They also connect through social media by frequently updating their 4000 followers on facebook.

<https://greencleanguide.com/>

miro

latest information in
the fields of
Environment,
Renewable Energy,
Sustainability and
Green technologies

easy to use approach created to
make available such information
in a single place. All the content
that is available on this website
has been collected from reliable
sources and has been created
after doing thorough analysis
and research.

Assisting
people
transition to
sustainable
living methods

encourage our
readers to
comment on
the topics
presented



Conserve Energy Future gives people tips and information on how they can transition to a sustainable lifestyle using green energy. Rinkesh, the creator of this website wanted to share his passion for renewable energy with others and inspire them to do the same.

<https://www.conserve-energy-future.com/>

miro

concerned about dependence on foreign energy and the impact it is having on economy

finding ways to conserve that were practical and painless for the average person

Original content and commentary on daily basis

educate others so that they would hopefully join in the conservation effort.

posts related to [Solar energy](#), [Wind energy](#), [Geothermal energy](#), [Global warming](#), [Recycling](#), [Fossil Fuels](#), [Hydrogen energy](#), [Nuclear energy](#), [Pollution](#)

STUDENT ENERGY

Student Energy is a not-for-profit organization that aims to inspire students and educates them about the issues we're currently faced with. The idea was initially to create a conference from-students-by-students but turned into a whole movement as it gradually gained popularity. We recommend checking out their recaps titled 'this month in energy'. Sorted by continents these blog posts give you all the information you need about the renewable energy around the globe.

<https://studentenergy.org/>

miro

global youth-led organization empowering young people to accelerate the sustainable energy transition through a variety of initiatives

working towards a sustainable and equitable energy future, and then utilize backwards mapping to illustrate how our organization's work creates the conditions for this goal to be achieved

network of 50,000 young people from over 120 countries to build the knowledge, skills, and networks they need to take action on energy

unique youth empowerment model. The initiatives are co-created with young people, for young people

Energy System Map - Inte

Greener
Ideal

Renewable
Energy
World

Conserve
Energy
Future

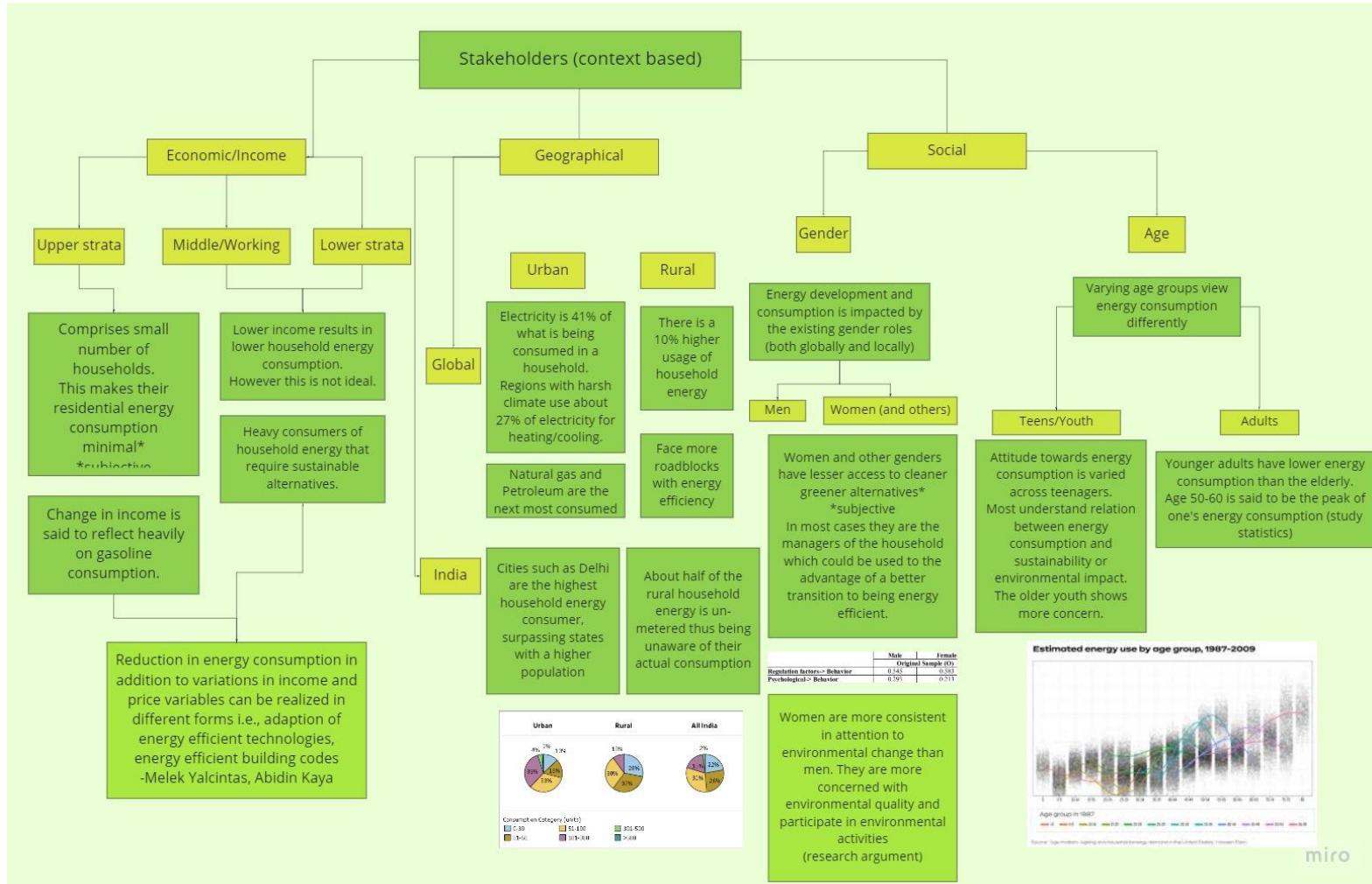
Green
Solutions
India

2 Green
Energy

Green
Clean
Guide

Student
Energy







Adnan Salik

Age - **23**

Location - **Bangalore**

Occupation - **SWE**

Pain Points

- Low income for a metro city
- Fuel is very expensive
- Commute is long
- Compromise on other necessities
- Budgeting
- Can not depend on working from home

Expectations

- Government initiatives can be taken to reduce sky-rocketing prices of fuel
- IT firms can atleast cover 20% cost of commute
- Residential quarters can be offered for the employees

Jobs to be done

The persona needs to travel on a daily basis with minimum fuel consumption, eventually leading to savings.



Jayanti Devi

Age - **27**

Location - **Dehradun**

Occupation - **House Help**

Pain Points

- Very low income
- Too many people depending on her
- No transparency in terms of energy bills
- High learning curve in terms of technology and government policies

Expectations

- Government initiatives can be taken to increase the transparency in terms of energy bills
- Cheap energy supply to low income households

Jobs to be done

The persona hopes to get educated on energy management, conservation and degradation.



Vish S

Age - 45

Location - **Coimbatore**

Occupation - **CEO**

Pain Points

- Currently energy auditing is done by manual labor
- Time consuming
- Accurate insights not obtained due to human error
- Loss of revenue (15% - 20%) because of energy wastage

Expectations

- Automated real time monitoring system for energy consumption of every device
- Predictive analysis and usage history of devices
- minimization of number of energy monitors in the factory

Jobs to be done

Reducing the electricity consumption of the factory in order to reduce the production cost.



Dr. Kusum Arunachalam

Age - **50**

Location - **New Delhi**

Occupation - **Professor**

Pain Points

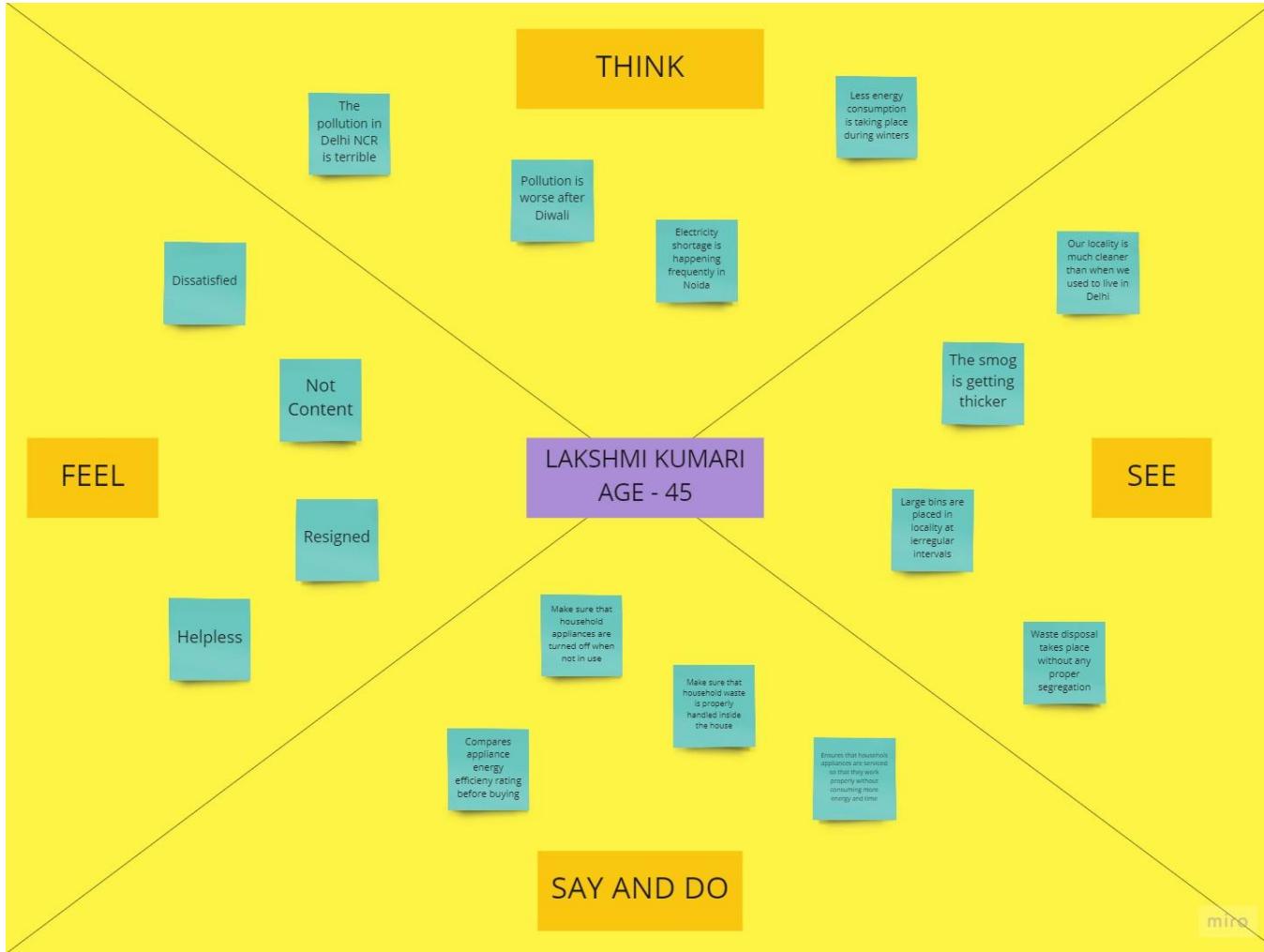
- AC & refrigerator are essential commodities these days
- On a humanitarian level feels guilty
- Due to extreme weather conditions, requires at least two ACs which is cost inefficient

Expectations

- Affordable eco friendly electronic home appliances with minimal energy usage

Jobs to be done

Energy consumption should be minimised without compromising on the basic necessities.



THINK

Dissatisfied

Delhi is not
a properly
sustainable
city

Reluctant

Irregularity in
maintenance is
seen between
different
localities

RITWIK GUPTA
AGE - 20

Waste disposal in
some localities is
not taken care of
and is seen
dumped outside
in piles

Prices for
energy
consumption
keep on
increasing

Household
energy
consumption
is large

Waste is
handled in
the morning
by collectors

Energy used is
household is
from non-
renewable
source

FEEL

Helpless

Agitated

Impatient

Proper
management by
the government is
required to
ensure
implementation

Alternative
energy sources
are needed to
be explored in
Delhi.

SAY AND DO

Mindful of
energy being
used in the
household.

Careful of the
appliances
being used in
the house and
their duration

SEE

There is a
water problem
in East of
Kailash

Biofuel in a small community

Biofuel waste bins
+ community + interactive game like features
Pokemon GO kinda interface
Mobile app with bio fuel waste etc.

+ scanning in the bin to see what is bio degradable and what is recyclable.

Solar Energy

Phone gets charged w solar energy

Common energy source for community
Point System to keep score of highest contributor

Phone screen/house windows as solar panel

Sun tracker attached with solar panel

Overall Sustainable Lifestyle Practices

audio jack has a metal straw
app syncs w electricity related sth
schedule of public transport available on app
app syncs w shower settings, warning after 7 mins stop @10
Community app that encompasses a list of what the community does.
And it keeps track of whether they do it or not
carpooling but with a lot more benefits?

Leftover food (from restaurants or homes or stores) is distributed to those in need.
App acts as an interface to bring the donors and recipients together

App which shows carbon footprint of daily household activities, has some game/ challenge to make it neutral/positive.

Plastic footprint tracker form challenge communities leaderboards reward points tips/tricks

game game with changing background sustainable non sustainable tasks as one proceeds

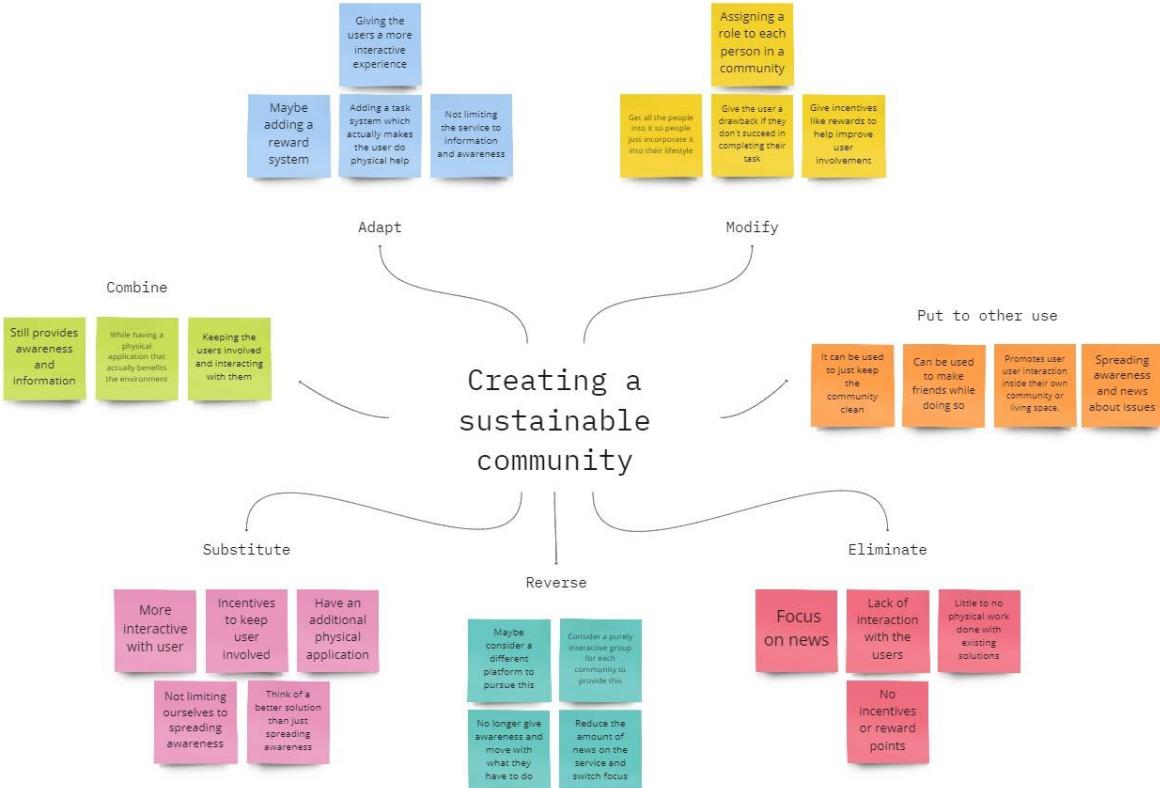
Wind Energy

Helps locate windfarms in the community or nearby
A lot of residents aren't aware of the windfarms nearby

Water Harvesting

Arid region fog harvesting
Using the internet for things w/ water conservation / harvesting

App which checks all the faucets at home and how much water is being used everyday



why biofuel?

Reducing the carbon footprint of a good amount of energy industries

Reduces greenhouse gas emissions

Easy to source in comparison to fossil fuels as the initial product required is waste/biomass

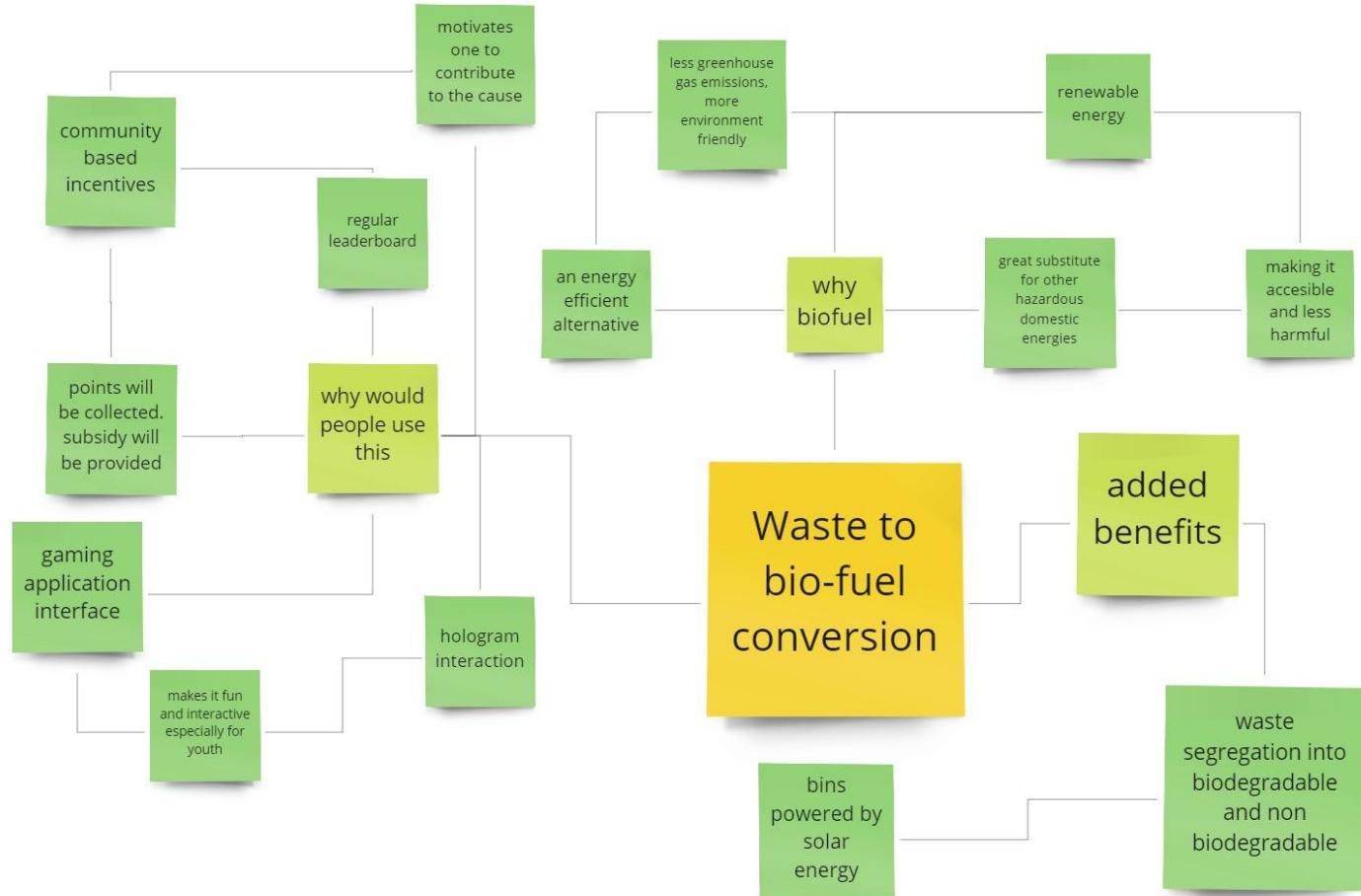
Some countries don't have adequate crude oil reserves, however biofuel can be produced locally per country thus decreasing dependency on import trade

Potential to diminish the ecological footprint by 8 to 16 times, making it more sustainable

Reduces possibility of soil and water contamination during the transport, storing and usage.

It is a biodegradable fuel.

Reduces need for landfills



Waste to bio-fuel conversion

pros

cons

history and current usage

a practice in native ecosystems

similar methods were carried out in indigenous areas

has become a more industrialized process recently

need for such fuels has risen due to current climate and economic crises

now a digital app with a gaming style interface

those involved

more appealing and engaging to the youth

community residents

household energy suppliers we provide subsidy from

inchng towards becoming sustainable cities and communities

tackles harmful energy overconsumption

innovative and interesting technology reaches out to the youth

solar powered waste segregation - additional benefits

brings the community together by providing incentives

cannot be utilised everywhere due to an existing digital divide

higher cost of production - bio fuel conversion

cannot be entirely substituted for the non renewable energy consumed



BEFORE

Time

---1-2 days--- ---1-2 days--- ---1-2 days--- ---1-2 months--- ---1 week--- ---2-3 months--- ---2-3 months--- ---1 week---

User actions

Conducting a survey

Gathering information from the internet

Gathering insights from all the information gathered

Pitching our idea to energy companies and select communities that they provide to

Generating a bin prototype to show the companies

Forming a connection with the companies

Forming a connection with Garbage disposal companies

Forming a connection with Recycling and Fertilizer companies as well

Mass producing the FUGO bins

Contacting companies that mass produce the raw materials for the Bins

Installing the FUGO bins in select locations

Adding all the locations into the app



For instance we can achieve a collaboration with BSES or Reliance Power by coming to an agreement with them about the use of our Application to keep the communities that they supply to clean while making biofuel that they can use. We would come to an agreement of how much subsidy should be given to a user for how much biofuel creation that they contribute to.



Central Electronics Ltd

We could talk to a company like Central Electronics Limited in Delhi to form a partnership with us and help us in completing our manufacturing of the bin by providing us with some of the electronic components that we need like solar panels , electrical equipment , etc.

CURRENT

Time	-0-2 seconds-	-----2 to 20 minutes-----	---1 minute---	-1-20 minutes--	---2 to 20 minutes--	—20 seconds—	-----5-90 days-----	-----1-2 years-----	
Physical evidence	Apps Database	Apps Database	Physical Location and App Database	Physical Interaction	Physical Interaction	FUGO bins segregation system	BioGas is created and waste is collected	App Database	Physical use of remains
User actions	Opens the FUGO App	Creates Account	Turns on location	App figures out the community they live in	Walks to the FUGO bins location	Throws Waste	Segregates waste	Bio-waste is converted into biogas	Bio-gas is sent to the company responsible for Energy in the community
				Syncs information regarding the bin availability in the community	Gets in game Walking points to buy in game skins for your character	Add points and info to the app based on the type and how much	Recyclable waste	Sent to be recycled	The remaining part of the bio-waste is used as fertilizer

miro

FUTURE



Video Link:

<https://drive.google.com/file/d/1U86k7E34hEPBiE30wij8cZk6rkLgyPgw/view?usp=sharing>

