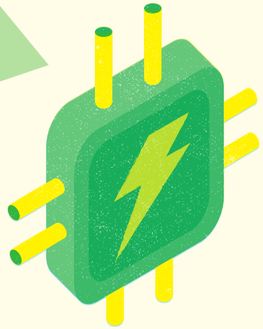

AMPIFY

IPC Project – Energy Monitoring Application

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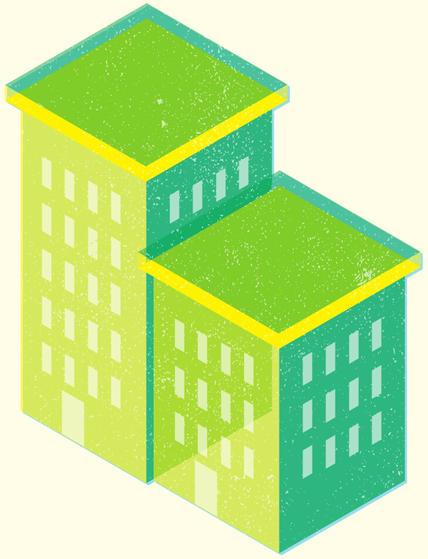
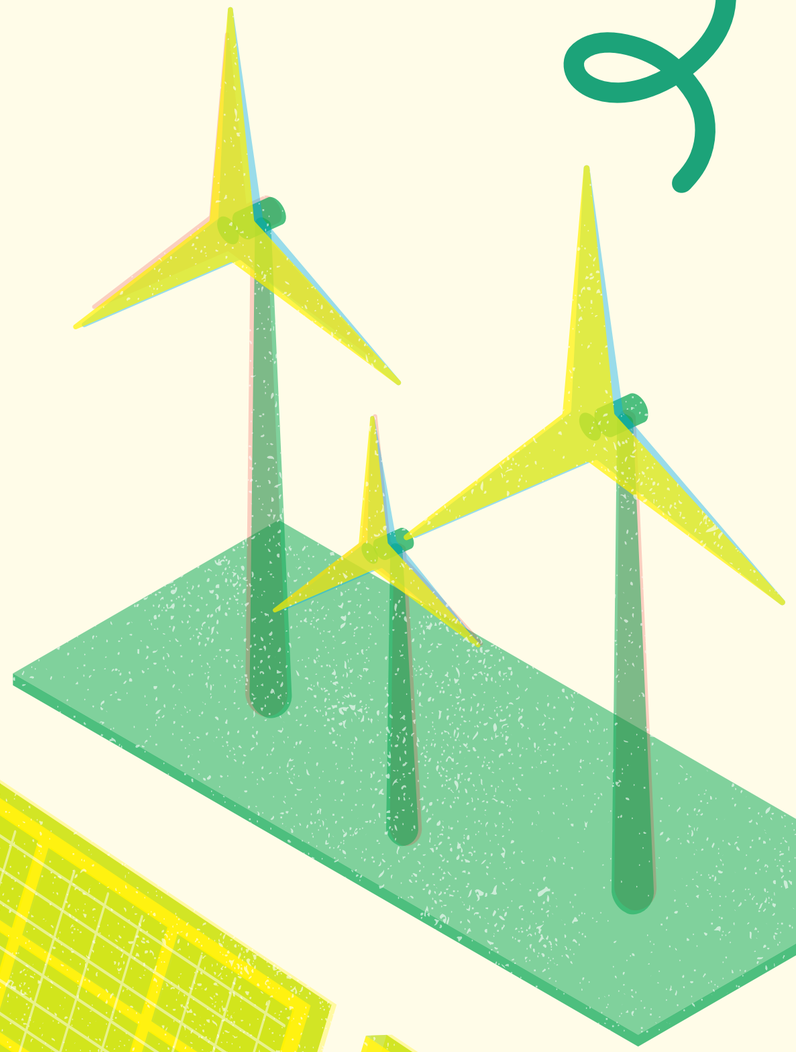
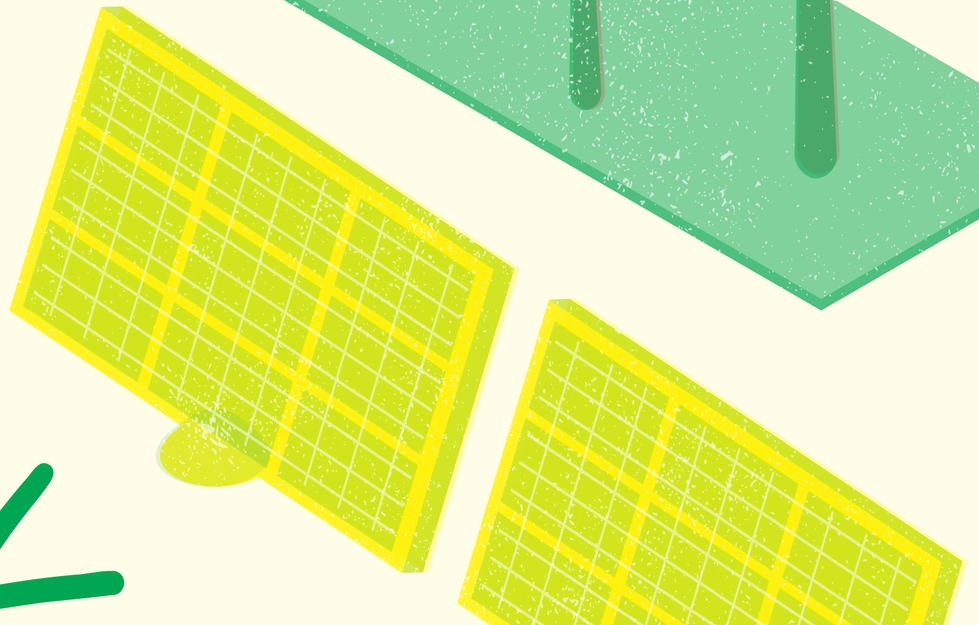




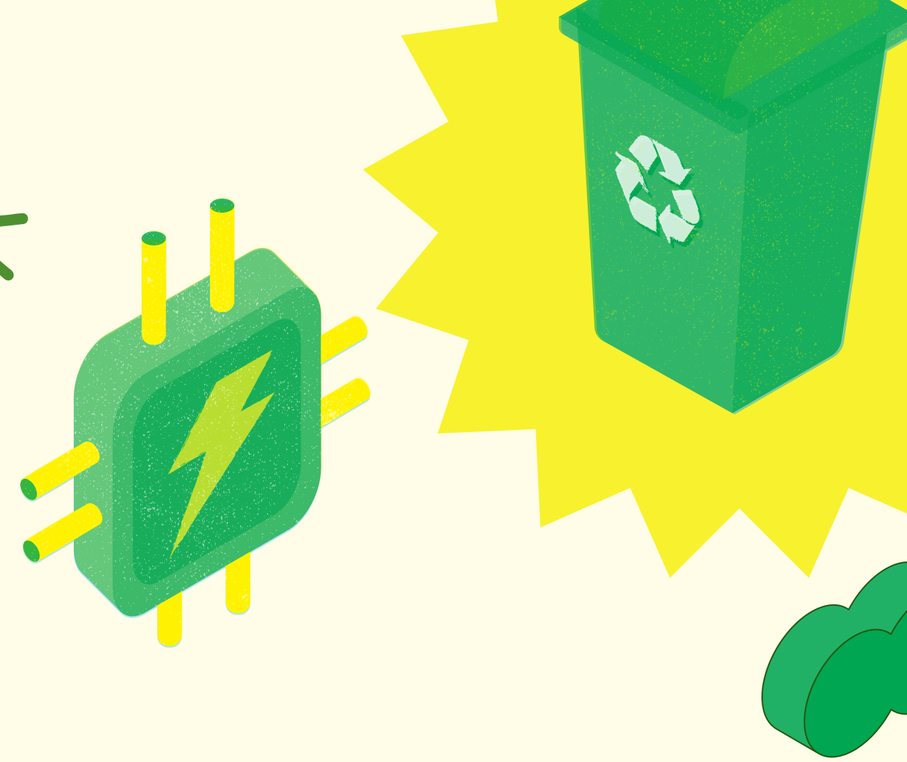
PROJECT'S IDEA DESCRIPTION

The project aims to create a mobile app that helps users monitor their energy consumption in real time, receive alerts, and get recommendations to save energy and reduce costs.

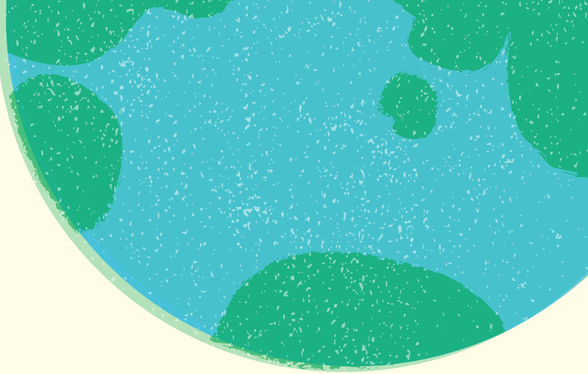


RELATED APPS/SYSTEMS

- Google Nest
- Sense
- Efergy Engage
- Emporia Energy



QUESTIONNAIRE HIGHLIGHTS



- The main target of this forms where diferent types of people and it was publish through Whatsapp Messages;
- Total of responses was about 170 answers;
- The majority of the participants were aged between 45 and 54 years old, with 92.8% of them being homeowners;
- The percentage of people who find the idea of monitoring energy consumption through an app interesting is 70.7%

It should be highlighted that:

- 50.6% of participants monitor their energy consumption monthly, while 40% rarely or never monitor it. This indicates that many users could benefit from more frequent monitoring tools.
- The main motivations for monitoring energy usage are paying bills (20.7%) and saving money (13.8%). However, some participants (9.7%) also monitor their consumption out of curiosity.
- Regarding mobile app development, 47.6% of participants prefer innovation with frequent updates, while 34.7% prioritize stability in their applications. This suggests a need for balance between new features and maintaining familiarity with app functionality.

PACT ANALYSIS

- People: Diverse age groups, homeowners and tenants;
- Activities: Monitoring energy usage, comparing bills, reducing costs;
- Contexts: Households with different sizes
- Technologies: Mobile apps, smart meters, potential future sensors

PERSONA EXAMPLE

Age: 28 years old
Profession: Engineer
Residence: Lives with 4 people
Hobbies: Running, palying football and Reading about new energy technologies

Pragmatic | Focused | Efficient | Dedicated

Gonçalo Santos

Gonçalo has always been a very organized person, with a passion for the efficient use of resources. At 28 years old, with a degree in engineering, he works at a technology company and lives with his family. He is highly interested in optimizing energy consumption at home, leveraging new technologies to reduce environmental impact and save on electricity bills.

Motivated to reduce energy waste, João regularly uses an app that allows him to monitor energy consumption in real-time. He values innovation and is always looking for updates and features that help him manage energy usage more efficiently. His main monitoring tools are a smart meter and an energy management app.

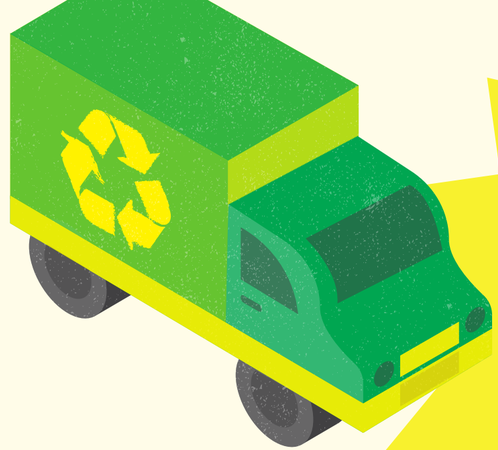
Objectives/Needs:

- Reduce energy consumption to minimize monthly costs.
- Receive personalized suggestions on how to improve the home's energy efficiency.
- Monitor energy consumption by device to identify which ones consume the most.
- Get real-time notifications about abnormal consumption or energy spikes.

Frustrations:

- Lack of smooth integration between the different smart devices he uses.
- Feeling that some features of energy management apps are not user-friendly.
- Challenges in keeping up with constant technological updates and learning how to use them efficiently.

ACTIVITY SCENARIO

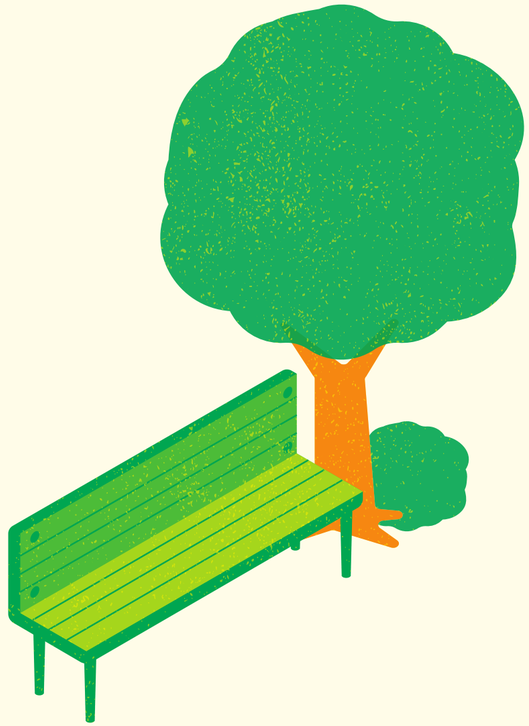


Gonçalo Santos

Gonçalo uses an energy management app to track the consumption of each device in his home. After noticing higher energy bills, he began receiving detailed reports from the app, showing which devices were using the most energy. When the app alerted him that his air conditioner was consuming more than usual, João adjusted its settings to energy-saving mode and scheduled other high-usage devices to run during off-peak hours. The app also offered tips on optimizing kitchen appliances like the refrigerator. By following these suggestions, João reduced his electricity bills and set up real-time alerts to monitor unusual consumption spikes. Now, he feels more in control of his energy usage, benefiting from lower costs and a smaller environmental footprint.

FUNCTIONALITIES

1. Real-time energy monitoring
2. Monthly energy reports
3. Alerts for high energy usage
4. Personalized energy-saving tips
5. Sustainability mode with eco-friendly suggestions



ANNEXES

Forms: https://forms.gle/DBeBNfR91eEuH8pZ8

Data Sheets: https://docs.google.com/spreadsheets/d/1mWJpS1NnGyuJw3jXFaNbVOoJpIo6iARRbgYqvqg1evU/edit?usp=sharing

LET'S COMMIT TO CLEAN ENERGY FOR A SUSTAINABLE FUTURE!

Thank you