



Meraki Co.



MERAKI CO.

MISSION - ACHIEVING CARBON NEUTRALITY BY 2033



- Meraki Co. is an Indian multinational conglomerate headquartered in Bangalore and we are proud to have been rated amongst the world's top conglomerate companies.
- We are involved in a number of business sectors such as manufacturing, energy, agriculture, infrastructure, technology, defence and financial services.
- As of 2020, we have more than a 100 subsidiaries, 20s of joint- ventures and 30+ joint operations companies, operating across the above mentioned business verticals.

- Meraki Co. has always strived to create value for all its stakeholders through not just economic benefits but also focusing on our Corporate Social Responsibility. Taking another crucial step in this direction, we plan to go completely **carbon neutral by 2033**.
- Here, we plan on aligning our Environmental, Social and Governance policies with our multi-year strategic plan for the next 11 years so that we can achieve our targeted carbon neutrality and take a step in helping our environment. .

About Us

Vision

Steps to achieve the vision

1

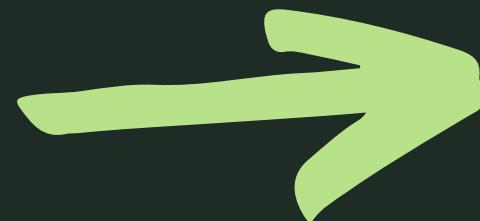
Come up with plans and strategies to help reduce carbon emissions and usage in all sectors

2

Calculate the monetary requirements to achieve the target by 2033 using available statistics

3

Use the profits from FY21 to reinvest the required amount towards the goal in FY22 as calculated in step 2





01. Manufacturing

Material Substitution

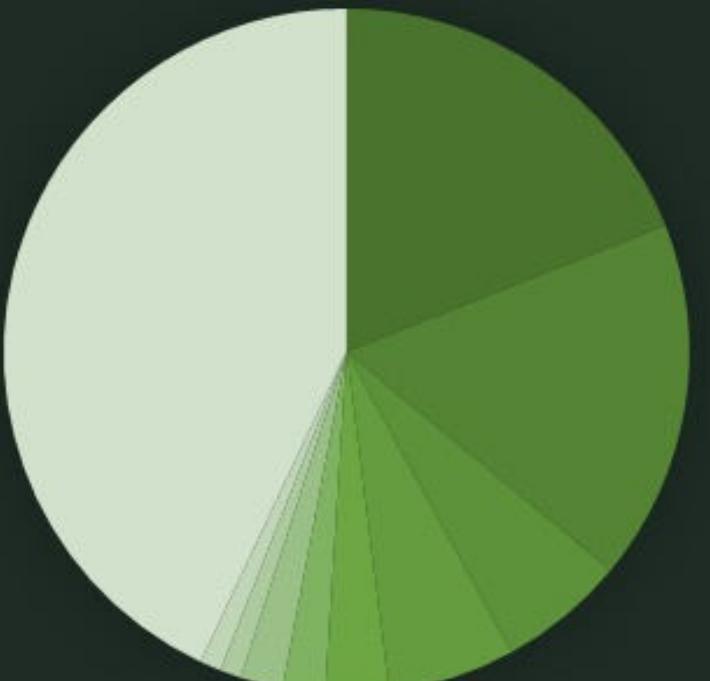
Switching to lower carbon versions of same material or finding alternative materials having lower carbon footprint



Remanufacturing

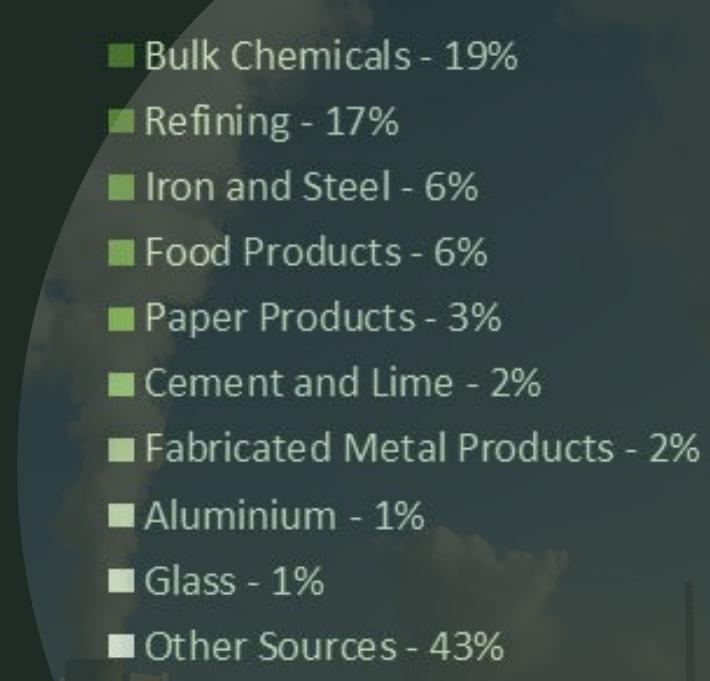
Reclamation of used durable materials and products can be reused in future manufacturing processes

Energy Related Carbon dioxide emissions



Monitoring energy use

Assessing how much pollution our organization's actions generate and make necessary policy changes



A 2014 study University of Groningen, Netherlands found that 3D printing could reduce the CO₂ emission intensities of industrial manufacturing by up to 5% by 2025.

02. Agriculture

- Reducing Enteric Fermentation by optimizing feed.
 - Improved feeding practices
 - Supplements and additives
 - Herd management and breeding
- Sequestering carbon in agricultural systems
- Managing manure
- Increasing Nitrogen Use Efficiency
- Increasing Agriculture Energy efficiency
- Reducing food wastage
- Avoid stubble burning



03. Information Technology

Consuming Electricity sourced from
Renewable Sources of energy

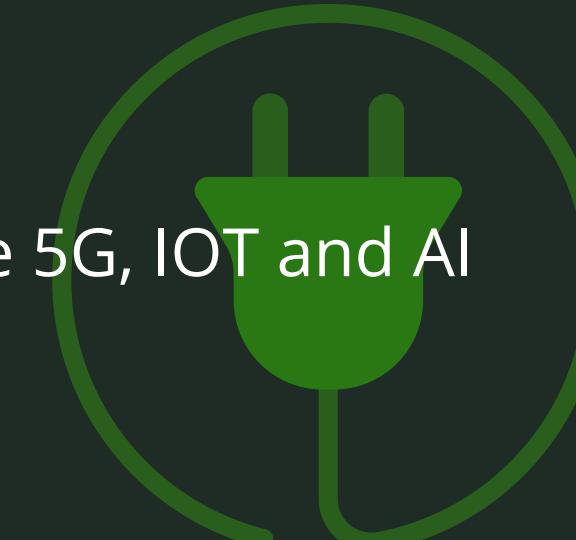


Consuming electricity produced by renewable energy sources can reduce more than 80% of ICT carbon footprint

Using new technologies like 5G, IOT and AI

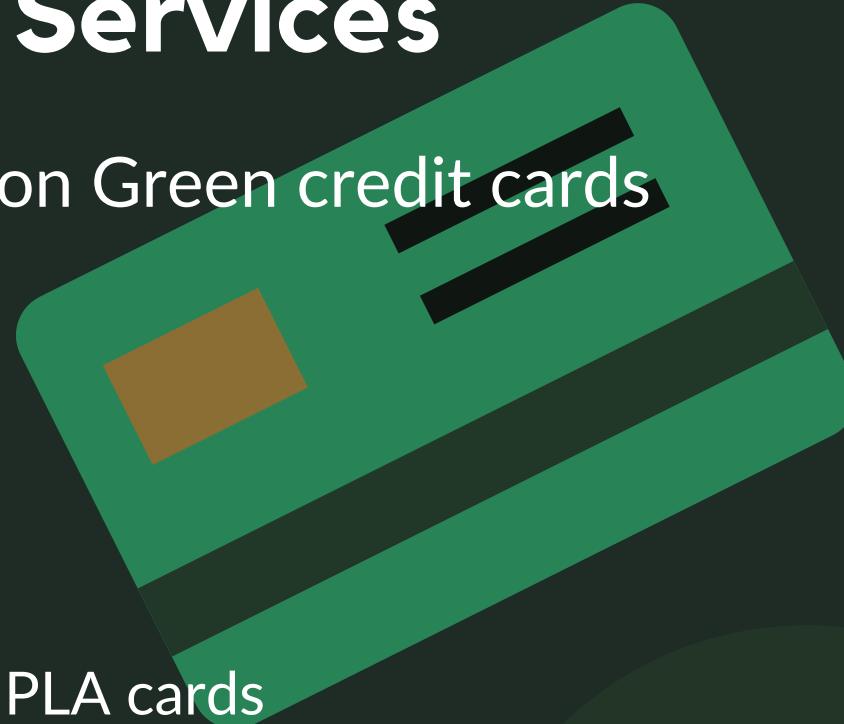

a risk of increased electricity consumption

Increasing Efficiency of deep learning processes



04. Financial Services

Banking on Green credit cards



3.5 Billion banking cards made every year produce a carbon footprint equal to 300,000 passengers flying from New York to Sydney

Bio Sourced PLA cards replace 84% of fossil-based PVC with bio-sourced PLA made from non-edible corn.



Increasing the dependency on cloud computing will be the X factor

Using Renewable sources of Energy for High Intensity Computations

Migrating to the Cloud from on-premises infrastructure reduces carbon emissions by 88%



05. Infrastructure

Low Carbon Infrastructure



Efficiency in material design

The degree in which raw materials are consumed, incorporated, or wasted



Community Relations

Sharing knowledge and feedbacks build the technical capabilities

70%

70% of global greenhouse gas emissions come from infrastructure construction and operations

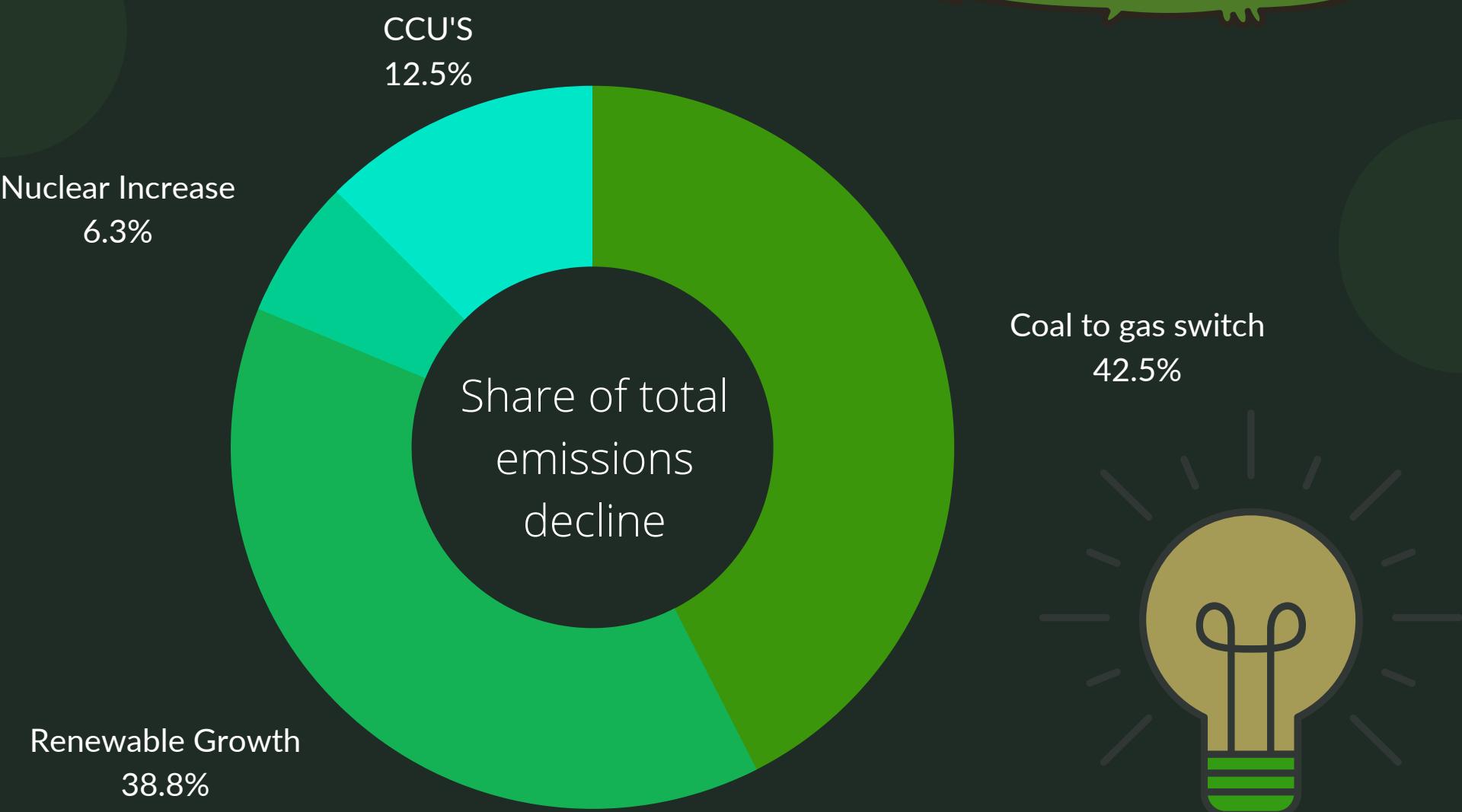
Using recycled steel, saves 75% of the energy required to produce steel in the production process





06. Energy

- Divest holdings in fossil fuel companies.
- Critical Monitoring of company's energy expenditure
- Carbon capture, utilization and storage (CCUS)
- Capture - from power, steel or cement plants
- Transport - via pipelines or ships
- Storage - in sea or underground

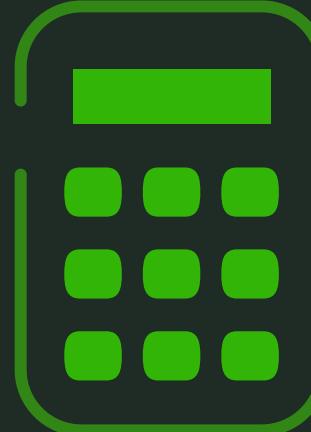


07. Defence

- Defence should actively encourage cross-sector collaboration with other government departments, industry etc
- Some of the emissions are hardest to decarbonize, this problem can be solved by offsets or increased attention to innovation.
- Leveraging assets, to decarbonize further in certain areas—For Example, by generating green power on bases or capturing carbon.
- Replacing with low emissions alternatives in critical missions .
- It should also be alert to new types of collaboration that are needed to meet the ambition.



Financial Calculations



Discount Rate adjusted for Inflation

$$\begin{aligned} \text{Real Discount Rate} &= \left(\frac{1 + \text{Discount Rate}}{1 + \text{Inflation Rate}} - 1 \right) \times 100 \\ &= \left(\frac{1+0.1}{1+0.08} - 1 \right) \times 100 = \mathbf{1.8519\%} \end{aligned}$$

Required Investment = Investment needed per tonne × Total Carbon Footprint of the sector

We use;

First we calculate the required investment in each sector using the given data

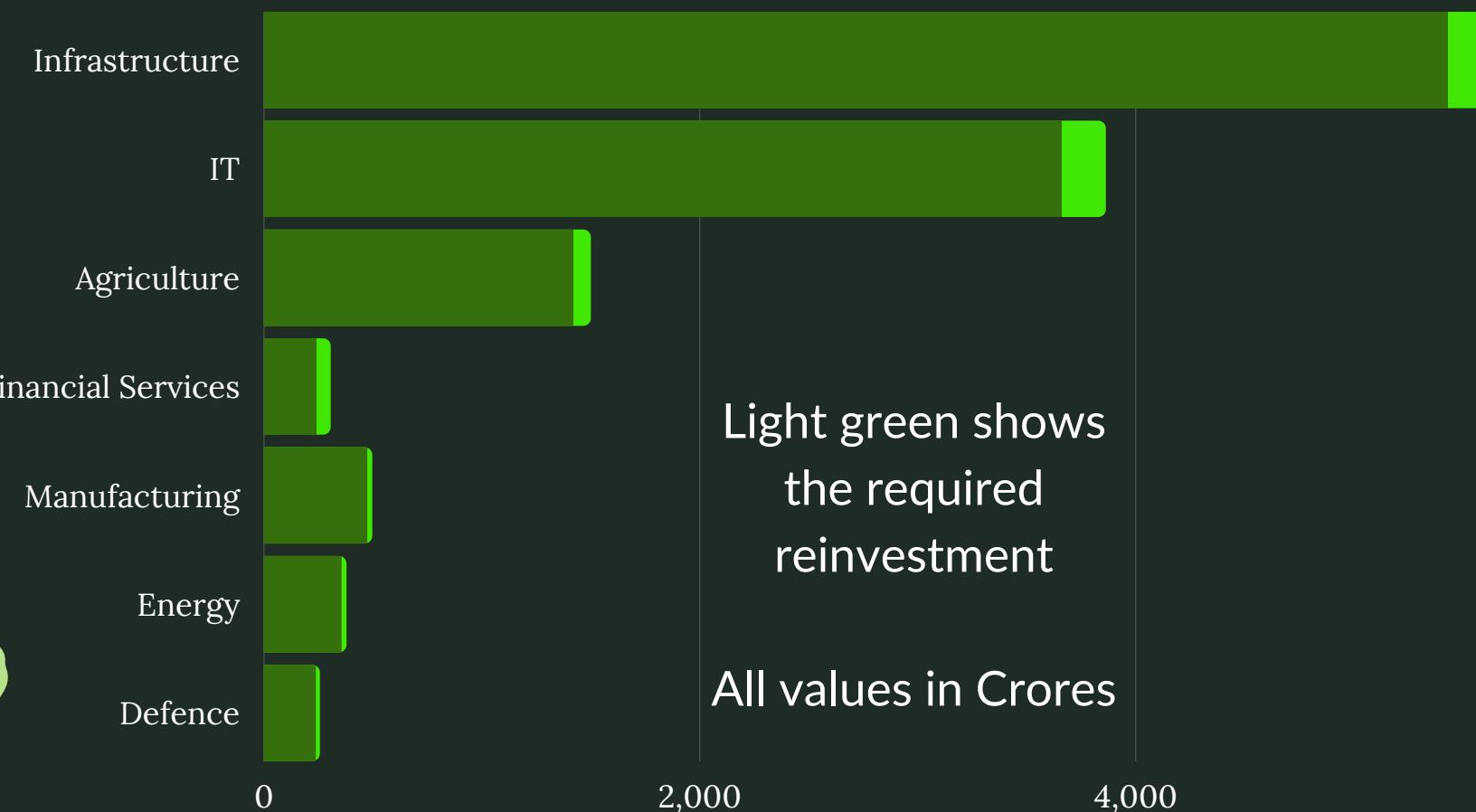
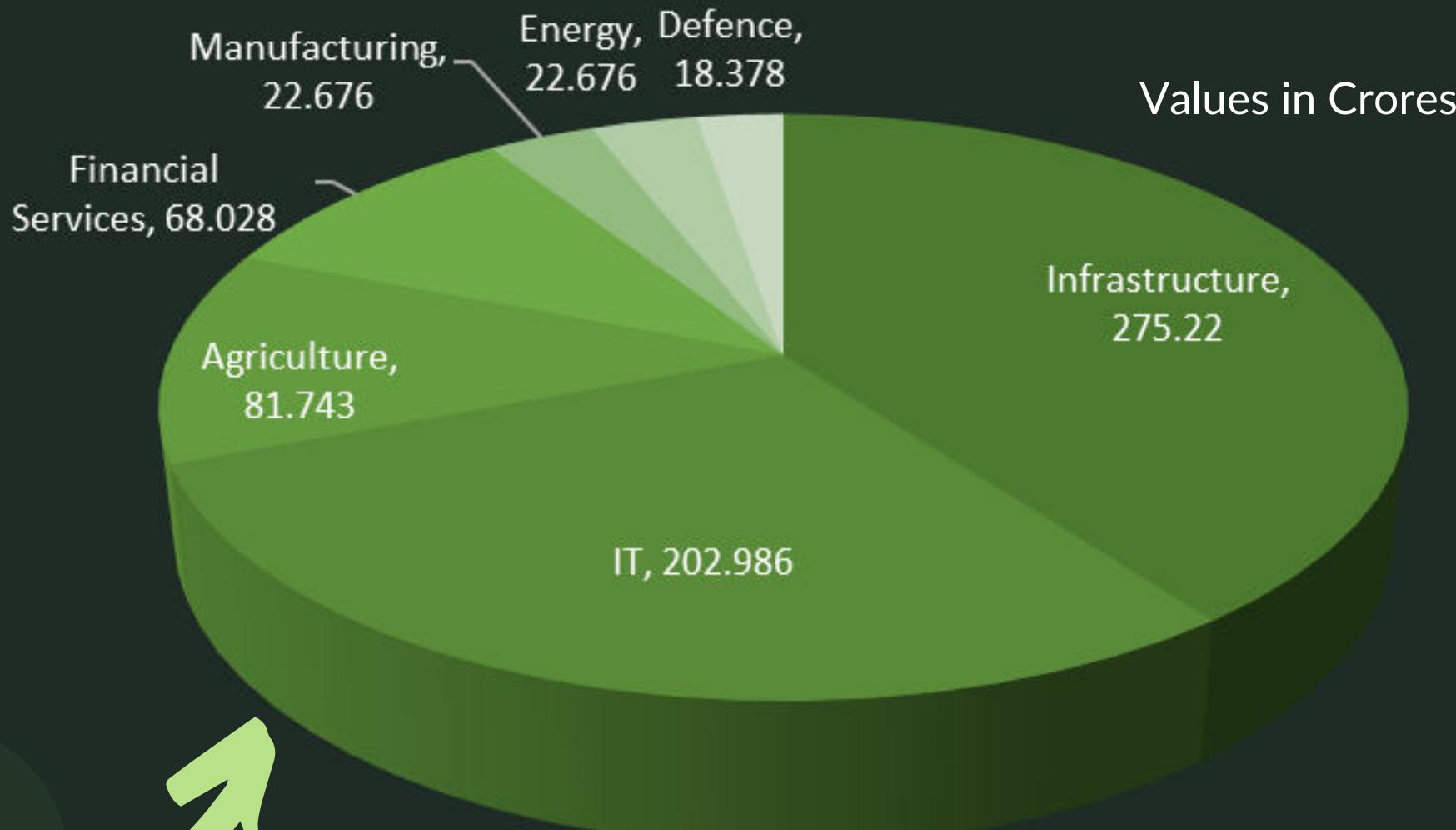
Since we have a time period of 11 years available to reach our goal, we can calculate the present worth of this required investment using the adjusted discount rate

$$\text{Present Worth} = \frac{\text{Required Investment}}{(1 + \text{Real Discount Rate})^{\text{Time Period}}}$$

Financial Viability

Discount Rate
adjusted for
Inflation =
1.85%

Net Present Value required to
achieve carbon neutrality over a
period of 11 years for each
sector



As the Government is willing to
fund all R&D in the defence sector
after 2030, we can explore the
possibility of working on carbon
neutrality in defence sector only
after 2030 which can save us
around 18.4 crores



MERAKI CO.

THANK YOU

PRESENTATION BY ROPAR CRUSADERS

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