

**Faculty of engineering**

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Physics applications project

**Solar Power Bank**

Alhusseain Shalaby - Akram Hany – Amir Anwar

Amir Ashraf – Ekwan Ehab - Albashir Altayeb

Enji Ashraf - Amira Hisham - Omnia Mostafa

Section: 6

ENG/ Mahmoud Mostafa

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# Task Sheet

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| **Member** | **Tasks Participated in** |
| **Amir Anwar** | Merging & formatting - market research |
| **Alhusseain Shalaby** | Revisor |
| **Akram Hany** | market research - literature review (theoretical) |
| **Amir Ashraf** | literature review (methodology) |
| **Ekwan Ehab** | market research – literature review (theoretical) |
| **Albashir Altayeb** |  |
| **Enji Ashraf** | Background (research) – Sustainability |
| **Amira Hisham** | Motivation – Sustainability |
| **Omnia Mostafa** | literature review (historical) |

# Literature review

## Historical Review

## Methodological Review

## Theoretical Review

# Market Research and customer feedback

## Background

Solar energy has evolved as a major alternative source of energy. Solar energy is increasingly being utilized as source of energy for street lighting, automobiles, house appliances and others. In recent times, solar power banks are gaining popularity in the consumer market, with the rise in use of electronic gadgets. Solar power banks serve as an energy storage device, which can be utilized when required to charge any of the USB-charged devices.

Solar power banks require sunlight to charge, making it reliable in circumstances where electrical supply or charger is not available. Most of the solar power banks available today can be charged alternatively via computer using USB. Considering solar as an environmentally friendly technology, demand for solar power banks is expected to escalate in the coming years. (1)

The key companies operating in solar power bank market include Anker., Advantage Computers, LG Chem, China BAK Battery, Inc., Mophie Inc., Microsoft Corporation, Panasonic Corporation, OnePlus, Sony Corporation, Samsung SDI Co., UNU ELECTRONICS INC., Xiaomi Technology Co., and Shenzhen Topband Co.

In this report we will try represent a comprehensive assessment of the market trying to identify the thought process of the target costumer, what matters more to them the price or the quality, what extra features would they find more appealing and what is the expected price range.

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| --- | --- |
| Strengths:   * Sustainability * Competitive price range with respect to capacity | Weaknesses:   * Bad aesthetics |
| Opportunities:   * The need for renewable portable power sources in increasing | Threats:   * New companies face a hard time gaining a market share against the established competitive ones. |

## Participants and Methodology

## Key Findings

## Next Steps and Recommendations

# A Review on Project compliance with national standards for environmental sustainability

# References

1. **Solar Power Bank Market - Global Industry Analysis, Size, Share, Growth, Trends and Forecast. *transparencymarketresearch.* [Online] https://www.transparencymarketresearch.com/solar-power-bank-market.html.**