

Is IOT the solution to solving the current climate crisis

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Introduction

Renewable energy thus far cannot supply the energy demand [1] 'due to the fact solar and wind power, in contrast, produce only intermittently' in different locations. I believe the to solution these problems are the adoption of smart homes and smart grids that provide flexibility for the foreseeable future. An independent journal by Advisory Group and the REEB Consortium states that [2] 'It is clear that if "green buildings" are to become commonplace, that this can only be facilitated by ICT'.

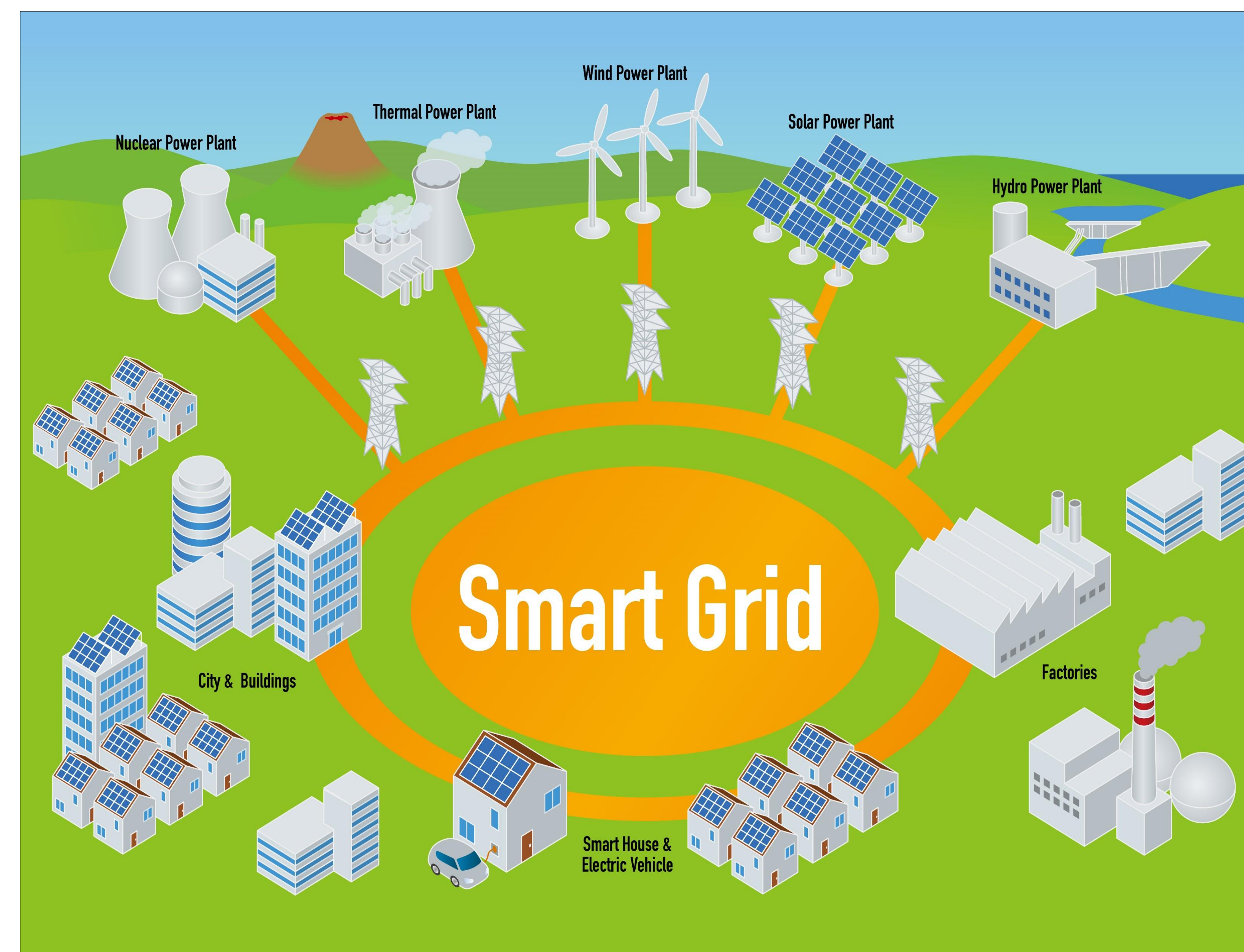
Aims of my project

- I. What are the challenge's IOT faces?
- II. What are the long term plans for renewables and the UK reaching its carbon emissions reduction target?
- III. What can we do to secure the smart grid and smart homes from cyber attacks?
- IV. What research has been done into IOT and renewable energy collaboration, if there are any what are their findings?

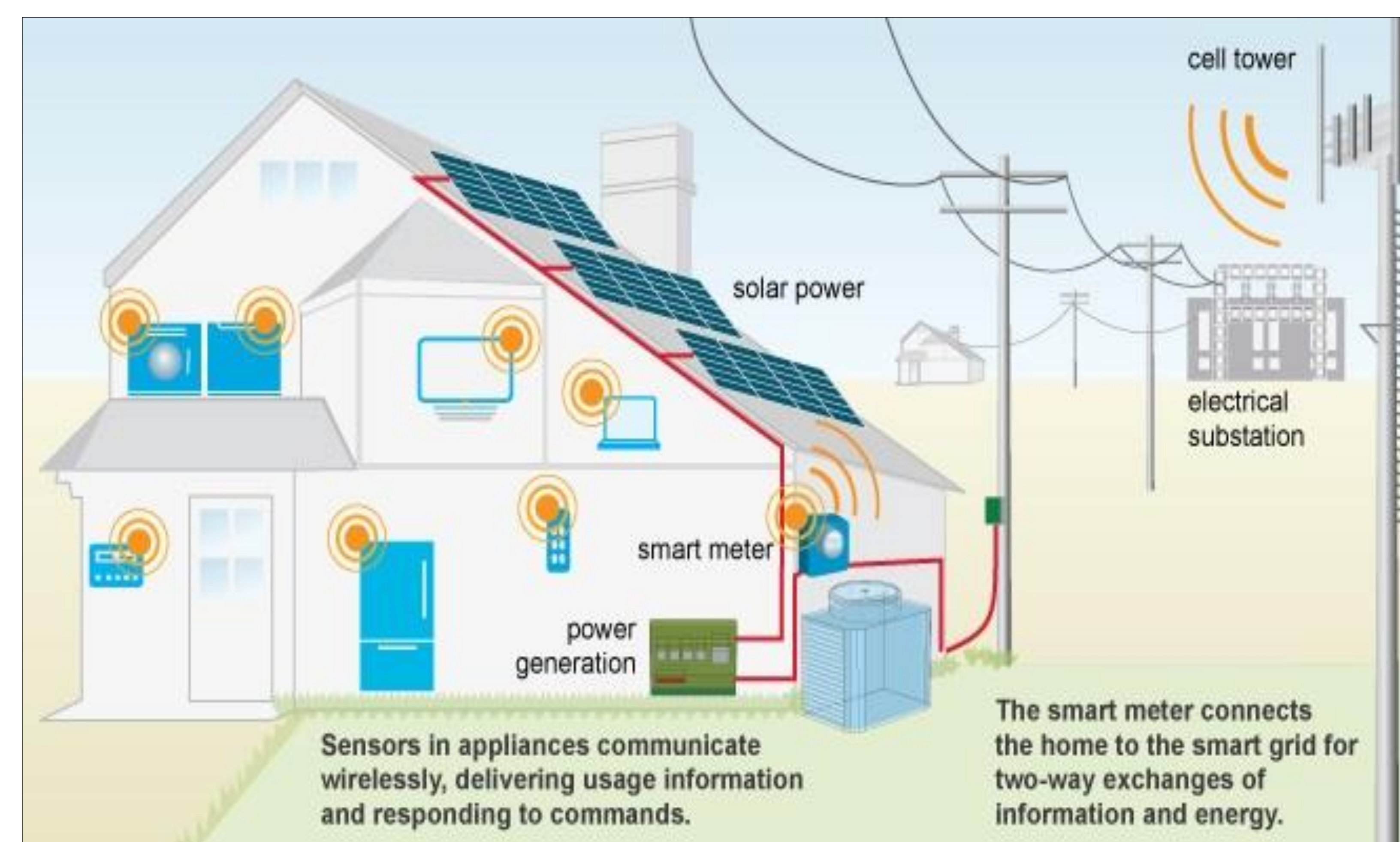
Methods

- I. The majority of my project will be books and journals looking into IOT and Renewables. Looking at why we need both and how they can work together.
- II. I will build a home network through Cisco packet tracer with functioning IOT devices running on a renewable energy sources.
- III. A Critical review of IOT and smart grids and the possibilty of cyber attacks.
- IV. Comparing arguments for and against smart grids and why.

A logical look of a IOT smart grid



An artist sketch of the smart home of the future



Risks

- I. Loss of all data collected over the past year referring to final year project.
- II. Loss of internet connection at home reducing productivity.
- III. Unable to make the packet tracer network perform as expected.
- IV. Lack of research and study relevant to my project.
- V. Becoming to involved and going into other areas other than my project.
- VI. Unable to time keep effectively.
- VII. Difficulties with workloads and stress on mental health.

Works Cited

- [1] Fridley, By David, Nine Challenges of Alternative Energy.
- [2] Findings by the High-Level Advisory Group and the REEB Consortium: ICT for a Low Carbon Economy Smart Buildings.
- [3] smart grid image ://blog.westmonroepartners.com/the-utility-iot-can-the-smart-grid-make-our-homes-businesses-cities-smarter.
- [4] www.research.att.com/articles/featured_stories/2010_01/201002_techview_smartgrid.html?fbid=XJo4AY0WR3A