

# Intro to DIY Off Grid Systems

Demand for Energy Equality

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TODO ADD IMAGE



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# Preface

## Introduction

This PDF has taken the content of the "Intro to DIY Off Grid Systems" PDF and put them into a form which can be easily corrected, improved and translated by the community using LaTeX a markdown language for technical topics.

## Notes

Please note the modifications which have been made & where you can find updates.

1. All the content of the PDF and put them into a form which can be easily corrected, improved and translated by the community using LaTeX a markdown language for technical topics.
2. Any updates, corrections or translations to the PDF will be available at <https://github.com/darigovresearch/Intro-to-DIY-Off-Grid-Systems> so do return periodically to check if you have the latest version.
3. Modifications from the original work includes typo correction, card merging & consistency consolidation (see the commit history for [en] for the specific changes if any).

Feel free to share the PDFs and give the repository a star so more people are likely to see this work and can get the most out of it.

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To see this work in full go to <https://www.demandenergyequality.org/get-started-with-offgrid>

## **Introduction**

**The Demand Energy Equality project**

**Using this guide**

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## Basic concepts

Power consumption

Voltage

Current

Resistance

Series and parallel circuits

What is an off grid system

Why 12 Volt

## Generation

Solar panels

Wind turbines

Hydro-generation

Cycle powered generation

## Storage

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How lead acid batteries work

Carbon intensity

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## Charge control

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Choosing the right charge controller

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