Funded by the European Union

Mitigation Enabling Energy Transition in the MEDiterranean region

BACKUP ELECTRICITY – EDE7

Prepared by Anissia BEAINY, ALMEE

Presented by Anissia BEAINY ALMEE

Training on GRASSMED – meetMED II

WP3_A3.1.6

Date 26-28 February 2024

OUTLINE

- ✓ What is BACKUP ELETRICITY?
- ✓ What is the most common type of BACKUP ELECTRICITY?
- ✓ How can BACK UP ELECTRICITY be integrated to reduce Environmental Impacts?
- ✓ How to comply with GRASSMED ?

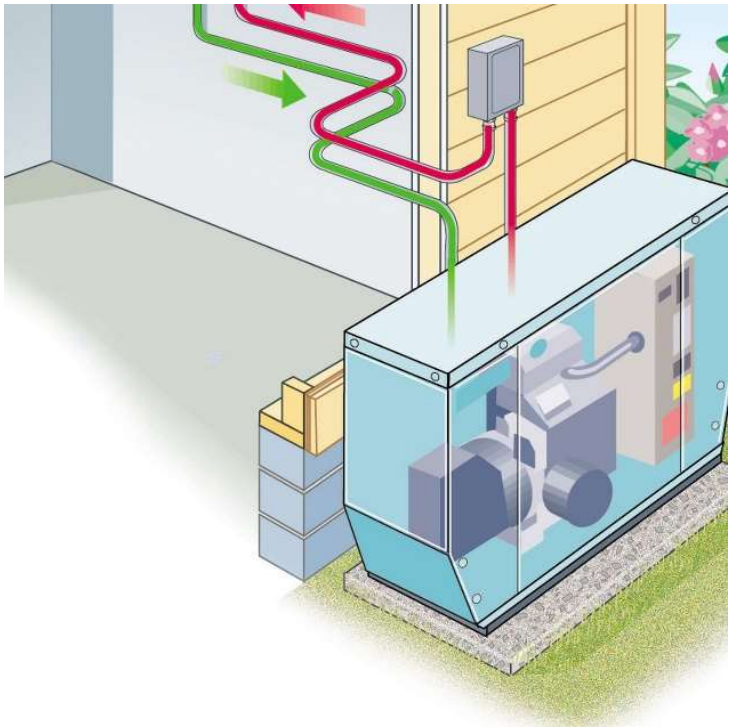
What Is BACKUP ELECTRICITY?

If you're like most people living in a traditional home or apartment, you'll draw your power from the electrical grid that your local power company maintains and operates. This is your primary source of energy.

The current backup systems include batteries and generators, which operate on a fuel source. Advanced systems can even produce their own energy using wind or solar.

But what happens when electrical systems aren't working?

That's where backup power comes in.



What is the most common type of BACKUP ELECTRICITY?

Businesses that simply can't go without power, even briefly include telecom service providers, hospitals, and electrical substations or factories, where power loss could seriously impact on lives, on production or damage expensive machinery.

The most common residential and commercial power is diesel generator. **A properly designed back-up system can reduce CO2 emissions and reduce environmental impacts.**

How can BACK UP ELECTRICITY be integrated to reduce Environmental Impacts?

Sound Attenuators

CO2 Catalyzers

Exhaust stacks

Waste Heat Recovery Unit

Bio-fuel

How To Comply With GRASSMED?

The target is not to prevent usage of generators, but to limit their negative impacts on environment. **Scoring points will be awarded as long as the residential or commercial building include the following prerequisites and requirements**.

Prerequisite 1: Install Sound Attenuators and Vibration Dampers to the diesel generators. This serves to eradicate noise and disturbance pollution within the building.

Prerequisite 2: Install exhaust stack away from air intakes of assessed building as well as nearby buildings.

- Install catalyzers for air filtration (reduce emissions of NOx and CO & CO_2)
- Provide Diesel Generators with effective optimal exhaust stacks.
- Install waste heat recovery Unit
- Use of bio-fuel as a source of energy for diesel generator

How To Comply With GRASSMED?

Requirement Applied	Scoring points
Maximum Scoring for Residential Buildings	**15**
Maximum Scoring for Commercial Buildings	**15**
Install Sound Attenuators and Vibration Dampers	Prerequisite 1
Install catalyzers for air filtration	2
Exhaust Stack's Specifications	**Scoring points**
Install away from air intakes of other building	Prerequisite 2
Install Effective optimal exhaust stacks	1
Innovation	**Scoring points**
Install Heat Recovery unit	7
Use 2% - 5% Biodiesel fuel	1
Use 5.1% - 10% Biodiesel fuel	2
Use 10.1% - 15% Biodiesel fuel	3
Use 15.1% - 20% Biodiesel fuel	4
Use ≥ 20.1% Biodiesel fuel	5

Contact us!

meetMED
Mitigation Enabling Energy Transition in the MEDiterranean region
Together We Switch to Clean Energy

For any inquires or comments,
please don't hesitate to contact us

www.meetmed.org
meetMED Project
@meetmed1

www.almeelebanon.com
almeelb
AlmeeLB
AlmeeLB
almeelb

This project is funded by the European Union