



BILHEN & DAVIS

E n e r g y

OWN YOUR POWER

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OBJECTIVE

- 1.ABOUT BILHEN AND DAVIS ENERGY
- 2.WHY BATTERY BACK-UP?
- 3.WHY GO SOLAR?
- 4.WHY A GENERATOR?
- 5.CONVER-TEK AS AN EXAMPLE

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ABOUT US

Bilhen & Davis Energy was founded by Dean Henning, Andre van Biljon and Bevan Davis in 2019. However, Bevan's involvement in solar dates back to 2011.

We aim to develop a solar brand that is renowned for quality products, designs and installations.

Bilhen & Davis Energy is focused on delivering the best custom renewable energy solutions for the domestic and commercial markets.

We are a company that solves problems for our clients, adapting to all needs.

"Own Your Power" is our slogan.

Given the unstable electricity situation in South Africa, we know that BD Energy will get rid of frustration, offer our clients power stability and R.O.I.

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Conver-Tek

Your Partner in Plastics (PTY) LTD



550KVA Generator

300Kw Hybrid Inverters

800 Solar Panels producing 440Kw

600Kw Battery providing backup power

Fully off the grid for 12 hours each day

Savings from peak hour shaving. No generator during load shedding.

PV production during sun hours total +R270 000.00 per month in savings.



WHY DO WE NEED BACK-UP SOLUTIONS?

1. ESKOM
2. THE COST OF DIESEL
3. THE FINANCIAL VIABILITY OF COMPANIES
4. MEETING DEMANDING CUSTOMER NEEDS



WHAT TYPES OF BACK-UP SOLUTIONS DO WE OFFER?

1. BATTERY INVERTER SOLUTIONS WITH PV
2. BATTERY INVERTER SOLUTION
3. DIESEL GENERATORS/GAS GENERATORS INCLUDING ITEMS 1 AND 2

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BATTERY & INVERTER SOLUTION WITH PV

ADVANTAGES:

1. PV provides a way to charge the battery for evening backup
2. Daytime cost savings from the grid
3. Less batteries are required if daytime loads are higher than evening loads
4. PV has a very quick payback period

DISADVANTAGE:

1. Large capital layout



BATTERY & INVERTER SOLUTION

ADVANTAGES:

1. Cheap to operate (+-R1.3 per Kw, vs +R9.00 per Kw for peaks)
2. Low maintenance is required
3. A small area is required
4. Long service life
5. Scalable

DISADVANTAGES:

1. Large capital layout on installation
2. Requires a specialist in the field to ensure the correct hardware for each unique site is met. A highly-specialised installation team is needed. BD Energy can assist.



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DIESEL GENERATORS

ADVANTAGES:

1. Quick to install
2. A small area is required
3. Cheaper capital layout initially

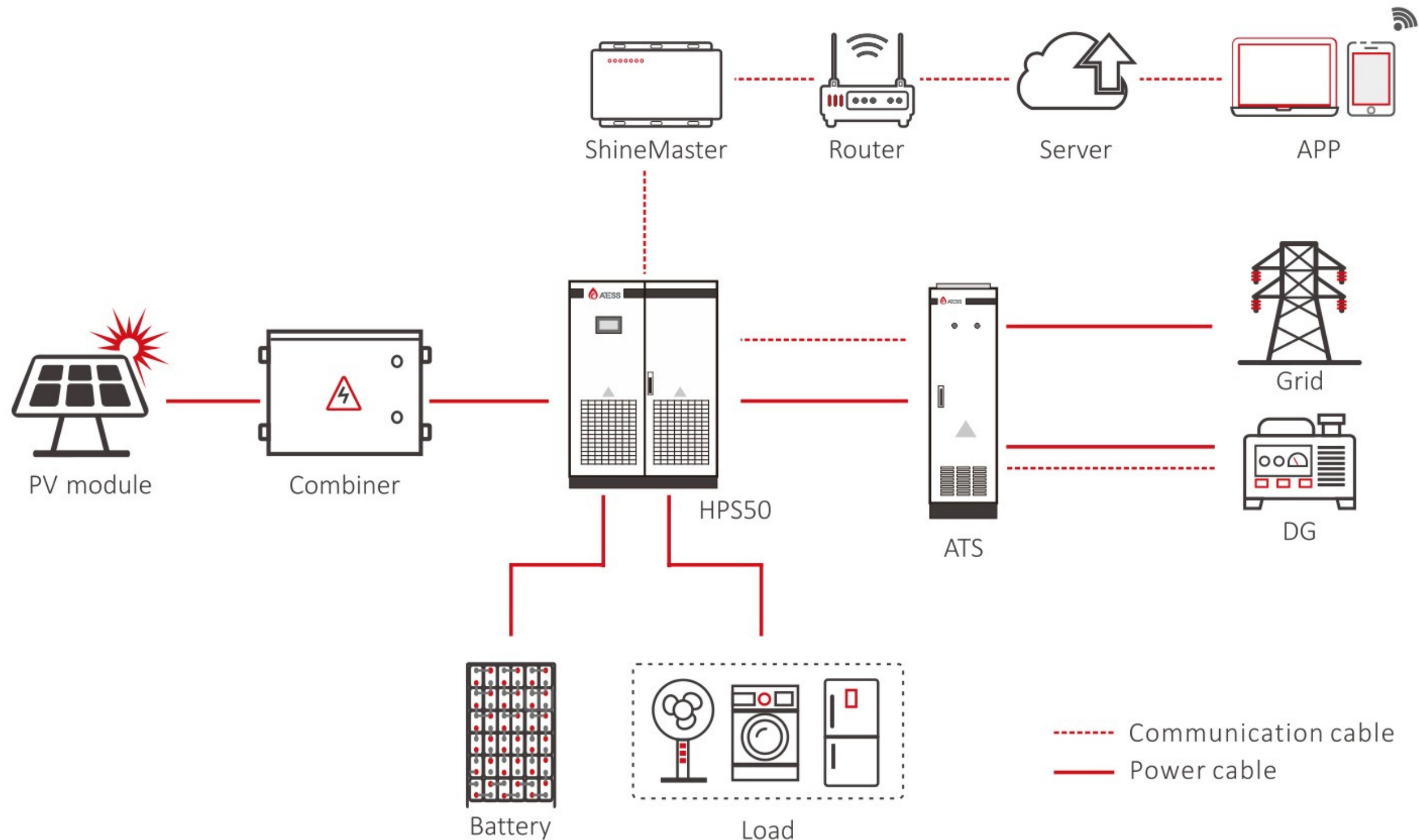
DISADVANTAGES:

1. Expensive to operate (most operating at a cost of +-R6 per Kw)
2. Most generators are made for standby backup, and not constant running as experienced in stage 4 load shedding and above.
3. The system requires constant service.



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HOW IT WORKS



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PAY-BACK PERIODS

Batteries/Inverter Solution vs. Generators

- The generator has an operational cost of +-R6 per Kw
- The grid has an operational cost of +-R1.3 per Kw
- Batteries are charged from the grid and have a cost of +-R1.3 per Kw
- Average pay-back periods are as follows, but each client is unique

	Load Shedding		
	4 Hours	8 Hours	12 Hours
4 Hours batteries	5 Years	2.5 years	2 Years
6 Hours batteries	7.5 Years	3.5 Years	2.5Years

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WHAT WE OFFER

- COMMERCIAL SOLAR AND BACK-UP SOLUTIONS WITH A SPECIALITY IN THE MANUFACTURING INDUSTRY
- SOLUTIONS TO HIGH-TECH EQUIPMENT WITH PLC MACHINES THAT CANNOT HANDLE CHANGEOVER ON INVERTERS
- SPECIALIST IN FULL INTEGRATION BETWEEN SOLAR, GENERATOR, BATTERIES AND INVERTERS
- MAINTENANCE OF SYSTEMS
- WE PERFORM INSTALLATIONS COUNTRY-WIDE
- GENERATORS
- RESIDENTIAL BACK-UP AND SOLAR SOLUTIONS

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WHAT INFORMATION DO WE NEED TO PERFORM AN INITIAL ASSESSMENT

- MUNICIPAL BILLS FOR THE LAST 12 TO 24 MONTHS
- ROOF AREA AVAILABLE AND GOOGLE ADDRESS
- YOUR REQUIREMENTS: BACK-UP VS. OFF-GRID & SAVINGS
- WHAT ARE YOUR OPERATIONS, AND HOW ARE THEY RUN?
- ARE YOU PLANNING ON EXPANDING?

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CONTACT US

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THANK YOU