



Frequently asked questions

1 What is renewable energy?

Energy that comes from a natural, non-depletable source, such as the sun, water, wind, geothermal heat (transferring heat to and from the ground) and biomass (renewable organic matter such as wood).

2 What does energy efficiency mean?

Energy efficiency means using less energy to accomplish the same task.

3 Why is energy efficiency important?

- The more efficiently we use energy throughout our country, the less money homeowners, schools, government agencies, businesses, and industries will spend on energy.
- This money can then be spent on consumer goods, education, services and products instead.

4 I'm interested in using renewable energy. How do I start?

- We have simplified the process of acquiring renewable-energy technologies.
- The emailer sent to you has a link to a campaign page that gives guidance on what your home energy options are.
- Our credible supplier, Energy Partners, has home energy experts who will help you find the right solution for your home and budget.
- Call them on 0861 000 606, email them at info.solar@energypartners.co.za or [click here*](#) if you'd like Energy Partners to call you. Energy Partners and Nedbank will keep you informed throughout the process – from consultation, financing and installation to after-sales service.

5 How can I save on electricity?

- The first step to making your home energy efficient is to reduce the amount of electricity you use. You can do this by switching off lights and appliances that you don't use.
- For example, you can replace old inefficient light bulbs with LED bulbs.
- One of the most effective ways to save electricity is to install a solar water heater or heat pump. These systems typically cost between R15 000 and R40 000 and will save 70% to 90% of the electricity you use for heating water.
- For more great tips to save energy read the City of Cape Town guide at http://savingselectricity.org.za/pages/saving_tips.php.

6 Will a solar energy solution add value to my property?

Yes. A solar energy solution will provide electricity and protect you from future electricity tariff increases, depending on the type of solution you choose.

7 What is a solar water heater?

- It uses solar collectors to capture heat from the sun to warm water in a special geyser.
- The collectors are placed on the roof of your house and the geyser can be placed on the roof or in the ceiling.
- A solar water geyser has an electrical element as backup for times when there is not enough sunshine to achieve the required water temperature.
- Solar water heaters are reliable and effective if sized correctly – make sure that you choose one that is big enough for your family and that you buy it from a reputable manufacturer.
- A solar water heater will 'pay for itself' in less than five years with all the electricity you'll save.

8 What is a heat pump?

- A heat pump is a device that heats water by absorbing heat from the air. It uses a small amount of electricity to do a lot of heating – for each unit of electricity it uses, it transfers three to four units of heat to your water.

- A heat pump looks like a small air-conditioning unit fixed to the outside of a building and is connected to a geyser inside.
- As heat pumps do not require roof space or direct sunlight, they are easier to incorporate into building designs.
- Heat pumps are also less affected by the weather and can provide energy savings all year round. However, they must be serviced and maintained – similar to air conditioners – to make sure they keep operating optimally.

9 Should I replace my geyser if I get a solar geyser or heat pump?

- No – there are solar geysers and heat pumps available that can connect to most existing geysers, and a qualified plumber can make the connections safely so that your home is still compliant. However, there are two exceptions:
 - If your current geyser is small, it may be better to replace it. Solar water heaters make hot water during the day, therefore it is important to have enough storage capacity to take full advantage of your savings. A good option is to have at least 50 liters of storage capacity for each person in the house, in other words a family of four should at least have a 200-liter geyser.
 - If your current geyser is very old or not compliant, it may be better to replace it with a new one when you install your heat pump.

10 Can I generate my own electricity?

Yes, after reducing your energy usage, you can generate your own electricity through a rooftop solar photovoltaic (solar PV) system.

11 What is a solar PV system?

- Solar panels, also known as photovoltaic (PV) panels, consist of cells that convert sunlight energy into electricity. Sunlight strikes the panels and generate an electric current, which can then be used to power your home.
- This current flows from the panels into a device called an inverter, which converts the direct current into an alternating current, which is what your appliances use.
- South Africa is one of the sunniest countries in the world and solar PV systems are very effective here.
- Solar PV systems come in many sizes and vary from around R80 000 for a complete system up to R250 000 for larger systems.

12 What should I look out for when buying a PV system?

- A solar PV system is an investment and will add value to your home, provided that you buy a system with high-quality components that is properly installed.
- Solar panels: Check the guarantee of the panels. It should have a 25-year or 80% performance guarantee, which means that the panels will still produce at least 80% of their rated capacity 25 years after they were installed. Inverters: Good-quality inverters are expected to last 10 to 15 years.
- You should also check that the inverter is marked as being compliant with the NRS 097 standard, which is a national guideline for solar PV systems and installations.
- An often overlooked aspect of a PV system is the mounting structures – the fittings that connect the panels to the roof. The cost of high-quality mounting structures can be up to 5% of the cost of your system, but these structures will typically last as long as the panels, as opposed to cheaper solutions that often corrode and fail during the panel lifetime, leading to expensive repairs.

13 Are all PV systems the same?

- There are two common types of solar PV system designs – grid-tied and hybrid systems.
- Grid-tied systems are simpler and feed the electricity generated by your system to your home in the same way as the grid connects to your home. Any extra electricity is fed back into the grid.
- Hybrid systems are more sophisticated and can incorporate a battery to store extra energy generated during the day to use at night.



14 What is a battery solution?

- If you generate more energy than what you use, you can store the excess energy in a battery. That energy can then be used in the evenings to reduce your reliance on the grid even further.
- In addition to increasing your savings, batteries also have the benefit of giving you backup power in the case of a power failure. Your batteries will usually be installed with a dedicated 'essential' load circuit, so that only critical items such as lights draw power from the battery during a power failure. It's important that you get your battery system designed and installed by a qualified expert to make sure this is done properly.
- Although battery prices are coming down rapidly, systems with battery storage are not yet financially competitive with grid power on a kWh basis, but there are other benefits.
- A battery solution can add between R50 000 and R150 000 to the cost of a system.

15 Are there different types of batteries, and which one should I get?

- There are various types of batteries (lead-acid, flow, gel and lithium-ion), so it can be quite overwhelming. The two most common types are lithium-ion batteries and lead-based batteries.
- Lead-based batteries are cheaper, but don't last as long. If you are looking for batteries only for backup power during load-shedding, these batteries are a good option, as you won't use them every day.
- Lithium-ion batteries are designed to be charged and discharged many times – often 4 000 cycles or more. That is why they are used in cellphones and laptops. Therefore, if you want to charge your battery during the day and discharge it every night, these batteries are a better option. They are also smaller and lighter than lead batteries, but cost more.

16 What happens when it rains for days on end?

In cloudy and rainy conditions solar PV panels generate less power. Your reliance on the grid or storage (like batteries) would be greater during these times. If you have a battery bank, you could use the grid to 'top up' your batteries.



17 Are these energy solutions resistant to hail and bad weather?

Solar modules are exposed to the elements and are thoroughly tested to withstand most hail storms. However, you can insure the solar modules as part of your property against hail damage, should you wish to do so.

18 Can my grid-tied solution feed back into the Eskom grid?

This is a contentious issue and currently no feedback to the Eskom grid is allowed, unless a specific process is followed to get approval. There are municipalities who do allow feedback to the grid, but we recommend that you speak to a specialist.

19 Where can I find more information about saving electricity and living sustainably?

The 'Nedbank Smart Living Guide'* has a range of smart interventions that will help you to reduce utility bills and environmental impact over time.

20 How can I finance renewable-energy solutions?

- If you are an existing Nedbank Home Loan client, you may:
 - access available funds through NedRevolve; or
 - apply for a readvance based on the value of your home.

21 What is a NedRevolve?

- NedRevolve gives you access to money that has been paid in excess of your prescribed minimum monthly instalment.
- The minimum amount that may be withdrawn is R1 000 and each withdrawal will be in rand.
- You have 24-hour access to surplus funds accumulated in your home loan account through your electronic profile, and you can access these funds by using a self-service terminal, internet banking or by calling the Nedbank Call Centre on <insert no>.

22 What is a readvance?

- A readvance is offered to existing Nedbank Home Loan clients who want to access capital already paid into their loan account.
- This option allows you to access the difference between your original loan amount and the current outstanding balance.
- The repayment term is based on the original loan term, but you may choose to extend the term of the entire loan when you apply for the readvance.
- There are no registration costs involved.

23 What is the qualifying criteria of a readvance?

- You must have an acceptable credit record.
- You must be able to pay the monthly instalment.

24 Who can provide renewable-energy solutions?

Nedbank Home Loans collaborates with Energy Partners Home Solutions to supply and install renewable-energy products.

25 What are the benefits?

- We will help you to identify the type of solution that's best for you.
- We, in partnership with credible suppliers, will deliver quality renewable-energy products and installation.
- You will get renewable-energy technology at affordable prices.
- There are no repricing or application fees for readvances.

26 Who can apply?

- Existing Nedbank clients who stay in Gauteng and Western Cape with access to their loan accounts. The accessible amount must be more than R25 000.
- Private Wealth, Business Banking and Retail Relationship Banking clients are excluded.

27 If I have any questions, who do I contact?



- Complaints related to the renewable and sustainable technologies should be directed to Energy Partners @ Info.nedbank@energypartners.co.za
- All finance related complaints should be directed to Nedbank @ ClientFeedback@Nedbank.co.za

28 If I want to apply, who do I contact?

- Call us on 0860 911 007 or apply online for a readvance.
- Call Energy Partners on 0600 703 608 or email them at info.solar@energypartners.co.za.