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Mitsubishi Electric Guide to the Green Deal



Information Guide

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Mitsubishi Electric Guide to the Green Deal



This is an independent guide produced by Mitsubishi Electric to enhance the knowledge of its customers and provide a view of the key issues facing our industry today.

This guide accompanies a series of seminars, all of which are CPD certified.

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The Green Deal explained

The Green Deal is the UK coalition Government's flagship carbon emission reduction policy, designed to encourage as many homes and businesses as possible to take energy efficiency measures such as installing insulation, double glazing or renewables. Essentially, the Green Deal facilitates the energy-efficient improvement of homes and non-dwellings with some or all of the cost paid for from the savings on their energy bills

Four facts have encouraged Whitehall to introduce the Green Deal, an ambitious plan to bring the UK's building stock up to date by introducing energy efficiency measures into as many homes and businesses as possible:

- Britain has some of the oldest building stock in Europe – almost three quarters of UK properties were built before 1975; many of our homes and businesses are draughty and poorly insulated, leaking vast amounts of heat and consuming high quantities of energy.
- A quarter of the UK's carbon emissions come from the energy used to heat homes and a similar amount comes from the commercial/industrial sector.
- Energy prices are rocketing in the UK; the average annual household energy bill is £1,300 and rising. Businesses are also feeling the impact of these increases.
- The Climate Change Act 2008 laid down legislation demanding a reduction in the UK's carbon emissions of 34% by 2020, rising to 80% by 2050 compared with 1990 levels.

One of the best ways to save energy, cut fuel bills and reduce carbon emissions is to encourage householders and business managers to take energy saving measures such as fitting insulation and installing renewable heating. That is the central aim of the Green Deal.



The Government's ambition is to enable as many as possible of the 26 million households and 4.5 million businesses in Britain to benefit from energy efficiency improvements. In line with this, the Green Deal is designed to:

- Finance a broad range of energy efficiency improvements
- Revitalise and drive a competitive and enduring market for energy efficiency

The Green Deal seeks to achieve this by providing all of the upfront finance for energy efficiency measures via a loan paid back by means of a consumer's savings on his or her energy bill. It differs from a standard loan because the repayments that are made on the energy bill should be covered by the savings - the so-called "golden rule" (see page 6).

The Government believes the Green Deal scheme provides opportunities for skilled and unskilled labour "from assessment to installation, manufacturing to supply, over the length and breadth of Britain, for many years to come".

But these are not the Green Deal's only benefits. By ensuring a high uptake of energy efficiency measures in households and businesses, the Government hopes also to improve the UK's energy security by significantly reducing the national demand for imported gas.

The Green Deal fits neatly with other green Government initiatives such as the Feed-In Tariff (FIT) and the Renewable Heat Incentive (RHI).

FITs were introduced on 1 April, 2010 and replaced Government grants as the main financial incentive to encourage the uptake of renewable electricity - generating technologies. Most domestic technologies qualify for the scheme, including:

- Solar electricity (photovoltaic - PV)
- Wind turbines
- Hydroelectricity
- Anaerobic digesters
- Micro combined heat and power (microCHP)

In a domestic setting, a Green Deal assessment can tell householders whether their home is suitable for generating its own electricity, as well as all the other energy saving improvements they can make. Householders can then use Green Deal finance to help meet the costs of installing solar PV, wind and microCHP systems up to 2kW on their property, and receive the FIT as well. Hydro generation and anaerobic digestion receive the FIT, but are ineligible for Green Deal finance.

The amount householders can finance through the Green Deal will depend on how much their home is expected to save on its electricity bill. Even if this is not enough to pay for the full cost, they can still use Green Deal finance to pay for part of the cost. The Green Deal provider will be able to calculate this.





Green Deal finance can contribute some or all of the costs of improvements, such as insulation, boilers and renewable technologies like air source heat pumps. The Green Deal also works in conjunction with the RHI, a long-term financial support programme for renewable heat. The Department of Energy and Climate Change has assured installers that installations attracting the Renewable Heat Incentive will be able to benefit from the Green Deal.

In order to ensure that they receive the RHI, consumers must have completed a Green Deal assessment to find out which energy efficient measures are cost - effective for the property. Loft insulation (to 250mm) and cavity wall insulation (where possible) are necessary when these measures are recommended by the Green Deal assesment; and where the Green Deal assesment shows the required loft and cavity wall insulation is yet to be installed, an updated EPC (Energy Performance Certificate) is then obtained following installation, as proof of the installation (or valid evidence is provided proving why installation was not feasible).

The “Golden Rule” explained

Energy saving measures being considered under the Green Deal must pass what is known as the “Golden Rule”. This rule is intended to protect the property owner and states that the energy savings the building makes over 25 years must be equal to, or more than, the cost of implementing the changes in the first place. It is possible to choose a period shorter than 25 years, but the return on investment must be paid for within that period. The Golden Rule is not a Government guarantee, but a guideline for customers that, typically, they should be able to expect to gain more efficient, less wasteful properties with no additional net cost from the Green Deal.

The rule also states that installations must be carried out by accredited Green Deal installers. This is designed to ensure that the property owner is not investing money in work that will not save them money on their energy bills. Each property will first be visited individually by a Green Deal assessor and then allocated an amount of money to purchase the measures - no actual money will change hands.

The golden rule caps the amount that can be collected in the first year of a Green Deal payment to the estimated annual savings. Increases in Green Deal payments during the following years will also be controlled. However, it is impossible to predict a rise or fall in future energy costs. Although the golden rule protects the property owner in the short term, it is impossible to guarantee that future energy savings will not increase over longer periods of time.

Nonetheless, property owners who invest in the Green Deal are likely to see their energy costs rise less than they would have without the measures in place.

The Green Deal in practice

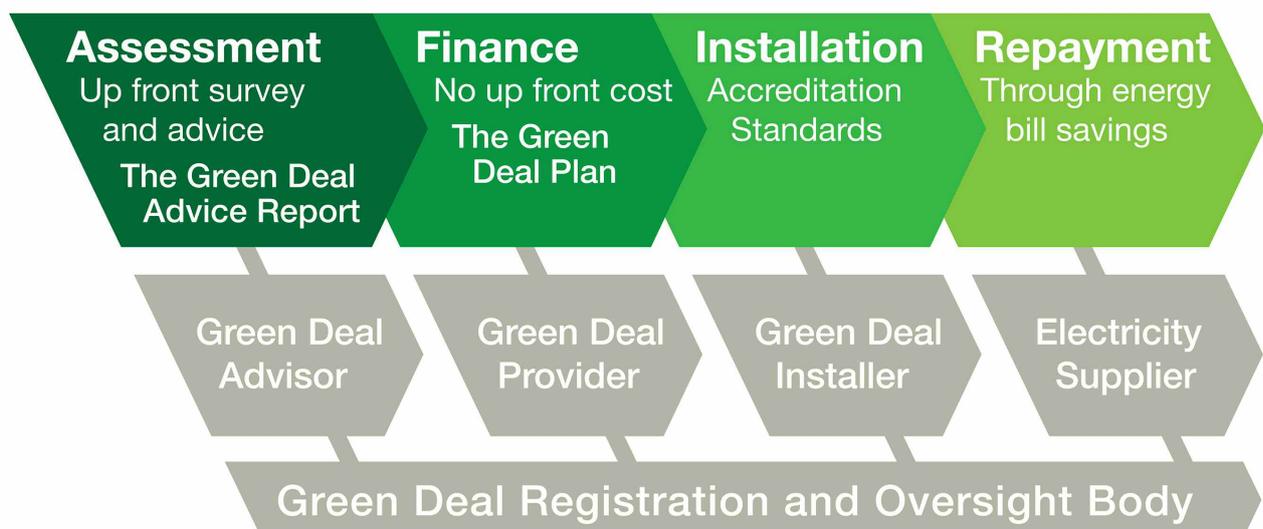
How does the Green Deal actually work, and who can offer Green Deal installations?

The Green Deal allows a building owner or occupier - whether a householder, tenant or company - to make energy-saving improvements (including insulation, heating, draught-proofing and renewable energy technologies) to a home or business premises without having to pay all the costs up front.

The Green Deal process is relatively straightforward. Essentially, it involves:

- Obtaining an assessment of the property to see what improvements can be made and how much could be saved on energy bills.
- Choosing a Green Deal provider to discuss what work needs to be done and whether the Green Deal is the right path.
- If they opt to go ahead with the improvements, the building owner/occupier signs the 'Green Deal Plan', a contract between them and the provider stating what work will be done and how much it will cost. The provider will then arrange for a Green Deal installer to do the work.
- Once the work is done, the owner or occupier pays off the money in instalments through their electricity bill. Landlords must get their tenants' permission before they sign up, and tenants must get their landlords' permission to sign up. The same rules also apply to social housing.

The Green Deal Process



Source: Diagram courtesy of the Energy Saving Trust



The building owner/occupier gets an assessment of the property by choosing a Green Deal assessor. They can also ask a Green Deal provider to find an assessor for them. If they get a provider to arrange the assessment, they don't have to use that provider for any future work they want undertaken. However, they may have to pay for the assessment (typically around £100).

During the assessment, an assessor will inspect the property, evaluate it, and discuss its energy use. The assessor then produces a Green Deal Advice Report which explains what improvements can be made and estimates savings on the energy bill. If the assessor wants to quote for improvements or recommend products or providers, they must get the permission of the building owner/occupier before the assessment.

After the assessment, the building owner/occupier contacts a Green Deal provider to discuss what work is right for the particular property and then arranges for the work to be done. They can get quotes from as many providers as they like; they don't have to choose all, or any, of their recommendations.

The amount repayable for Green Deal improvements is based on what a typical household or business is expected to save on energy bills by having the work done. The cost will be shown on the Green Deal Plan, the contract between the building owner/occupier and the provider, and will include the interest rate. Most energy saving improvements should reduce the heating bill because less electricity, gas or oil will be consumed, but the actual savings will depend on energy use and the future cost of energy.

The building owner/occupier pays the money back through the electricity bill and the Green Deal stays with the property. Those who move no longer benefit from the improvements and therefore stop paying for them.

The landlord or seller must show anybody who moves into a property with a Green Deal a copy of the Energy Performance Certificate (EPC). An EPC gives a property an energy efficiency rating from A (most efficient) to G (least efficient) and contains:

- Information about a property's energy use and typical energy costs
- Recommendations about how to reduce energy use and save money

It also explains what improvements have been made and how much the building owner/occupier will need to repay. The person who pays the electricity bill pays the money back so, for example, a tenant rather than the landlord in a rented property will pay back the costs. This is because it is the tenant who can expect to benefit from lower energy costs.



Householders may be able to claim back money from the Government if they make energy saving improvements to their home under the Green Deal. The scheme will run for a limited period, and is available for householders (home-owners, tenants, etc) in England and Wales. Landlords are eligible if they pay for the installation.

Householders may also be able to get part of the cost for energy-saving improvements such as loft or cavity wall insulation and boiler repairs or replacements paid for by an energy supplier under the ECO (Energy Company Obligation). To qualify, they must be on certain benefits and own or privately rent their home.

ECO - which has replaced the Carbon Emission Reduction Target and Community Energy Saving Programme - has two main aims: To reduce domestic carbon emissions and alleviate fuel poverty by helping to provide energy-saving home improvements.

The Green Deal players - assessors, advisors, installers, providers

A Green Deal assessor is the certified organisation under which individual Green Deal advisors work. Assessor organisations may work independently, contract with or be part of a Green Deal provider organisation. Green Deal assessors can also be sole traders if they are certified by a Green Deal certification body.

Advisors are the individuals who carry out the assessments. Qualified and authorised Green Deal advisors make recommendations for measures that could improve the energy efficiency of the building. Only an authorised Green Deal installer can make energy efficiency improvements under the Green Deal finance mechanism. Authorised Green Deal installers:

- Are certified by a Certification Body as meeting the Publicly Available Specification (PAS) 2030 for the measures they wish to install.
- Comply with the conditions in the Green Deal Code of Practice (which sets out requirements for Green Deal providers, assessors, installers or certification bodies).

The Green Deal provider is responsible for both the provision of finance and arranging the energy efficiency work. Green Deal providers may choose to conduct the assessment and supply goods and installation using their own employees, or they may choose to sub-contract. Green Deal Providers are responsible for:

- Offering a Green Deal Plan to customers, based on recommendations from an assessor/advisor.
- Arranging installation by an authorised installer.
- On-going obligations for Green Deal plans, such as customer complaints, providing information to a new homeowner who moves into a property with a Green Deal.

The Green Deal ombudsman has a duty to help resolve complaints about a Green Deal provider if a provider is unable or unwilling to help when something goes wrong with a Green Deal plan.





Is the Green Deal a good deal?



The Green Deal has not been operating for long, so it is difficult to judge its impact on the UK market in terms of energy efficiency improvements.

Although most people agree that it is well-intentioned, the Green Deal scheme has received mixed reviews from leading industry figures and in the press.

Under the scheme, householders or businesses take out 10 to 25-year loans to undertake energy efficiency measures, such as upgrading to new boilers and improving insulation. The repayments should be offset by fuel bill savings under the so-called "Golden Rule". Repayments are collected via the energy company and, in the case of households or businesses switching to another utility, is passed on to the new company.

The aim of the Green Deal at a local level is to enable households and businesses to improve the energy efficiency of their properties, without consuming as much energy and wasting so much money. At a national level, the UK needs to become more energy efficient to reduce greenhouse gas emissions which risk contributing to dangerous climate change.

However, some have pointed out that the Green Deal charges comparatively high interest rates. This detracts from the financial case for the Green Deal, with the interest rate for paying the loan back set at around 7 to 11% and an assessment that will incur an up front cost of between £80 and £120. There is also a penalty for early repayment.

The Green Deal loan attaches to the property rather than the individual so repayment obligations pass to the new owner if the property is sold. Because the money is repaid through the electricity bill, the Green Deal stays with the property. This has been cited as both a disadvantage and as an advantage.

The Federation of Master Builders argues that, in order to work properly, the Green Deal needs to involve more small, local builders. It says that just over a quarter of small to medium-sized construction firms are planning to get involved, although many of these companies claim the application and accreditation process is overly complicated.

Detractors also argue that the Green Deal is not comprehensive and therefore not as effective as it might be because some energy saving technology is not included in the scheme. For example, LED lighting (which can cut energy consumption and its associated costs by 85%) is left out.

However, Energy and Climate Change Secretary Ed Davey has defended the Green Deal, claiming that using less energy - the central aim of the scheme - is the best way for people to protect themselves from rising fuel bills. And, because it provides the financing up front, it enables hard-pressed consumers to invest in home improvements in order to reap these rewards earlier.



The Government also believes that the Green Deal will encourage the creation of thousands of jobs. It has, for example, estimated that the Green Deal could double the number of people working in the insulation industry to 60,000. Overall, the Green Deal is forecast to generate up to 65,000 extra jobs by 2015.

On top of this, Green Deal supporters argue that many people simply do not know how to make their homes more energy efficient and need assurance about the quality of any work done, and help with funding. The Green Deal helps solve these problems by ensuring that accredited professionals do the work, backed by strong consumer protection.

The Green Deal contains a lot of consumer protection. Green Deal providers, assessors and installers must all sign up to a Code of Practice, and all Green Deal home improvements should have the Green Deal Quality Mark. The Green Deal Code of Practice requires that any other tradesmen involved who aren't Green Deal Installers are members of other Competent Persons schemes, such as TrustMark.

Savings depend on energy use and the future cost of energy. However, it is a fairly safe bet that fuel prices will continue their upward movement. Energy bills have risen by more than 100% in the past 10 years and many believe the trend looks like it will continue for the next 10 years.

Security of energy supply is another argument put forward by the Government in favour of the Green Deal. It says that, by ensuring a high uptake of energy efficiency measures in households and business, the national demand for imported gas could be reduced considerably. With more than a third of our gas currently imported and UK gas production on a downward trend, the net result could be a saving on imports at a national level.

Further information

Government Information	http://bit.ly/SmU4Nt
Energy Saving Trust Guide	http://bit.ly/10ukqyw
Oversight & Registration Body	http://www.greendealorb.co.uk
Green Deal Initiative	http://www.greendealinitiative.co.uk
Green Deal Hub	http://www.thegreendealhub.co.uk
Green Deal Ombudsman Services	http://bit.ly/RPjtz7
Greendeal.co.uk	http://www.greendeal.co.uk
Green Deal Finance Company	http://www.thegreendealfinancecompany.com

To receive a CPD seminar on the Green Deal you can call your Mitsubishi Electric Regional sales office to arrange an in-house presentation of this information.

If you would like to receive invitations to future CPD events, please email livingenvironmentalsystems@meuk.mee.com

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