

THE JUSTICE AND PEACE OFFICE PRESENTS...

CARING FOR CREATION THROUGH SOLAR

An exciting new pilot project.

JUSTICE 
PEACE OFFICE
CATHOLIC ARCHDIOCESE OF SYDNEY



Introduction

Climate change is threatening all life on Earth. It is undermining God's Creation and it will be the poorest and most vulnerable amongst us that are hit the hardest.

The call to care for God's Creation is central to the Church's teaching. As is responding to the plight of the poor.

Installing power on our own homes is one simple way to respond to this challenge. What's more, with the cost of solar falling rapidly and electricity prices increasing, it makes good financial sense as well.

For many of us, however, installing solar on your own home can seem like a daunting task. It feels technically complicated and picking a trustworthy solar company can seem impossible, and it is a larger investment so can feel risky. Not many of us understand the electricity system either and navigating both puts a lot of people off installing solar even before they've really begun the journey!

To help with this, the Justice and Peace Office has set up a 'bulk buy' pilot programme, *Caring for Creation Through Solar* ([link to offer page](#)). It's a programme that assists Catholic communities and families who would like to put their faith into action by putting solar on their homes. We have taken care of the research on companies, the right good quality kit, and competitive prices for reliable service and materials. More than this the programme is designed to guide you through the technicalities, options, financial costs and savings and indeed the whole process from initial interest to installation!

Why Go Solar? A Catholic View

Caring for Creation

In his 2015 encyclical, *Laudato Si': On Care for Our Common Home*, Pope Francis has reminded us of our Eternal call to look after the gift of the Earth. In it Francis laments and warns against unmitigated consumerism and irresponsible development and the degrading and warming effects they are having on the planet. He calls all people of the world to '*take swift and unified global action*'. More than this, Pope Francis tells us that caring for the Earth is not an optional but '*integral part of the Church's teaching on social justice*'.

Climate change caused by human use of fossil fuels and loss of natural tree cover is causing a build-up of greenhouse gases in our atmosphere which is rapidly changing the climatic conditions across the globe. Increased extreme weather events and increased temperatures will unleash devastating impacts on the operations of the ecosystems on which we rely.

Caring for the Poor

Jesus's example of caring for the poor has made emulating that behaviour a deep and longstanding tradition of the Church and what it means to be people living the Gospel message. In her social teaching the Church teaches we should give 'preferential option to the poor', especially the materially poor. More than this we have an obligation to do so not out of charity but out of an obligation to justice. This is because God gave all of Creation to all of humankind without favour so that each of us can have and use what we need for a simple and dignified life. It is unequivocally

immoral and unjust to take more than we need, and most especially so when doing this takes from and harms others.

Climate change is a result of such behaviour. The actions of a few powerful countries are harming the lives and landscapes of those less powerful. Climate change will ruin all of Creation but it will be the poor who suffer first and the most. All over the globe poor and vulnerable communities are already feeling the effects of climate change. We only have to look to our near neighbours in the Pacific to see this.

According to the World Bank, Pacific Island nations are some of the most economically and physically vulnerable to climate change and extreme weather events. As the sea rises, land, especially agricultural land, is being inundated. This destroys subsistence farming on which most of the population relies, as well as people's homes and neighbourhoods.

'To be protectors of God's handiwork is essential to a life of virtue; it is not an optional or secondary aspect of our Christian experience.'

- Pope Francis

Why Go Solar? Great for your Finances and for the Environment

With electricity prices constantly spiralling upwards and the cost of solar panels coming down – solar makes great financial sense. The price of solar panels has fallen more than 75% since 2009. While the average cost of electricity in NSW has increased 30-40% in the last 12 months.

Installing solar panels on your roof is a significant up-front cost, but once they are paid off solar panels provide free electricity for at least the 25 years of their warranty life!

The cost of solar panels is a fixed cost so they are also a great way to build predictability into your energy costs. It is not a coincidence that the greatest uptake of solar panels has not been in the wealthy suburbs of Australia, but the poorest. Off-setting against rapidly increasing prices and taking control of energy costs are some of the advantages of solar panels.

How much will I save exactly?

The amount you'll save depends on a few different things, including how much you pay for your system upfront, how energy efficient your household is, how much of your energy use you switch to daytime, the types of government rebates and feed-in tariffs you're able to access and how fair and transparent your electricity retailer is.

Our installer can provide you with a proper calculation, based on your current electricity cost of how long it will be to pay back your up-front cost. The Federal Government provides some

help up with up-front costs and you will also receive payment from your retailer for solar energy you don't use but feed back into the grid instead.

My 5Kw solar system saves me \$500 per quarter on my bill. Having paid \$7 500 for the system I paid it off in just under 4 years. I estimate that it will save me another \$35 000 over the life of the system – and that's at today's prices.

- Solar User

Households leading the way

Having signed onto the Paris Agreement and committed to doing its bit to keep global warming below two degrees, Australia's greenhouse gas emissions continue to rise.

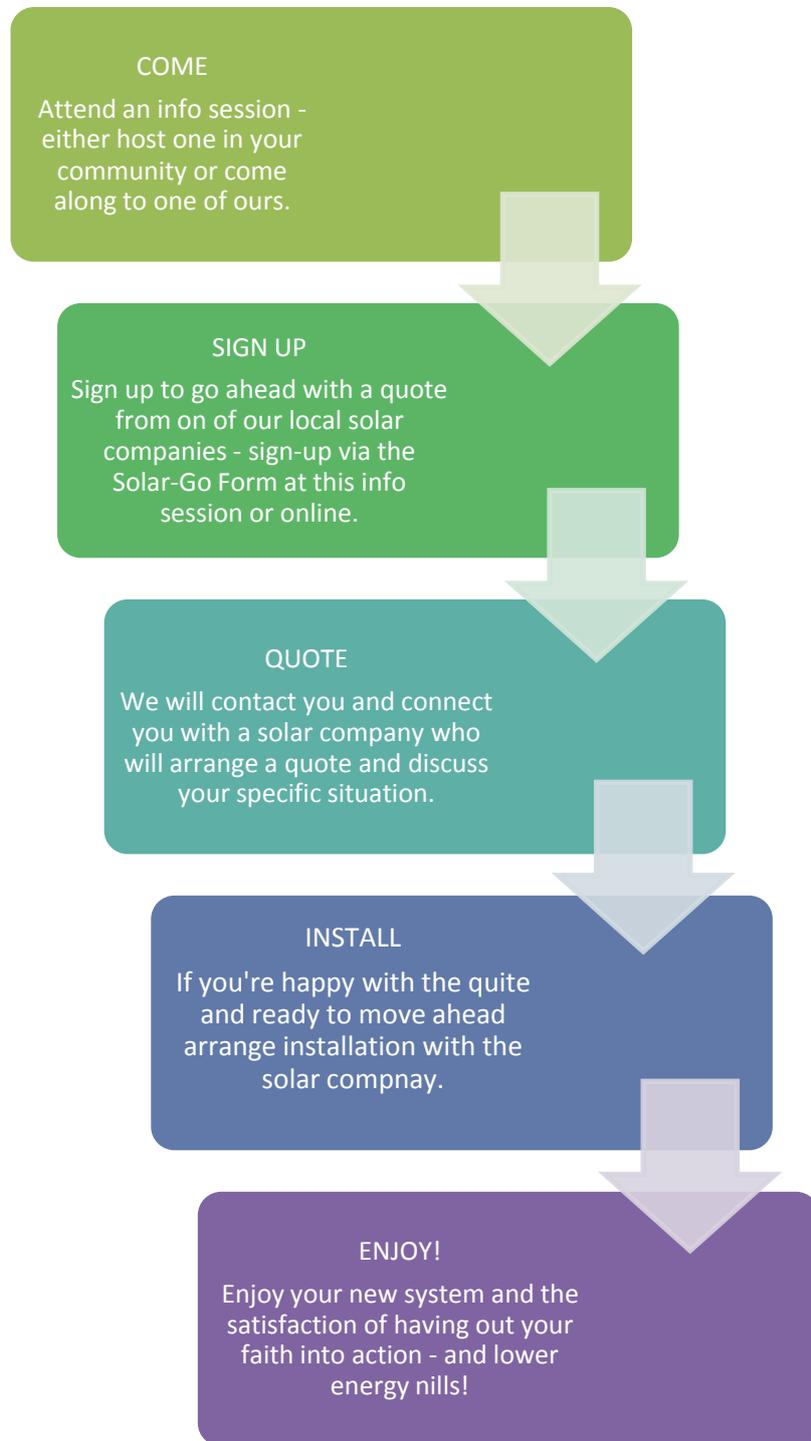
Our politicians seem to find it impossible to address the challenge of setting Australia on the path to a low carbon future. But Australians aren't waiting - Australia has the greatest uptake of household solar in the world. 1.7 million households have solar - that's 1 in 5. And that's up from 100 000 in 2008. You won't be alone in joining the solar revolution!



Although the post-industrial period may well be remembered as one of the most irresponsible in history, nonetheless there is reason to hope that humanity at the dawn of the twenty-first century will be remembered for having generously shouldered its grave responsibilities.

- Pope Francis

The process at a glance...



The Offer

Putting solar on the roof makes sense both financially and ethically, but it can be a daunting process. The challenge of understanding the key issues, shuffling through potential solar companies, deciding what panels and inverters and other kit is best value and even where to start diving into this process can be very overwhelming!

This is where *Caring for Creation Through Solar* comes in! We aim to take the pain out of this process and guide you through it. We have brought together industry experts to source high quality materials, reliable, honest solar companies and have negotiated good prices by virtue of 'bulk buying'. While these won't be the cheapest prices on the market, they are great prices for top quality kit and safe, reliable service during and after installation.

What are the Benefits?

- Sourcing of high quality solar systems and reliable local companies all done for you
- Competitive on top quality materials and services negotiated for Sydney Catholic communities
- Independent advice and guidance through the process from the Justice and Peace Office
- An easy way to finally tick 'getting solar' off your to-do list without navigating all the complexities and pitfalls alone
- Free information sessions on all elements of solar systems, held in your community. Sessions are just one hour.
- A chance to bring together practical and spiritual elements of choosing solar
- An opportunity to connect with and build your parish and/or school community or the broader Sydney Catholic community and go through the journey as a group
- A chance to put your faith into action
- The satisfaction of having joined with 3 million other Australians in doing something really substantial to avert climate change!

Key Practical Information

Why Information Sessions?

As this is a 'bulk buy' project it is best done as part of a community, ideally a parish and/or school community, or some sub-group from these. This not only allows us to offer you great prices on top-quality kit, it also creates unique opportunities for communities to become more connected, and share their experiences, success and learning with each other.

The Session's last only an hour and will be presented by the *Caring for Creation Through Solar* team. The Session will include:

- Outline of the Church's teaching on caring for Creation and why putting solar on our homes is a practical and consequential way to live out our faith
- A 'Solar 101' - we will run through the basics and common questions on solar: 'What is a kilowatt?', 'Is my place too shady?', 'How does solar work with my current electricity supply', 'How does a solar system work?' 'How much will I save' 'How will it work with my current electricity supply?' etc.

- Detailed presentation of the specific *Caring for Creation through Solar* offer - costs, options on the materials, the solar companies, technical details and the next steps in the process, and plenty of time for questions.
- A packet of resources for each attendee, and Sign-up forms.

How we choose local solar companies

We have a strict set of criteria for choosing the companies we partner with to ensure they are reliable and trustworthy and offer quality kit, installation and service. The criteria are:

- Local, small to medium sized businesses
- Quality, best-practice quote process, including quotation documents in format and detail recommended by the Clean Energy Council
- End to end customer service and management, rather than the separate companies and contractors for each stage e.g. sales, design/quote and installation.
- Honest – we make sure our companies offer trustworthy reliable advice to suit your needs and situation rather than a ‘salesy’ approach
- Quality products and installation and service at reasonable prices

Price Guide

	5kW	7kW	10kW
Fronius Inverter Trina 295W Panels	\$5990	\$8220	\$10625
SolarEdge Inverter Trina 295W Panels	\$7250	\$8800	\$12500
Fronius Inverter LG 330W Panels	\$7760	\$10130	\$13455
SolarEdge Inverter LG330W Panels	\$9000	\$11060	\$15220
Consumption Monitoring	+600*	+600*	+700*

These prices have taken into account the government rebate and may differ slightly as the rebate amount is subject to a shifting price based on a government market in renewable energy.

**These prices are for single phases electricity systems, which are the most common*

Financial Disclosure: Please note the Justice and Peace Office does not receive any financial benefit by your participation in the programme, at any stage, including whether or not you decide to purchase a solar system. Our Solar Consultant's fees are being covered by the local solar companies.

Aside from the panels what else do I need?

INVERTER

An inverter converts the direct current (DC) generated by the solar panels into the 240Volt alternating current (AC) that the grid and appliances in your home need. You can't supply power to your home without an inverter.

The inverter will feed excess energy into the grid.

The installer will guide you to the right size inverter for your home and system.

METER UPGRADE

Your home will need a new digital net meter. An upgraded meter is a requirement of your retailer so as to correctly calculate energy imports and exports.

Your energy retailer can arrange the upgrade. Costs will vary depending upon the retailer. The upgrade will usually occur 2-3 weeks after installation.

CONSUMPTION MONITORING

This is an optional extra. Consumption monitoring allows you to see your energy usage at frequent intervals throughout the day and managed energy use. For example, you can find out how much energy your dishwasher uses and then choose to run it at the best time of day to use your solar instead of the grid. Without this feature you will only be able to monitor the output of your solar

Some Common Concerns and Questions

IS MY ROOF SUITABLE?

Most roofs are suitable for solar panel installation. There is a lot of scope to manage any shading as well. There will be ample opportunities to discuss any concerns you have at 'Caring for Creation Through Solar' Information Sessions as well as getting into the specifics with your installer throughout the entire process. Even if you are concerned your roof is not suitable please join the programme and get expert advice and guidance.

WHAT IS A KILOWATT?

A kilowatt is a measurement of energy generated over a period of time. When a light bulb with 100W rating is left on for an hour, the energy used is 100 watt-hours. A kilowatt is 1000 watts.

A system can produce up to its kilowatt maximum, but its energy production will differ depending on the time of day, season and cloud cover. A 5kW system will produce about 19kW hours per day - this is roughly equal to the average energy use of a fairly energy efficient household.

WHAT SIZE?

The right size for you will depend on various factors including your budget, the availability of suitable roof space and your own desires and goals in relation to your household's energy usage.

It is easier and cheaper to install a larger system up-front rather than adding panels later. This saves money over time despite the larger initial cost and regardless of how much energy your household uses. Check the back of your electricity bill for your average usage.

The Nuts and Bolts

Why these prices?

The prices we have negotiated are not the cheapest on the market. The components are all high quality, near or at the top of the market. Our prices are highly competitive for this quality gear and we are confident our local solar companies are both ethical and professional.

When does the Caring for Creation through Solar Bulk Buy close?

This bulk buy round will close **on May 31 2018**. So get in quick – you must be signed up by this date, installation can take place after it!

If you are not sure about committing that's ok, come along to an Info Session to learn more. Or if you feel you're ready to move ahead with a quote from one of the solar companies please sign-up on the Solar-Go Form and we'll get in touch. We do highly encourage people to come to an Info Session before signing up.

Do I have to live within and belong to the Catholic Archdiocese of Sydney to take part?

Not necessarily. At this pilot stage of the project our suppliers are only able to service the Sydney region, which encompasses most of the Archdiocese. Some parts of Parramatta and Broken Bay Dioceses may also be serviceable, and we hope that over time we can grow our supplier list so as to be able to service more areas. If you belong to another diocese please get in touch with us to discuss your interests, or come along to an Information Session, and we will do our best to find a way to include you in the programme.

When do I get my solar installed?

Once you have signed up on the Solar-Go Form we'll contact you to connect you to the solar company and they will get in touch to arrange a quote. Once you've accepted the quote they will schedule your job.

Is my roof suitable for solar panels? What about shading?

Most roofs are suitable for solar panel installation. If you are unsure, don't worry, come along to an Info Session to get expert advice and we'll help you find out your options. If you move forward with the quote the solar company will be able to assist you with your concerns and specific needs.

How much power does my solar array produce?

Household solar panel arrays on houses are usually measured in kilowatts. 5 and 8 kilowatt systems are common. It is important to realise that if your system is a 5 kilowatt system, it will not produce 5 kW of power each hour. 5 kW is its maximum production over an hour; production will be zero overnight and differ during the day depending on time of day, season and cloud cover. A 5kW system will on average produce about 19kWh per day. This is roughly equal to the average daily energy use of a fairly energy-efficient household. During winter it will produce less than 19kWh and during summer it will produce more.

What size system should I get? Why going big makes sense.

The Australian Government calculator reports that 18-25 kWh is typical daily electricity use for a four person, totally electric household. You can check your current average usage on the back of your electricity bill.

The right size will depend on various factors including your budget, availability of suitable roof space and your objectives. It is easier and cheaper to install a larger system up-front rather than starting smaller and adding panels later. Larger systems should save more money over time, despite the larger up-front cost and regardless of how much energy your household uses. This approach was confirmed by leading experts the Alternative Technology Association.

If your objective is to be as self-sufficient as possible then you'll probably want a larger system.

Can I get a different size to the sample prices, e.g. 4kW?

Yes. You can discuss your requirements with the local solar company and they will quote accordingly.

Can I get finance to fund my solar installation?

We cannot organise this or offer financial advice or recommendations for you, but there are many options.

For example, Community First Credit Union offers 'green loans' to support solar installations. The current interest rate is 6.12%.

Technical Information - Components

Which panels should I choose?

Both of our options (Trina and LG) are quality, high-performing products.

The premium LG panels:

- produce more power per panel: 330W vs. 295W for Trina, so less panels are required for a given system size
- should produce more power in low light situations
- have a 12 year manufacturer's warranty vs. 10 year for Trina

The Trina panels produce more output per dollar of cost compared to the LG panels and may be more economical in most situations.

Which inverter should I choose?

Both of our options (Fronius and SolarEdge) are quality, high-performing products. The main benefit of the premium SolarEdge inverter is the use of DC optimisers on each panel. This allows for increased system output in the following cases:

- partial shading of some panels

- differences in the orientation and tilt of panels
- differences between panels caused by manufacturing variation, dirt, bird droppings etc.

The Fronius inverter supports two groups (or ‘strings’) of panels and requires all panels in a group to be installed with the same orientation and tilt. If this is not possible on your roof and/or if you experience partial shading then the SolarEdge system may be a better choice. The local solar company can advise on your particular situation.

The SolarEdge inverter also comes with a much longer warranty: 12 years vs. 5 for the Fronius. The Fronius warranty can be extended for an extra fee.

Gear at a glance

Components	Warranty	Model	Notes	No of panels
Trina Panels (Good gear)	10 years manufacturing 25 years output	Honey 295W		3 kW: 10 panels 5 kW: 17 panels 7 kW: 24 panels
LG Panels (Super gear)	12 years manufacturing 25 years output	NeON 330W		3 kW: 9 panels 5kw: 16 panels 7 kW: 22 panels
Fronius Inverter (Good gear)	5 years Can be extended		<ul style="list-style-type: none"> • Panels must be in maximum two rows 	
SolarEdge Inverter (Super gear)	12 years Can be extended	SE 3000, SE 5000	<ul style="list-style-type: none"> • Includes DC optimiser on each panel • Allows for panels to be at different orientations and tilts 	
Optional DC Optimiser	25 years			

What does an inverter do, again?

Inverters convert the DC (direct current) power generated by your solar panels into the 240 volt AC (alternating current) power needed by the grid and by appliances in your home. Basically, without an inverter, your solar system can't be used to supply the appliances in your home.

Your inverter will feed the excess energy you produce into the grid. This type of inverter requires the mains grid voltage to be present for safety, this means your solar system will automatically shut down during blackouts.

Please note, installing an inverter larger than 5kW on a house requires permission from the network operator, although this permission is often granted. If such permission is required it will be arranged by the solar company.

Can I have 6kW of panels with a 5kW inverter?

Yes, it is possible and generally recommended to install more panel capacity than the inverter's rating. A multiple of 1.3 is the maximum, e.g. a 5kW inverter can support up to 6.5kW of panels. Installing more panels will result in greater energy output and does not damage the inverter. Adding more panels will increase the price but is good value per additional kW. The solar company can provide more details and a quote for your particular situation.

What about the meter upgrades?

Your home will need a digital bidirectional net meter, which is one that measures not only the electricity coming into your home but the electricity you are feeding back into the system from your solar panels.

Only your retailer can arrange a new meter for you. Some charge, others don't. The meter can only be ordered after you have had your solar installed. It is important to get onto this early in the process so you can start reaping the benefits of solar. We will offer more detailed information and advice on this at the Information Sessions.

What about Consumption Monitoring?

The consumption monitoring feature provides monitoring and reporting of your household's energy use at frequent intervals e.g. every 15 minutes. This feature provides insight into when your home uses energy and how much, this allows you to manage and optimise your self-consumption. For example, you can determine how much energy your dishwasher uses and when to run it so it can be powered by solar energy instead of importing energy from the grid. This will save money, which will help offset the additional cost of the monitoring option.

Both Fronius and SolarEdge inverters require an extra device to enable consumption monitoring, hence the additional cost. Without consumption monitoring both inverters will only monitor your solar output and the only visibility of energy imports and exports will be your electricity bill.

Consumption monitoring for both inverters connect to your home internet connection via Wi-Fi or Ethernet cable and send monitoring data to a system on the internet. Both systems provide apps for Android and Apple IOS. You can check the performance of your solar from work!

Do these systems support a battery?

There are three kinds of home batteries:

- AC batteries, e.g. Tesla Powerwall 2
- DC low-voltage, e.g. some LG Chem
- DC high-voltage, e.g. Tesla Powerwall 1, some LG Chem

AC batteries, such as the Tesla Powerwall 2, should be compatible with any solar inverter, including those offered in this bulk buy. AC batteries have a built-in inverter and do not rely on the solar inverter.

The Fronius inverter does not support DC batteries directly. DC batteries can be added later by adding a separate battery inverter.

The base SolarEdge inverter does not support DC batteries, but can be upgraded to a SolarEdge StorEdge inverter that supports some DC high-voltage batteries. Selecting a StorEdge inverter to

begin with is cheaper than retrofitting a separate battery inverter (the “SolarEdge Interface”) later. If you plan to install a DC battery at some point you may wish to select the StorEdge inverter up front – please see the price guide for costs and be sure to discuss your wishes with the solar company who can offer personalised advice.

Will these systems let me go 'off grid'?

No, all inverters offered here are grid-tied and must be installed with a connection to the grid.

What happens in a blackout?

The Fronius inverter and the regular SolarEdge inverter cannot function during a blackout. It is not possible to generate or use solar electricity during a blackout with a grid-tied inverter.

The SolarEdge inverter with a DC battery would allow some loads (e.g. lights, fridge etc) to continue operating during a blackout.

What does single phase and three phase mean?

Without getting too technical, most houses are single phase. If you have a really big house or are a big consumer you may have a three phase system. Three Phase power means you have greater power supply to your house. It also means you can, in most cases, get a larger solar system. If so, some aspects of your set up will be a little different. The local solar company will explain this to you.



**To be protectors of God's handiwork
is essential to a life of virtue;
it is not an optional
or secondary aspect of our Christian
experience**

- Pope Francis

Terms Conditions & Privacy

TERMS & CONDITIONS

YOU, the SOLAR COMPANY and CARING FOR CREATION THROUGH SOLAR

These questions and answers aim to give you a better understanding of the relationship between *Caring for Creation Through Solar* (CCS) [also referred to as 'we', 'our' and 'us'], the Solar Company and You (meaning participants in the programme) [also referred to as 'your/s', 'their', 'my' and 'I'].

1. What is *Caring for Creation Through Solar's* role in this project?

Over the duration of the CCS Bulk Buy program, CCS will act as a coordinator to ensure you are offered the highest quality products at the best possible price. Through a careful evaluation process, we have selected a reputable provider. We have made this offer available for a limited period, and are here to provide independent advice as you embark on your solar journey.

2. Who is responsible for the contract for installation and maintenance

The Solar Company is responsible for the installation, services, products and maintenance subject to the terms of the agreed upon contract between the you and the solar company. CCS is not responsible for or a party to these matters, but is available to respond to any questions you may have about the offer.

3. What are the obligations of the Solar Company?

The terms of your individual contract will outline the obligations of the solar company.

4. What are Participants' obligations as a registrant? What if a Participant changes Their mind?

If you have registered your interest and received a final quotation, but have changed your mind, you have no obligation to proceed with the installation of a solar PV system. However, once you have decided to proceed with the final quotation by making a deposit/signing a contract or other agreed upon method between you and the solar company, your agreement and obligation will be with the solar company and **not** with *Caring for Creation Through Solar*, the Justice and Peace Office, Catholic Archdiocese of Sydney. If you change your mind after entering into a contract with the solar supplier, you will need to discuss this directly with the solar supplier. CCS is **not** a party to, or responsible or liable for these matters.

6. Can I join the *Caring for Creation Through Solar* project at any time?

This offer is available until 31st May 2018. CCS cannot guarantee that this offer will be available at any time in the future, though that is a possibility.

7. Does the Justice and Peace Office, Catholic Archdiocese of Sydney receive any financial reward for my participation?

No. The Justice and Peace Office does not receive any financial benefit by your participation in the programme, at any stage, including whether or not you decide to purchase a solar system. Our Solar Consultant's fees are being covered by the local solar companies.

BY REGISTERING FOR THIS OFFER, I UNDERSTAND THAT:

1. I have the authority to request an assessment and installation of solar PV systems at the specified property.
2. *Caring for Creation Through Solar (CCS)* will provide independent advice on the products and services of a solar PV panel installer but are **not** a party to any contract that I enter into with a Solar Company.
3. I have the ultimate responsibility for the decision to accept the Solar Company's proposal and final quotation. Upon signing an agreement, contractual rights and obligations are wholly between Myself and the Solar Company.
4. CCS has no liability for any loss, damage or injury that may result from proceeding with the installation of solar PV panel systems, or for the content or accuracy of the information provided in CCS's materials.
5. CCS makes no warranties about the Solar Company, its services or products, or about the information provided by the Solar Company. CCS has no liability for, and I release and forever discharge CCS in respect of any loss, liability or claim which is in any way connected to the products or services supplied by the Solar Company.
6. The preferred Solar Company/ies have been reviewed for their suitability for residential projects, however they represent only a portion of the market. It is My responsibility to make a decision about available Solar Company and perform My own due diligence in respect of My chosen Solar Company.

PRIVACY

The Justice and Peace Office, Catholic Archdiocese of Sydney (referred to as “**we**”, “**our**” and/or “**us**”) is collecting your personal information (including your name, contact details (such as phone number and address) and photographs, videos and stories so that we can:

- contact you;
- provide you with updates on the *Caring for Creation Through Solar Project*;
- provide you with services and information connected to your participation in the *Caring for Creation Through Solar Project*;
- to promote the *Caring for Creation Through Solar Project* - please not we will only include your story, image or other personal information in promotional materials with your written consent.

We will share your contact details with the Solar Company/ies only when you have Signed-up in writing using the Solar-Go form (provided at Information Sessions and on this website) to receive a quotation from the Solar Company/ies.

We will not disclose your details with parties outside of the Solar Companies and the Justice and Peace Office, Catholic Archdiocese of Sydney.

Our Privacy policy is separate from any and all such policies from the Solar Company – please refer to the Solar Company for this information.

We may also disclose your personal information where we are required or authorised by Australian law to do so

If you have any concerns or questions you can contact us by using the following details:

Phone: 02 9307 8465

Email: jpoinfo@sydneycatholic.org (please put 'Caring for Creation Through Solar' in the subject line)

Post: Justice and Peace Office, attn: Caring for Creation Programme

Level 12, Polding Centre

133 Liverpool St

Sydney NSW

2000

Further Resources

Shading

- Jay Banyer, Sunny Shire, *How I justified Getting Solar on my Partially Shaded Roof*. <http://sunnyshire.org.au/how-i-justified-getting-solar-on-a-partially-shaded-roof/>

Bigger System Upfront

- Alternative Energy Association, *Bigger is Now Better for Rooftop Solar – Even for Low Energy Users*. <http://reneweconomy.com.au/bigger-is-now-better-for-rooftop-solar-even-for-low-energy-users-14009/>
- Jonathan Prendergast, One Step Off the Grid. *Go Big: Six Reasons Why You Should be a Rooftop Solar Champion*. <https://onestepoffthegrid.com.au/go-big-six-reasons-rooftop-solar-champion/>

Consumption Monitoring Explained

- Jonathan Prendergast, Sunny Shire. *Consumption Monitoring – How to Unlock Your Solar Potential*. <http://sunnyshire.org.au/consumption-monitoring-how-to-unlock-your-solar-potential/>

Low-Interest Solar Loans and Financing*

- Community First Credit Union. Green Loans. <https://www.communityfirst.com.au/personal/green-loans/solar>
- Hunter United. Green Personal Loans. <https://www.hunterunited.com.au/products/personal-loans/green-personal-loan>
- For more discussion of financing options this introductory article by Energy Matters may be helpful. <https://www.energymatters.com.au/rebates-incentives/low-interest-solar-loans/>

LG Panels – Review and Explanation

- Nigel Morris, LG. *The Very Best Solar Panel Ever Seen*. <https://www.lgenergy.com.au/lg-solar-profile/lg-energy-news/the-very-best-solar-panel-ever-seen-by-nigel-morris>

Catholic Resources

- Catholic Earthcare. The Australian Catholic Bishops Conference's national agency. Has a wonderful range of informative resources, action and advocacy options as well as formation possibilities for schools and parishes, especially in relation *Laudato Si'*. <http://catholicearthcare.org.au/>
- Pope Francis, *Laudato Si'*. Digital Copy of the Encyclical. http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html
- Global Catholic Climate Movement. Supported by the Sydney Archdiocese, this global initiative has great resources on climate change, stories from people already experiencing its effects, what the Church is up to around the world and ways you can get involved and get informed.
- Pontifical Council for Justice and Peace, Dicastery for Promoting Integral Human Development. There are a whole range of related resources, including the full *Compendium of the Social Doctrine of the Church'*, as well as *Laudato Si'* resources and news. <http://www.iustitiaetpax.va/content/giustiziaepace/en.html>

**Please note we are not endorsing or recommending any financial products, the suggestions provided are intended for information purposes only. Please consider your own financial needs, goals and situation.*

The
Canticle
of the
Creatures

Praised be You Lord God
with all Your creatures,
especially our Brother Sun,
through whom You give us light.

Praised be You, my Lord,
through Sister Moon and the stars,
You make the heavens bright.

Praised be You, my Lord,
through Brothers Wind and Air,
by which You cherish all
that You have made.

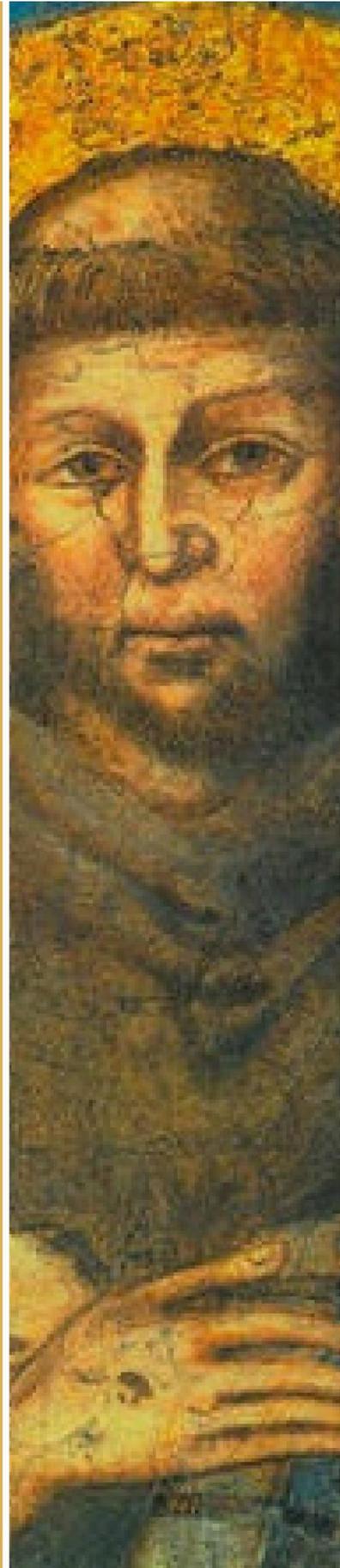
Praised be You my Lord
through Sister Water, so useful, humble,
precious and pure.

Praised be You my Lord
through Brother Fire,
through whom You light the night.

Praised be You my Lord
through our Sister, Mother Earth
who sustains and governs us,
producing varied fruits with
coloured flowers and herbs.

Praised be You my Lord
through those who grant pardon
for love of You and
bear sickness and trial.

- St Francis of Assisi





JUSTICE 
PEACE OFFICE
CATHOLIC ARCHDIOCESE OF SYDNEY