The VALUE TIMES

INSTITUTE OF VALUE MANAGEMENT AUSTRALIA
Ensuring better value for money

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CORPORATE MEMBERS
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President's Message

Stakeholders and Value for Money

In any venture, program or project, creating sustainable value for money (VfM) outcomes requires engaging with and satisfying key stakeholders.

That is, you can't create long-term value by making expedient decisions to optimise program or project progress at the expense of considering long-term stakeholders' interests: whether they be the asset owner/operator, end users and/or key interest groups.

It is therefore critical to identify all the key stakeholders in a project and engage them from the outset so that they have a clear understanding of the project rationale and its consequent proposed design, construction and operation.

This is becoming particularly important as the community becomes increasingly aware of the ecological, aesthetic and climate impacts of proposals in an increasingly cluttered environment.

So, who really are the stakeholders in any project, program or product development?

The place to start is the commissioning organisation itself. Have all the organisation's internal stakeholders been identified and consulted?

There is often a strong focus on the brief, design and construction with too little input on the proposed day-to-day operation of the business or facility once built.

Further, careful consideration needs to be given to operational flexibility and the method of maintenance , including whether these actions are undertaken in-house or outsourced.

If outsourced, who might the possible organisation be and how can their experience be built into the project from inception?

In major projects, the organisation's shareholders will undoubtedly want a say because it is their money that is on the line.

Customers and client stakeholder representatives need to be identified and, depending on the product or service, these may be homogeneous or highly diverse in nature.

How can diverse interests be best represented in stakeholder consultation?

Members of the general public, neighbouring residents and businesses and interest groups with specific ecological, environmental, social and visual impact concerns with your proposal might need to be consulted. Government bodies (local, state and federal) might also be stakeholders, and it will be important to deal with the most appropriate authority level and individuals, particularly if approvals are required from that public body.

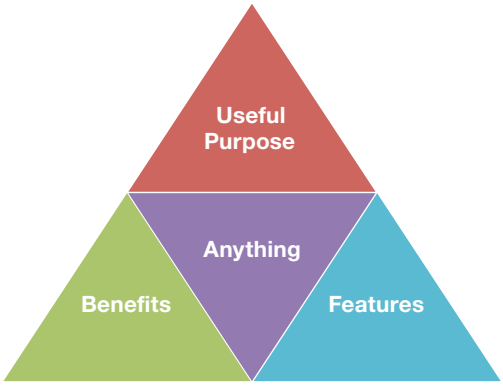
An aspect that has become particularly prevalent of late is the rapid spread of misinformation, ably assisted by the plethora of digital information sources.

There will be a need to find out the information on which stakeholders are basing their opinions and actions before taking effective steps to ensure that key facts are established in the Value Management (VM) Study background paper distributed prior to the study itself.

It follows then that to pursue best VfM, we need to build shared knowledge and understanding of requirements and assumptions across the key stakeholders and the project team.

In this regard, a well-facilitated VM Study provides a highly effective framework for bringing together key stakeholders and distilling the understanding of the VfM requirements.

I have previously written about the IVMA's Value Triangle which provides the VfM framework, but it is worth revisiting what the Value Triangle provides and what underpins its key elements.



- **Useful Purpose:** This refers to the fundamental need or function that a product, service, or project is intended to serve.

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Ongoing Value for Money Labs

Current Practice

Since the introduction of Value for Money Labs (VfM Labs) during the COVID 19 pandemic, we have significantly expanded our experience and consequent refinements to the process which is now more finely aligned to clients' present needs.

Specifically, clients increasingly desire shorter workshop events resulting in difficulty in completing the traditional Value Management Work Plan (typically two full days of face-to-face workshops or longer).

Yet our primary objective is still to achieve better 'shared knowledge and understanding' as the basis for more informed decision-making.

Achieving this objective enables teams to focus on better solutions for the real problems and preparing them to successfully develop and implement best value-for-money solutions that achieve the useful purpose.

Further, a critical early step is achieving clarity about the useful purpose, key benefits and important features, within the corporate context — not just at the specific project or issue level.

The process ... is now more finely aligned to clients' present needs

This necessarily requires key decision-makers to be engaged in the process, and this is where VfM Labs prove themselves to be a most powerful and effective approach.

Senior decision-makers are rarely available for 1, 2, 3, 4 or even 5-day workshops but they are proving to be more than willing to participate in sessions of up to 90 minutes.

They are also willing to attend several of these VfM Lab sessions to help guide and learn with the team, because they recognise the value to the organisation of their time spent in this way.

Their presence assists in several important ways:

- Ensuring timely commitment of the key people to the Lab sessions
- Fostering good preparations and analysis so that pertinent information is shared
- Requiring improved information sharing through sharper and relevant presentations
- Fostering corporate alignment towards common issues, goals and solutions
- Avoiding unnecessary work and distractions — clearer tasks and timings.

Lab Preparation

Our experience demonstrates that shorter workshop sessions, especially when conducted on-line, need specific detailed preparation to ensure their success.

President's Message

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- **Benefits:** This encompasses the positive results or benefits or outcomes that are derived from fulfilling the useful purpose.
- **Features:** This refers to the specific characteristics or qualities that are necessary to achieve the benefits/ outcomes and are valued by stakeholders.

In a VM workshop, the *useful purpose* is identified though a facilitated discussion so that all the stakeholders are aligned on the reason for the project, program or other endeavour.

Once agreement is reached about the primary purpose or *raison d'être*, we then have a common base for moving forward. That is, we have:

- Clarified the value proposition
- Consolidated stakeholder focus and understanding
- Identified a basis for measuring value and thereby a process for assuring ongoing alignment through subsequent project or program phases
- Established a basis for informed decision-making by understanding the criteria around useful purpose, beneficial outcomes, and important features that must be realised.

Used correctly, by the engagement of trained VM facilitators, the Value Triangle can provide a pivot point between key participants in the value management process, thereby helping to structure the requirements and objectives for projects and services being considered.

It should be remembered that the issues in this paper are equally applicable to online VfM Labs or conventional face-to-face VM Studies.

Ted Smithies
President, Institute of Value Management Australia

My approach includes:

- Receiving a briefing on the scope of the issue or project, its status, the Board/ Executive expectations of the outputs required of the VfM Lab and likely decision-making timeframes
- Pertinent information and/or analysis assembled specifically for the VfM Lab
- Agreeing with the client the Lab participants and what each participant needs to prepare to ensure that the whole VfM Lab process will be effective
- The nature of briefing information and the agenda — especially for the Board/ Executive participants — including securing opening remarks by the CEO or Board member
- Create a draft Value Statement — from briefing material and table with the Board/Executive Team for confirmation (arranging, where appropriate, a VfM Lab to develop just that so information subsequently shared with the full Lab team is already aligned with Corporate objectives).

VfM Labs on two projects serve as examples of the application of this approach. Both Labs were on projects where the participants were overseas, and the VfM Lab sessions were wholly conducted online via Zoom.

Our management of the Labs included a primary facilitator and a full-time assistant who managed housekeeping matters such as recording progress and managing the chats that participants were encouraged to make during the session.

As noted in **Lab B,** below, the second project required two VfM Labs plus a follow-up, face-to-face Value Management (VM) Study with all participants, facilitator and assisting being overseas.

This is a good illustration of the appropriate application of VfM Labs and conventional face-to-face VM Studies at different stages of project development depending on the function and seniority of stakeholder participants.

Lab A: A Cultural Exhibition in the Tourism Industry

The key participants were a small team of senior representatives from the host organisation that was to provide the grounds for the exhibition and the Chief Executive Officer (CEO) of the company importing the international exhibition.

The agreed purpose of the VfM Lab was to clarify the tasks and responsibilities each party had to finalise preparations for importing, setting-up, managing and closing the exhibition, including obtaining final government clearances for the exhibition team and the art exhibits themselves to enter the country.

A Value Statement was available prior to the session which had been derived from the project briefing material.

Some key Givens and Assumptions were also gleaned from the project briefing.

Both were tabled as part of the session opening and some key amendments noted, several of which became significant items of discussion later in the session.

However, about one-third of the way through the session it became clear that the CEO of the exhibition team was not at all happy with the way things currently stood.

Chief amongst his concerns were the lack of any contractual and payments security for the event, particularly having already expended very significant funds to have the international artist and exhibits secured for the event.

Both parties agreed to a shift of focus of the Lab to address these concerns.

Consequently, the middle segment of the session became a mediation and frank exchange between the host Executive and the Exhibition CEO on key terms and conditions at the core of the contract relationship.

By way of background, in the months prior to the VfM Lab the host organisation's Project Manager had been making frequent alterations to the draft contract to try to define and allocate risks to the Exhibitor, rather than to provide a simpler Memorandum of Understanding (MOU) that would help the parties recognise and agree to necessary refinements.

In the VfM Lab both parties were able to agree the key risks that could impact the final costs and income sharing although they could not be fully resolved at the time.

They did however accept that they would need a simple, high-level process to identify, share and resolve any required contract variations over the coming months.

With these concerns now addressed, both parties stated their overt commitment to proceeding in a collaborative way.

The final 20 minutes of the session captured the agreed tasks and responsibilities in the form of a simple Action Plan.

The outcome of the VfM Lab was that the parties agreed to an MOU in which the risks that both parties faced were identified and ways of equitably allocating risk management were included.

The outcome was that the exhibition proceeded in accordance with the agreed timetable and achieved successful outcomes for both parties.

Lab B: An Integrated Development involving four Government Agencies

The project under consideration was an integrated, multi-agency group of proposed fully-integrated, community facilities with footpaths and roadways to residential community and commercial precincts.

The site was strategically located within a busy part of the city, surrounded on three sides by high-volume roadways — but within an existing parkland with important cultural heritage facilities

Four government agency clients (Sporting

Ongoing Value for Money Labs

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Facilities, National Library, Medical Facility and National Parks) plus the Ministry of Finance and the consultant team for the design and delivery of the project participated in the VfM Lab.

To ensure that all stakeholders were given an opportunity to set the parameters for the Lab, we conducted two on-line video sessions with 38 participants in each.

It was particularly important to build shared knowledge and understanding because it was evident that the four key clients each had some challenging requirements and issues that they wanted the consultant team to understand to enable an integrated solution to be created.

The VfM Lab process comprised two 90-minute sessions held a week apart. T wo weeks after the second VfM Lab, we conducted a face-to-face conventional VMS with the overseas clients.

The first VfM Lab session was to air and affirm the Value Statement for the integrated development, which included important nuanced features and benefits that the four agencies needed to have realised.

A draft Value Statement was prepared by the facilitation team and circulated to all participants prior to the session.

The Senior Executive of each agency provided brief introductions of their perspectives on the Value Statement.

A question-and-answer session assisted the whole group to achieve a better understanding of the values relevant to the project.

This was achieved by participants typing questions into the chat line which was monitored by a member of the facilitation team and a member of the project team.

These two monitors would interject points as they were being submitted so that the overall facilitation flow of the session was sustained.

The four key clients each had some challenging requirements and issues

As lead facilitator I made progressive adjustments to the Value Statement as the points emerged. Some points were not relevant to the Value Statement but were warehoused to be raised at an appropriate time later in the sessions.

The key actions arising from the Lab were developed and reviewed with the Project Manager immediately following the video session.

It was not thought necessary to review the actions with all the session participants as it would have extended the session beyond the 90 minutes allowed.

The Project Manager emailed an Outputs and Action Plan the following morning to all the Lab participants.

The second VfM Lab session addressed the key Givens and Assumptions related to the project.

A draft list derived from the project briefing, presented in simple Word tables for ease of reading and capture of comments and notations had been distributed to Lab participants with the Outputs of the first Lab session.

The participants were asked to critically review these Givens and Assumptions and to make notes on anything that they felt should be raised and clarified with the rest of the team at this Lab.

Most of the participants complied with the request to email any suggested variations or additions to the facilitation team so they could be shared with all participants the day prior to the second VfM Lab session.

This assisted in understanding and challenging certain Givens which resulted in some of these being no longer accepted as being fixed thus presenting flexibility to improve value-for-money outcomes during design development and project delivery.

The Face-to-Face VM Study was held two weeks after the second VfM session with all participants in a conference room in the overseas location.

Conclusion

Sharing the Value Statement and Givens and Assumptions prior to the VM workshop helped sharpen focus and ideas when looking at the preliminary design solutions and delivery strategies.

Participants were better prepared and came into the workshop with many well-considered solutions and strategies that could be worked into the design and delivery activities in the subsequent months.

The four government agency client groups participated in the two VfM Lab sessions with a far more positive and collaborative position than evidenced by their initial scope and requirements presented to the consultant team.

The concluding VM Study was able to progress rapidly to creation of ideas that fostered much more effective design integration of the facilities and infrastructure, while still achieving the distinct agency presence and operational effectiveness, without adversely impacting the other agencies.

The design and delivery team were able to take a far more informed brief into the design development phases, avoiding unnecessary multiple re-drafting that such complex developments seem to typically entail.

Mark Neasbey
IVMA Accredited VMS Facilitator and Accredited VM Course deliverer

A Retired Value Management Facilitator Reminisces

Following a 25-year engineering career in Queensland's electricity industry, David established his company Advanced Value Management Systems in 1990 to provide value management, risk management and other group facilitation services.

Since then, he has assisted a broad range of organisations to achieve value for money (VfM) outcomes.

His experience covers projects for local government, water supply and sewerage, government infrastructure, electricity generation and distribution, coal mining and transport, minerals processing, imbedded energy and defence.

Now looking back on his value management (VM) career David tells us about some of his most memorable experiences.

In the beginning

My most memorable study was not as a facilitator but as a study participant.

The study on the coal handling plant for Stanwell Power Station was one of 25 studies conducted by the Queensland Electricity Generating Board to review the design of this power station

The design for the $100 Million coal handling and storage systems was based on conventional design for previous power stations.

This system unloaded coal brought by train from the Bowen Basin, transferring it directly to the boiler bunkers or into storage for future use. It also included the reclaiming of the stored coal.

Following the VM work plan, the study group challenged the various assumptions that underpinned the conventional design to create opportunities for improvement.

The group soon realised that by relaxing certain operating constraints based on latest operating practices, the plant layout could be simplified thereby reducing capital cost to $50 million — a 50% saving.

A significant operating cost reduction was also identified by negotiating the receipt of coal by rail on 5-day, 2-shift basis.

I was so impressed with the study process and the outcomes achieved that I decided there and then that I wanted to become a VM study facilitator. I pursued and achieved this goal.

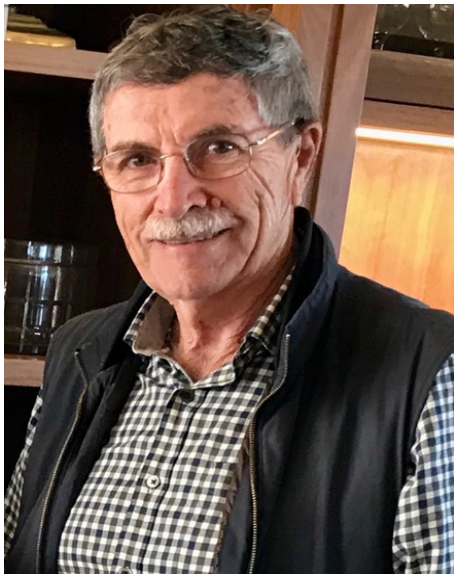
The 'wildcard'

During the Queensland Electricity Generating Board (QEGB) design studies for Stanwell Power Station, we included a 'wildcard' –— a person not connected with the project who was prepared to ask unusual questions and proved to be a very effective lateral thinker.

If you are looking for a 'step-change' in value, the VM teams need to think laterally and having a person willing to challenge conventional thinking can lead to some innovative solutions.

We also included visits to examine how different industries did things, for instance sugar handling for a coal study. Many innovative recommendations emerged from the study and were adopted in the Power Station design.

Many innovative recommendations emerged from the study and were adopted in the Power Station design



David Baguley, BE, BA, FIVMA

From this study I learnt at an early stage in my VM career to use 'wildcard' participants and visits to other industries to provide stimulus to the other study participants.

Whole-of-system viewpoint

Another coal industry study was at the transport network level and was in response to increasing demurrage charges arising from ships kept waiting to load export coal.

What was needed was a cost-effective increase in the capacity of the coal haulage rail corridor in Central Queensland to increase the coal throughput and thereby reduce these demurrage charges.

This network-level VM study took five days to examine the rail operational logistics involved in transporting domestic and export coal from several Bowen Basin coal mines to the Port of Gladstone plus Gladstone and Stanwell Power Stations.

Sub-optimal movement of coal by rail impacted all parties and through the study process many of these impacts were able to be reduced through a greater appreciation of the whole system.

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A Retired Value Management Facilitator Reminisces

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The study resulted in rail operations being improved with a key initiative being the rationalisation of the locations of the coal stockpiles at the port to provide improved unloading for the trains and faster loading for the ships.

This study provided me with a valuable learning experience: systems involving multiple stakeholders can be optimised if each party gains an understanding of the needs and issues of the other parties.

Group dynamics

Group dynamics are a fascinating aspect of VM - and they can vary widely.

The range of these dynamics and their propensity to change was demonstrated in a review of the design of a Youth Detention Facility.

The operational participants in the study included social workers who focused on the need to care for and rehabilitate detainees and security staff who focussed on the need to prevent their escape.

Initially this dichotomy resulted in some tension between the two groups but as the study progressed it became increasingly difficult to remember who was a social worker and who was a custodial officer as mutual understanding increased and participants attitudes changed.

This understanding produced a negotiated balance between providing a caring environment and ensuring the security of both the detainees and the facility.

Using Function Analysis enabled the study group to understand the reasons behind certain design elements and enabled them to identify better ways to achieve these outcomes while satisfying both care and security requirements.

My most interesting study

The VM study that I found most interesting in my career involved a group of English-speaking agricultural advisors from Pakistan.

Pakistani farmers workshopping with the value sign in background

The University of Canberra brought the group to Australia to develop their coaching skills using the VM methodology so that they in turn could coach farmers to improve farm productivity.

I used the Value Management Work Plan as a basis for the advisors to develop a simplified facilitation model to workshop with farmers. Aligning Edward de Bono's '6 thinking hats' with the workplan proved to be very effective communication tool.

On returning home to Pakistan, the advisors went out to the villages and facilitated workshops with groups of farmers to improve production and increase female participation in agricultural production.

From this fascinating experience I learnt that the VM work plan is an extremely powerful methodology in any situation.

Creative use of VM at the tender stage

Another project that proved to be interesting was the use of a VM study involving three consultancy groups competing for the design contract for the modifications of a sewage network for a local council.

The VM study group was made up of representatives of the design consultants and team members from the council. The design consultants were paid for their participation in the VM study.

The study was split into two stages. In the first stage, the Information and Analysis phases of the study operated as a briefing for the consultants and a forum to raise questions and generate ideas.

The consultants then went away to develop ideas into options with preliminary cost estimates.

In the second stage, held several weeks later, the client team re-assembled and each of the consultant groups came and presented their options for the design.

The whole study team then evaluated each of the options presented and selected the best value-for-money option.

The consultants who developed this option were then engaged to deliver the design.

I learnt from this approach that a written brief for a project or program is open to interpretation and may block innovative solutions.

Using this two-stage approach provided an excellent briefing for consultants and furnished them with a clear understanding of the desired outcomes and the scope for identifying alternative solutions.

The challenging ones

Of course, conducting VM studies can present its challenges too.

A study in Sarawak, Malaysia consisted of a review of design for a transmission system. As in many parts of Asia, the culture perceives that if a company or individual's ideas or work are challenged this may be seen as a potential 'loss of face'.

This risk restricted potential questioning of the original design and inhibited the team. As a result, several ideas and concepts with a high potential for project improvement were not considered.

Another study that presented challenges, again in Asia, was a three-day study reviewing standard designs for schools in Singapore.

As the study progressed it became apparent that the period for the study was inadequate and there was insufficient time to identify and address potential high-value changes to standard school designs.

These constraints limited the options generated for post-workshop development and restricted the study team from really owning the ideas developed.

From this experience I learnt that it is essential to ensure that the scope of the study and the time allocated must be adequate to satisfy client expectations.

David Baguley
Chair Appointments and Accreditations Committee, IVMA

The Accelerating Global Energy Transition

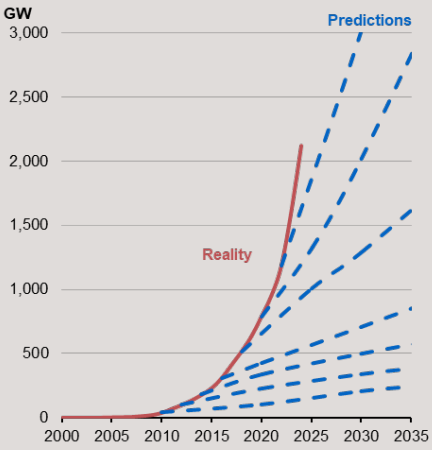
Throughout history any society's standard-of-living has been primarily determined by the availability and cost of energy; whether provided by slaves, horsepower, watermills, windmills or fossil fuel energy.

Growth of Solar Electricity Generation

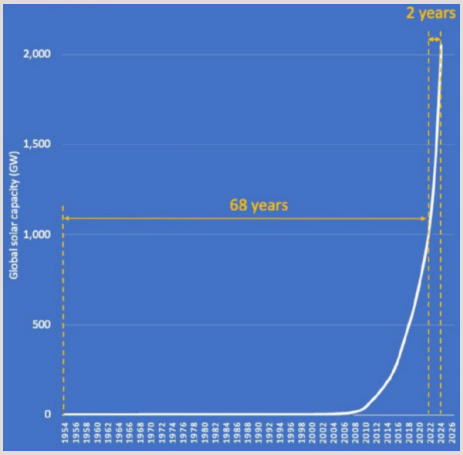
Mankind is currently experiencing the fastest growing energy transition ever experienced.

Consider the following:

- In the first six months of this year, electricity generated by solar and wind renewable energy globally surpassed that generated by coal-fired power
- As of January 2025, solar and wind electricity generation is being installed and commissioned five times faster than all other energy sources combined
- Of all the electricity generation options, solar and wind energy (plus large batteries) are the most economical to operate and are the quickest to construct — largely due to their modular construction (VT Spring 2024, p2 and VT Autumn 2025, p6)
- Global solar (photovoltaic cells) installations and commissioning are proceeding significantly faster than the second fastest energy source, wind, and far faster than historical predictions of this energy system's growth. It should be obvious from the Policy Scenarios graph that, had solar energy growth only met predictions made in the early-to-mid 2010s, the world would now be in serious electricity deficit with consequent high prices and economic disruption
- It took the world 68 years to get to a cumulative 1 terawatt of solar installed, and 2 years to get to 2 terawatts
- Moreover, despite repeated claims to the contrary, the annual solar energy resource delivered to planet earth is some 6,000 times the total energy used by mankind in 2022 – and it's good for some 4 billion years – with some fluctuations, of course (3,800/0.62 zettajoules)



World Energy Outlook's Stated or Current Policies Scenarios taken biannually from 2010 to 2022 (International Energy Agency, 2024)



Global solar (photovoltaic) capacity doubled in two years (Gavin Mooney, EMBER, Global Solar Council, February 2025)

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The Accelerating Global Energy Transition

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Fluctuating solar and wind electricity supplies are now backed up by large batteries as well as pumped hydro.

Electric vehicles and local electricity regulations are now changing to permit these vehicles to return their stored electricity to the grid.

In time this will provide a significant back-up because the battery in an electric car is typically about ten times the capacity of batteries used for an individual household solar system.

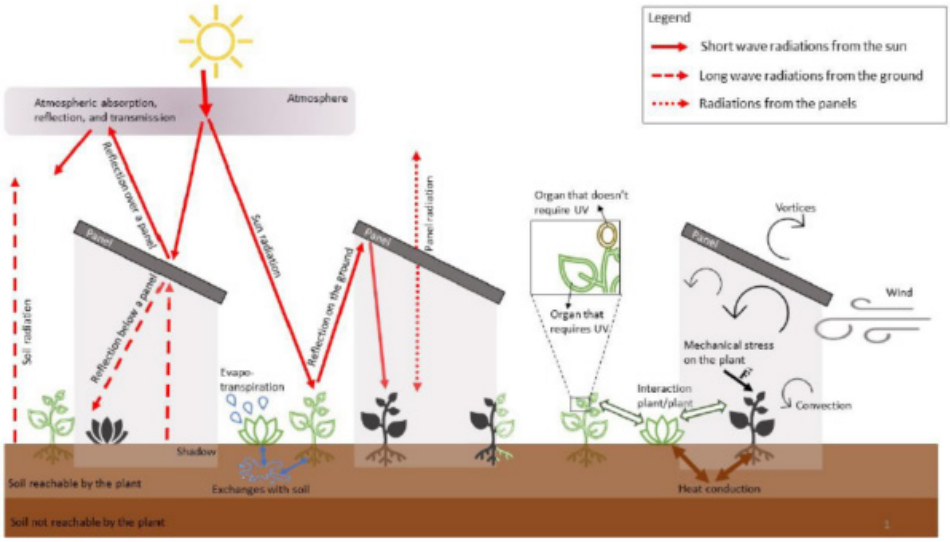
Think-tank Climate Energy Finance has advised that the costs of solar panels continue to fall substantially while panel efficiencies continue to rise steadily as the technology matures.

The cost of the solar modules which make up the solar panels halved from 2024 to 2025 while manufacturing capacity expanded significantly at the same time.

Tandem solar panels currently in development comprise two layers of solar modules (polysilicon and perovskite) and will improve panel efficiencies from some 25% to 35% within a decade further reducing the cost of solar generated electricity.

China is the leading global manufacturer of solar panels (and wind turbines) and is currently installing new solar generation at five times the rate of the United States.

All of this growth is happening at the same time we are having to replace obsolescent fossil fuel



The physical phenomena within an agrivoltaic system and how they interact. (International Energy Agency)

The Energy Transition Challenge is Huge

Advances in innovation and use by consumers in the last decade mean the additional electricity requirements in the decades ahead are now far greater that envisaged 10 years ago.

Rapidly growing areas of power demand include electronic data storage, high power demand from cryptocurrency generation, increased use of air conditioning (particularly in the USA), and the rapid uptake of energy hungry artificial intelligence (AI).

All this growth is happening at the same time as we are having to replace obsolescent fossil fuel generated electricity and most methane gas use in industry. All this results in a search to find additional locations for solar panels that are compatible with other adjacent functions.

Deployment of Solar Electricity Generation

Globally, the leading deployment of solar energy is in rooftop solar on domestic, industrial and commercial buildings.

This is followed by 'utility' solar that is owned and operated by energy supply corporations (and increasingly provided with significant on-site battery backup).

Utility solar is typically a stand-alone endeavour but is increasingly being installed in conjunction with agricultural activities where both the power generator and the agricultural enterprise can benefit from the symbiotic 'agrivoltaic' cooperation.

Solar panels have been used in conjunction with pastural farming, usually sheep, providing some protection to animals during inclement weather and providing the farmer with an assured income stream independent of the risk of disease, stock loss or market price variability.

The combination of solar panels with farming is now being extended to arable farming with 'bifacial' solar panels being installed over land where horticultural activities are planned.

The panel layout and support system is designed to accommodate stock grazing, planting and harvesting, agricultural machinery and planned operating practices.

Horticultural Solar Farm (International Energy Agency)

Aotearoa New Zealand renewables company Lodestone Energy has completed three agrivoltaic solar farms and has a fourth one under construction.

The most recent facility, Te Herenga o Te Rā, is New Zealand's first solar farm to be connected directly to the country's transmission network service provider, Transpower's national grid.

This facility provides sufficient electricity to power 10,000 homes per year. The two earlier solar farms constructed by Lodestone are connected to local electricity grids only.

The Te Herenga o Te Rā solar farm has proven to be resilient to the vagaries of global warming.

The whole site was subject to flash flooding in January 2025 but returned to service once the water had receded with no sign of damage to the power generation infrastructure.

Te Herenga o Te Rā Solar Farm (Lodestone Energy)

John Bushell,
Chair, Events and Publications Committee,
IVMA