



A Business Case For

A Shared Energy Efficiency Officer

April 2018

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1. Introduction

1.1 Executive Summary

The purpose of this Business Case is to propose a shared service model for partner Councils to access specialist energy auditing and assessment skills via a shared in-house resource. This service would otherwise be less accessible due to (internal and regional) skills shortages and associated costs.

The model proposed is a jointly funded in-house specialist engaged on a fixed term contract by a host Council to provide energy audit services to partner Councils. Additional services may be provided under this agreement on a 'user pays' basis and an equitable contribution and service apportionment model can be established under a Service Level Agreement.

Wodonga City and The Rural City of Wangaratta have been identified as optimal host Councils given the respective organisational capacity and geographic proximity of those Councils in relation to the majority of Hume region Councils however this is not asserted and subject to the development of effective Council clusters.

The feasibility study demonstrated that 'like for like' services can be offered under this model at a lower than market cost. Greater than market value is added in the form of retained IP and knowledge sharing within the host organisation and between partner Councils. It has been proven through Wodonga's experience in addition to cost savings and carbon reductions associated with waste elimination and demand reduction, sustained access to technical expertise is incrementally valuable for additional benefits such as:

- IP retention and development.
- Assisting with preparatory costings for EOIs and other procurements.
- Assisting with project and operational budgeting.
- Identification and mitigation/elimination of risk related to electrical injury.

By auditing energy usage to establish and implement energy waste elimination and demand reduction initiatives Councils can reduce the environmental and financial costs associated with high energy-usage of buildings and by extension there is capacity to include vehicles and other equipment.

This business case aims to inform a 'go, no go' decision to commence the design and implementation stage for a shared service and should assist potential partner-Councils with decision-making regarding:

- Selection criteria for a host Council
- Selection criteria for partner Councils

Assessing the service requires consideration of the proposed benefits, being:

- Cost and carbon savings associated with the service.
- Improved capacity for skills access.
- Energy Efficiency IP development and retention within and between partner Councils.

The method of governance recommended is under auspice by a lead council delivering services to multiple partner Councils. This model may be replicated across a number of Council 'clusters' depending on uptake or the practical constraints of geography. Meticulous consideration and commitment must be given in the design stage to a Service Level Agreement between partner Councils to ensure service expectations are met.

The key challenge faced by a shared service of this type is the broad geography of the catchment; distance negates economies of scale, particularly in the sharing of physical services. By establishing clusters of a reasonable scale, that are geographically proximate it is possible to mitigate excessive travel however it is assumed that significant travel will be required.

It is important to note that many regional Councils historically share healthy inter-organisational relationships and effectively share knowledge and resources informally. Whilst this business case presents an opportunity to formalise a solution to shared challenges it is imperative that any new arrangements add value to existing relationships and adaptive practices.

It is proposed that this business case now forms the basis for ongoing discussion by Councils to discuss the relative merit of a shared service and to engage partner Councils for the implementation of an appropriate host Council and partner collective.

1.2 Project Context

CoolChanger Pty Ltd was engaged by Wodonga City to prepare a Business Case for an 'Energy Efficiency Shared Service' model for potential partner Councils.

This project was enabled by the Local Government Victoria (LGV) *Collaborative Council Sustainability Fund Partnerships Program* (CCSFPP). This fund encourages councils to jointly explore innovative initiatives that deliver procurement solutions or shared services which improve the social, economic and environmental sustainability of participating Councils and which encourage investment in supporting technology, facilities and services.

The lead council for this project was Wodonga City who has partnered with Indigo Shire Council in the first instance to test the feasibility of a shared energy efficiency service for council buildings which may then be replicated for additional council partners and additional energy assessment services.

The CCSFPP was identified as the catalyst to extend the scope and impact of the energy efficiency officer employment trial being undertaken by Wodonga City. In late 2016, Wodonga City council engaged a fixed term, part-time energy efficiency officer. This experimental employment model (remote, flexible working arrangements by a specialist) tested whether a better-quality result could be delivered against a traditional role by focusing on energy efficiency. The test provided a comparable output for a reduced price compared to using external consultants. Specialist equipment (electricity data loggers and monitors) was purchased by Wodonga City to support this activity and to optimise utilisation of the asset and role, the potential for a shared service became evident.

Further, a series of environmental factors aligned to contribute to the project's initiation, including:

- Several Councils in the Hume region were intending to commence energy efficiency projects.
- A sub-set of those councils expressed curiosity about Wodonga City's energy efficiency officer, requested the position description and indicated aspirations to explore such a position in their council.
- The inherent difficulty to obtain the services of professional energy auditors in regional locations.
- Prohibitive costs for resource constrained regional and rural councils to engage consultants for energy efficiency audits.
- Emergent energy 'crisis' with energy costs estimated to increase 30% 2017-2018.

The idea for a grant project to test sharing the resource was developed by Wodonga City and the neighbouring Indigo Shire Council. The grant application was supported by the Goulbourn Broken Greenhouse Alliance (GBGA) of which both councils are members.

1.3 Feasibility Process

The Feasibility Report associated with this Business Case (Available for review) has determined that a dedicated energy assessment resource, shared between multiple councils is a feasible way to make energy reduction recommendations and improvements for councils to reduce the associated financial and environmental costs of inefficient energy practices and assets. The feasibility assessment comprised an extensive process of academic research and consultation with local Councils, undertaken in two stages:

Stage One:

The study tested the service's demand and supply and potential environmental/financial return based on stakeholder input and energy audit findings.

Most notably, the survey of potential Council partners from the GBGA validated demand for the audit services.

Of the survey respondents:

- 87.5% have a commitment in their Council Plan to improve energy efficiency in Council owned buildings
- 50% have not yet commenced an energy efficiency program to achieve energy efficiency in Council buildings
- 0% believed they had the skills to run an energy efficiency program in-house
- 75% are planning to run energy audit (buildings in the next 1-4 years)
- 62.5% would require a Type 2 level audit

Stage Two:

In this stage potential shared service models were assessed to establish a fit-for-purpose solution to deliver the service.

An extensive study of literature and case studies relating to Australian and international shared services in the public and private sectors was analysed. From those shared service learnings, many principles and several models were identified as informative for the application of this service's needs. Five models were developed for consideration, being:

- *Model 1: Joint procurement of an Energy Procurement Contract (EPC) with project officer.*
A joint procurement of an EPC made possible by multiple shire investment, led by a project officer on behalf of the collective.
- *Model 2: In-house energy efficiency officer jointly funded by participating councils.*
A lead council houses a suitably qualified officer who performs the service function on behalf of partner councils who jointly fund the position.
- *Model 3: Lead council employs in-house energy efficiency officer available by hire.*
A lead council houses a suitably qualified officer who performs the service functions on a fee per service basis with member councils.
- *Model 4: Joint procurement of audits by a consultant.*
Partner Councils would jointly procure the services of a suitably qualified consultant
- *Model 5: Sharing processes and equipment.*
An ad hoc approach to sharing knowledge and hiring equipment on a needs basis and by agreement.

A Workshop of potential partners identified Model 2 as the most appropriate method of governance and further, a variable solution with 'add on' services was modelled which is detailed in Section 3.2.

1.4 Scope of this Business Case

The objective of the project is to investigate a shared energy efficiency audit service across multiple councils.

To assess feasibility three primary questions were evaluated:

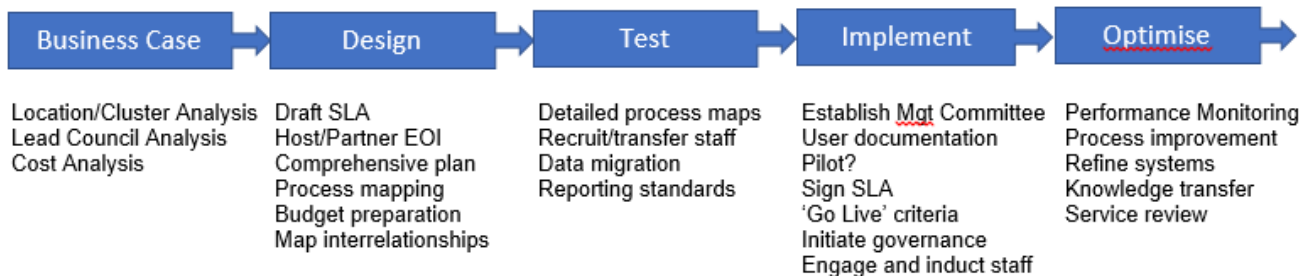
- Does this model improve service access and service quality at a lower cost?
- Can cost and service improvements be replicated for additional partner councils?
- Does demand exist for this service from other councils?

The project aligns with the objectives of the CCSFP fund by testing the feasibility of savings to council resources on two levels: firstly, reducing operating expenditure from energy bills for individual councils and secondly, by making energy efficiency gains more accessible.

A model for the collective is explored being a service centre with an in house resource auspiced by a lead member council and co-funded by a cluster of partner Councils.

1.5 High Level Project Map

The following diagram demonstrates a high level phased approach to assist planning, designing, testing, implementing and optimising the shared service project. Phasing the project with defined tasks and check points for quality assurance ensured a structured approach to decision making and project development in order to better position the ongoing project for success.



1.6 Energy Efficiency Overview

This model relates principally to building facilities however there is scope to extend the service to other high energy consuming assets.

An energy efficient facility is one that reduces energy and maintenance costs and provides a comfortable and healthy environment for its occupants. Energy efficiency measures can result in significant annual cost and carbon savings and potentially deliver the following:

- Lower maintenance bills;
- Happier, more comfortable building users;
- Reduced energy use and a reduction in costs;
- Increased asset value;
- Deferred capital costs and lower maintenance costs (well-tuned equipment lasts longer and breaks down less often);
- Future proofed building assets that reduce the impact of rising energy costs and regulations; and
- Reduced greenhouse gas emissions.

Sustainability Victoria's recent award-winning Energy Efficient Office Buildings Program demonstrated that efficiency gains and emission reductions of 30% are achievable through implementation of building systems and plant improvements to improve energy efficiency in commercial office buildings. Savings even higher than this are also likely to be found when combining energy efficiency and renewable energy measures in larger council facilities such as council corporate centers, arts and civic centres, community buildings (e.g. libraries and recreation/aquatic centres.)

Demonstrating the benefit of Energy Efficiency investment is complex and can be contentious. Despite much of the current public debate around energy efficiency in Australia focusing on the relative merit of 'supply-side' technologies like solar photovoltaics and energy storage, demand-side considerations such as energy efficiency offer the fastest and often cheapest way to reduce energy bills and associated greenhouse gas emissions.

Commercial buildings account for around 8 per cent of final energy use in Australia and energy efficiency measures could shave as much as 30 percent off energy consumption. In addition, non-energy benefits such as, "...improved product quality and output, reduced risks and liabilities, (and) enhanced resilience..." begin to be quantified. (Energy Efficiency Council, Connecting SMMs with expert energy efficiency support p. 5)

Investment in energy efficiency has also been demonstrated to have regional economy-wide benefits. As energy efficiency upgrades involve substantial on-site works, investment in energy efficiency activities has a large local economic multiplier effect. Research in the US found that each dollar invested in energy efficiency generates US\$2.32 in local economic activity, US\$0.84 more than an equivalent spend on natural gas and petroleum product (Energy Efficiency Council, 2011, p9.)

While the case for improving the energy efficiency of council buildings is demonstrable there are barriers for regional and rural councils to consider. These barriers include:

- Financial constraints – although savings are clear, energy efficiency improvements often require an up-front capital investment.
- Resourcing (capacity and capability) – Managers and officers in rural and regional councils may not have sufficient skill nor time to thoroughly investigate and implement energy efficiency opportunities.
- Lack of suitably qualified external service providers.
- Political constraints - Councillors and council management may have a preference to invest in visible demonstrations of sustainability, such as rooftop solar PV, and be less willing to invest in non-visible efficiency improvements due to the challenge in adequately communicating the financial and emissions savings.

1.7 Shared Services Overview

Shared services are not new, most Victorian councils undertake some form of shared services. Shared services are usually related to back office functions and procurement whereas the shared service being investigated in this study requires the delivery of physical services (energy efficiency) across multiple councils. Shared services are one way that councils can potentially achieve greater efficiency in the delivery of services to the community but Councils may consider adopting shared services for a variety of reasons. While increasing efficiency is usually an objective, cost reduction may not always be the key driver for councils. Other reasons may include improving the quality of service delivery, gaining access to skilled resources and/or needing to meet statutory obligations.

Implementations of shared services across public and private sectors globally have focused more on functions which are transactional in nature. The reason for the focus on these services is they are generally easier to standardise and consolidate; with an underlying intent of cost reduction.

Needs-driven arrangements, such as those investigated here, offer some flexibility in the design of shared service arrangements based on the intended aims and the preferences of the parties involved. It is critical therefore to have clarity of purpose and design with the buy-in of stakeholders and partners and a fit for purpose delivery method and governance.

A Productivity Commission review of local government coordination and consolidation in Australia identified the following categories of approaches to local government coordination:

- Joint activities between local governments—these include resource sharing, joint projects and mutual recognition.
- Regional organisations of councils (ROCs) and other coordinating bodies of local government—ROCs are voluntary 'partnerships between groups of local government entities that agree to collaborate on matters of common interest.'
- Joint local government entities—joint local government entities can be created to undertake the legislative responsibilities of individual local governments. These entities differ from other groups of local governments such as ROCs and other regional groupings in that legislation plays an essential role in their establishment, objectives and governance, and these entities are delegated legislative responsibilities by their constituent local governments. They are usually created to provide services and manage facilities involving waste management, water, vermin control or land development.

More broadly, other models have been based on clustering or centralisation of designated services. Councils already undertaking shared services report several benefits, including:

- increased opportunities for regional and subregional strategic development;
- increased cost savings and economies of scale;
- reduced duplication;
- access to a service not otherwise available;
- improved access to technical expertise and higher quality work

Successful shared services have a number of common traits but foremost to success is effective governance, precise Service Level Agreements and buy-in from council leadership through to officers and a 'business as usual' approach to service delivery.

There are significant challenges to implementing a shared service including the time and cost to arrange, lack of funds to establish and support ongoing operations, managing expectations of equity, the need for strong leadership and ongoing commitment, the need for strong strategic and business planning, overcoming governance issues and parochialism.

Each Australian state has legislative arrangements in place through which councils can set up shared services (ACELG, Legal and Governance Models for Shared Services in Local Government, p4). In Victoria, that includes exercising functions outside the council area and exercising functions jointly with other councils:

- A council may perform its functions inside and outside its municipal district
- Usual tendering provisions do not apply if the contract is entered into with a council acting as the agent for a group of councils
- A council may form and operate a corporation, but must assess the total risk exposure of forming or operating a company

In Victoria, there are no legislative restrictions to local governments collaborating based on informal cooperation, sharing and aligning plans and documents, joint tendering, councils purchasing services from each other or one council contracting services on behalf of a group of local governments.

Establishing shared services requires strong strategic planning skills, a willingness to cede and share control and autonomy, effective business planning, and an appropriate model of governance through which to undertake shared services activities.

1.8 Policy Considerations

Victorian Government Policy

Energy Efficiency and Shared Services, in the context of this project, are supported by Victorian Government policy. The Australian Energy Efficiency Policy Handbooks recommends, "...a mandate on agencies to identify energy saving opportunities in their buildings and invest in projects that meet pre-determined financial criteria.". The report continues, "...the former Victorian Greener Government Building (GGB) program was on track to save the Victorian Government over \$2 billion."

This study tested the governance and statutory requirement for the service against Victorian Government Policy to answer the questions "Can a shared service of this nature be established by Councils?" and "Does a service of this nature fit within Council's statutory remit?"

Each Australian state has legislative arrangements in place through which councils can set up shared services (ACELG, Legal and Governance Models for Shared Services in Local Government, p4). In Victoria, that includes exercising functions outside the council area and exercising functions jointly with other councils:

- A council may perform its functions inside and outside its municipal district
- Usual tendering provisions do not apply if the contract is entered into with a council acting as the agent for a group of councils
- A council may form and operate a corporation, but must assess the total risk exposure of forming or operating a company (Somerville and Gibbs, p. 23).

In Victoria, there are no legislative restrictions to local governments collaborating based on informal cooperation, sharing and aligning plans and documents, joint tendering, councils purchasing services from each other or one council contracting services on behalf of a group of local governments.

The GGB program was reinstated by the Department of Treasury and Finance in August 2016, and aims to improve the efficiency of existing government buildings to reduce operating costs and greenhouse gas emissions. This sets the tone from the state government that it is fiscally responsible to invest in energy efficiency.

In Victoria, there are no legislative restrictions to local governments collaborating based on informal cooperation, sharing and aligning plans and documents, joint tendering, councils purchasing services from each other or one council contracting services on behalf of a group of local governments. However, the establishment by a group of councils of a commercial entity or joint venture (that could jointly procure or offer a service) requires approval by the Minister for Local Government and in some circumstances the Treasurer. (DELWP, 2017, p. 2)- Councils also have no legislative barriers to sharing resources such as back-end administrative systems such as HR, finance and IT.

The VEET scheme was established under the Victorian Energy Efficiency Target Act 2007 (the Act) and commenced on 1 January 2009. The scheme is administered in accordance with the Act, the Victorian Energy Efficiency Target Regulations 2008 and the Victorian Energy Efficiency Target (Project-Based Activities) Regulations 2017.

The VEET scheme is designed to make energy efficiency improvements more affordable, contribute to the reduction of greenhouse gases, and encourage investment, employment and innovation in industries that supply energy efficiency goods and services.

The Victorian Energy Efficiency Target (VEET) scheme works by allowing certain businesses, known as Accredited Persons, to create certificates when they help you make selected energy efficiency improvements to your premises, or those of your business/organisation. Each certificate - known as a Victorian Energy Efficiency Certificate, or VEEC - represents one tonne of greenhouse gas abated. The money the accredited business makes from selling its certificates can go towards a discount on the product or appliance installed. The process and requirements is prohibitive for councils. However, councils involved in energy efficiency need to have some awareness of the scheme to ensure VEECs are being claimed and savings passed onto council for applicable projects.

Council Policy

The community increasingly expects all levels of government to play a leadership role in reducing Australia's greenhouse gas emissions.

Policies exist within each council pertaining to their respective financial and environmental imperatives; with financial sustainability and a reduction in environmental impact consistent themes in policy and decision making. Energy efficiency is a service that most councils are not yet adopting on behalf of ratepayers, so the opportunity to reduce costs and greenhouse emissions as a shared service has merit in supporting existing and emerging financial and environmental policy.

As members of the Goulbourn Broken Greenhouse Alliance (GBGA) the initial potential shared service partner councils have a shared commitment with Wodonga City's goal of energy efficiencies. The GBGA mission is "In partnership, raise the awareness and capacity of the region to response to a changing climate". All member councils have an aspiration for climate change mitigation and adaptation. The individual councils then expand on this aspiration within an Environment or Sustainability Strategy. In the stakeholder survey, 87.5% of the respondents stated their council has a commitment in their environment/sustainability strategy or council plan to improve energy efficiency of council owned building.

2. Problem and Opportunity Definition

2.1 The Problem: Resourcing and accessing appropriate skills to deliver Council's energy reduction needs

Every Council has a mandate to reduce the financial and environmental costs associated with energy consumption. Council's Environment Officers are often time constrained and lack the appropriate specific skillset to conduct energy audits, assess recommendations and implement improvement plans.

The capacity to access and resource the appropriate skills capable of auditing energy usage and assessing suitable reduction recommendations is often limited by budget and location constraints, particularly in regional areas.

Consequently, many Councils, whilst actively undertaking energy reduction initiatives are sub optimising their efforts at an individual organisation level and as a region wide collective.

2.2 The Opportunity: A region-wide approach to service delivery

By aggregating the demand of a selection of partner councils, a cost effective service delivery model may be developed by an auspice council to provide access to skills and services in a substantive, in-house role.

Wodonga have demonstrated that an in house resources can be cost competitive to external providers.

Through consultation it has been determined that there is sufficient in-principal demand to warrant progressing to a design phase for an in-house service to engage partner councils and establish service standards from which to develop a suitable Position Description to attract and competitively remunerate the appropriately skilled resource.

3. Analysis

3.1 Introduction

Whilst most Councils are committed to reducing energy consumption and achieving the consequent environmental and financial benefits, the capacity to resource the skills appropriate to identifying and implementing change can be limited in regional areas.

Each potential partner Council, whilst guided by consistent commitments to energy demand reduction are at varying stages of strategic and operational capacity to resource and undertake improvement. The scope of the feasibility study was restricted to buildings however through ongoing consultation with potential partner Councils it has been established that there is interest for auditing and improvement of other sources of significant energy consumption, such as vehicles and heavy equipment.

Opportunity exists for larger Councils to partner with smaller Councils eligible under the Sustainability Victoria Local Government Energy Saver Program and act as a lead Council to help facilitate that program via a shared resource.

3.2 Service Summary

To enable meaningful cost comparison of an in-house service versus external service providers, it is important to compare the same level of service (the audit methodology and detail of the report). Although the Standard indicates clear delineation between the three Types(1,2 and 3), the level of audit can vary upon the needs of the audit and consequently may reflect a convergence of two or more Types. As long as the mandatory requirements of the Standard (AS/NZS 3598.1:2014) are met, the audit is compliant.

The Australian Standard for Energy Audits: Part 1 Commercial Buildings (AS3598.1:2014) describes three levels of energy audits, summarised below.

Type 1: Basic energy audit	Type 2: Detailed energy audit	Type 3: Precision sub-system audit
• Minimum level of detail required for an audit to confirm to the Australian Standard. • Provides a quantitative overview that is suitable for smaller sites with lower energy expenditures, or as a scoping audit for larger sites. • Identifies no-cost and low-cost opportunities with a payback of up to 2 years. • Costs and energy savings are broad estimates only	• Detailed analysis of energy performance to quantify the full range of opportunities for a site • Comprehensive review of systems, equipment and operational characteristics • Includes financial analysis of recommended energy performance improvement actions based on agreed financial criteria • May include on-site measurements but would not normally involve the installation of additional monitoring equipment. • Calculate energy savings by reconciling against the end-use breakdown, considering daily energy consumption profiles. • Medium level of accuracy in calculating costs and benefits.	• Detailed audits of specific sub-systems, e.g. HVAC, building management systems, compressed air or lighting. • Additional data gathering and monitoring provides a higher level of accuracy • Involves on site measurements to monitor energy over a period long enough to capture the various operating conditions and relevant variables • Costs of implementation are based on both capital and labour items, and a higher level of accuracy in line with the organisations capital budget process.
		

Any actual shared service will be determined by agreed demand, in terms of the participating Councils and their collective service expectations. It is possible that any actual service may extend beyond buildings to include vehicles, plant and equipment however to demonstrate a shared service model in its simplest form, the methodology undertaken within the feasibility stage has been applied; being building energy audit and assessment. The level of service tested in the feasibility stage would align to a convergence of Levels Two and Three of the Standard as shown above.

Under the proposed model, member Councils co-contribute to the employment of a fixed term in-house energy audit expert, housed at a host Council. The specialist employee will undertake a determined number of base level audits as detailed below per Council. Partner Councils may opt in for Building Energy Indexing at an additional cost on a pay per use basis.

Upon completion of each audit, Councils will be provided with a comprehensive report outlining recommendations for critical and non-critical improvements noting investment requirements, ROI, financial and carbon savings from which Councils may develop capital or improvement projects. Audit outcomes will enable member Councils to:

- Negotiate tariffs for cost optimisation
- Identify wastage for elimination
- Identify alternative energy reduction solutions
- Identify energy generation opportunities and optimisation of existing services
- Assess ancillary energy usages
- Model capital projects

Following is a summary of the two services offered being the base service and the optional additional service:

BASE SERVICE: Building Energy Audit

Member Councils will receive a base level audit on any number of buildings relative to their contribution. Below is a list of service inclusions for a single building:

- Electricity Accounts Analysis and tariff negotiation
- Monitored live metering
- Switchboard Thermal Imaging
- Power Factor Correction & Voltage Optimisation Assessment
- Variable speed drive recommendation and modelling
- Lighting audit and assessment
- Heating, Ventilation and Air Conditioning assessment.
- Solar PV analysis and energy generation recommendation.
- Hot Water Systems.
- Heat Exchangers.

OPTIONAL ADDITIONAL SERVICE: Building Energy Indexing

For an additional cost of \$3,000 Councils may opt in for a Thermal Energy Assessment that will identify significant thermal energy losses at the building design stage as well as for existing structures. The assessment takes into consideration the governing factors of building thermal performance (i.e. the insulation materials, the dimensions, the loads, and the schedules of people interactions) to associate these factors with any building of choice and to subject the model to a range of time and cost dependent changes, that will inform critical and substantial decisions for improving the building's thermal performance.

3.3 Location & Host Council

By definition, shared physical services will require a centralised location or set of locations from which to operate. A simple modelling tool can be employed to determine the optimal host location depending on actual task densities and participating council proximity.

The geographic challenges may involve not only significant distances but varied topography, population densities and distribution as well as other variable conditions such as snow work. The model will require additional overall travel and therefore efforts to manage work plans efficiently will be critical to maximising productivity and reducing costs.

'Clusters' may be formed of a scale that is sufficient to prove financial viability but with practical workability; According to DEWLP, experience suggests three to four member Councils is practically workable in terms of establishment and ongoing management. The key selection criteria for Council clusters should include:

- *Correlation*
Where Shires of similar populations, urbanisation, strategic intent, geographies and service outputs share a common challenge
- *Proximity*
Given the considerable geographic breadth of regional Shires, Councils with shared boundaries logically reduce the negating effect of distance on economies of scale.
- *Capacity*
The collective workload should warrant substantive full time roles and create a structure of scale that provides recruitment appeal and the potential to gain economies and service improvement.

The selection of a host Council will require:

- Optimal location, that is, relative proximity to partner councils to mitigate overall travel.
- The organisational will to host the service
- The organisational capacity to resource the position and its associated direct and indirect costs and support requirements.

3.4 Potential Partners

Throughout the feasibility process a number of potential partners have been consulted for input and have expressed in principal interest for inclusion in a shared service.

Goulburn Broken Greenhouse Alliance members constitute the core of Councils consulted and include:

Councils	
• Strathbogrie	• Moira
• Wangaratta	• Benalla
• Murrindindi	• Towong
• Shepparton	• Mansfield
• Mitchell	• Campaspe
• Wodonga	• indigo

In addition to the member Local Government Agencies are North East Catchment Management Authority, the Department of Environment, Land, Water and Planning (Hume region) and the Goulburn Broken Catchment Authority which provide the opportunity to extend the reach of the service.

3.5 Cost Attribution

A number of cost attribution models are possible under a shared service with an apportionment based on respective populations commonly favoured however the nature of this service suggests that a more equitable contribution would be modelled on a fixed service cost. This cost in turn may be collated to an appropriate level in terms of total cluster contribution to initiate the recruitment of a dedicated resource, preferably in a substantive, full time, fixed term role.

Any number of permutations of participation and audit requirement is possible given the number of potential partner Councils so for the sake of demonstration a simple model is outlined below.

It is assumed that An Energy Efficiency and Assessment officer could be retained at an annual total cost of approximately \$100,000 including salary, on costs and other expenses. The approximate recovery cost of a large building is \$4,000 per audit.

In simple terms this would mean that annually the officer would be required to undertake a minimum of twenty five standard audits annually to recover the cost of employment. If it is assumed that each Council contains five large market sites then an effective cluster would require five Councils each contributing approximately \$20,000 to the service.

In Wodonga's experience, the large market building audit outcomes identified:

- \$1.395m worth of capital works
- Estimated annual savings of \$270,000
- Average ROI against capital works of 4.8 years
- Estimated annual consumption reduction of 1.2m kW
- Annual CO2 emission reduction of 1309 tonnes

Appendix 1 provides a set of case studies summarising audit findings from the feasibility phase.

3.6 Advantages/Benefits

Broadly, the notion of a centralised service centre could provide the collective of member councils with:

- Opportunity to establish best practise set of systems and processes
- Improved procurement capacity
- Consistent set of functions and their respective reporting measures
- Flexibility to add 'nice to do' functions
- A shared forum for innovation with IP transferral leading to service and strategic improvement
- Opportunity to develop and align complimentary regional strategies and services
- Resource and asset optimisation with dedicated utilisation

3.7 Risks/Disadvantages

Conversely, by aggregating the service, member councils may experience:

- Inefficient integration of co-dependent internal processes
- System and process misalignment

3.8 Sustainability Victoria Local Government Energy Saver Program

Opportunity exists to extend the utilisation of the shared resource to assist Councils who are undertaking Sustainability Victoria's Local Government Energy Saver Program (LGESP).

The Local Government Energy Saver Program aims is to work with a minimum of 22 resource constrained, regional councils across Victoria to identify opportunities for financial savings and other co-benefits that can be achieved through improving the energy productivity of public facilities; including from the local area:

Councils	
• Strathbogie	• Towong
• Mansfield	• Benalla
• Murrindindi	

The program will run until June 2020, and will help councils to understand, prioritise and implement energy efficiency and renewable energy upgrades on their buildings.

This will include:

- Establishing current baseline corporate emissions;
- Developing an energy use reduction plan;
- Undertaking facility audits on highest energy using sites; and
- Implementing projects that cut energy costs and reduce emissions.

Given the absolute alignment to the services proposed it is worth noting this program and its participants for their potential to extend the reach and productivity of the shared service.

3.9 Summary

A centralised model for service delivery can improve member council access to skills particularly high level technical skills that are otherwise difficult to attract or resource independently. The challenge with establishing this shared service is identifying a cluster of proximately located Councils with sufficient audit requirements to constitute enough collective demand to meet the financial threshold of the role. It may be possible to test this shared model on a 12 month trial basis looking at building assessment initially and developing or replicating the model based on further demand and extended service requirements. Equally, the role may be tested on a shorter term contract.

4. Structure and Governance

4.1 Principles of good governance

It should be the ambition of the service to achieve exceptional levels of governance to drive accountability, compliance, transparency and performance. Commonly, the following principles inform the development of effective governance:

- A legal and operational framework for the ongoing engagement, management and oversight of contracts and arrangements.
- Mechanisms for representatives of partner councils to contribute to strategic and operational discussions.
- A framework of equitable apportionment of member risk, investment, benefit and representation.
- Established cycles and protocols for the monitoring and review of performance and governance.
- Clear lines of accountability which enable effective and transparent organisational communication, decision making and management.
- Confidence and 'Buy-in' across all levels of the affected organisations (From politicians, decision makers and implementers) and ultimately the communities being serviced.

4.2 Governance: Scope of Responsibility

Governance, in the context of this Business Case, relates to oversight, management and implementation of the proposed shared service functions under the auspice of a lead council and in this context includes:

- Development of policy parameters to apply to the collective of councils and functions, relatable to the respective policies and strategies of member councils.
- Oversight and implementation of service agreements with member councils.
- Execution of labour contracts.
- Execution of license arrangements and service agreements including software and other third party engagements.
- Leadership standards for strategic development and decision making.
- Marketing and communications processes that will accompany implementation.

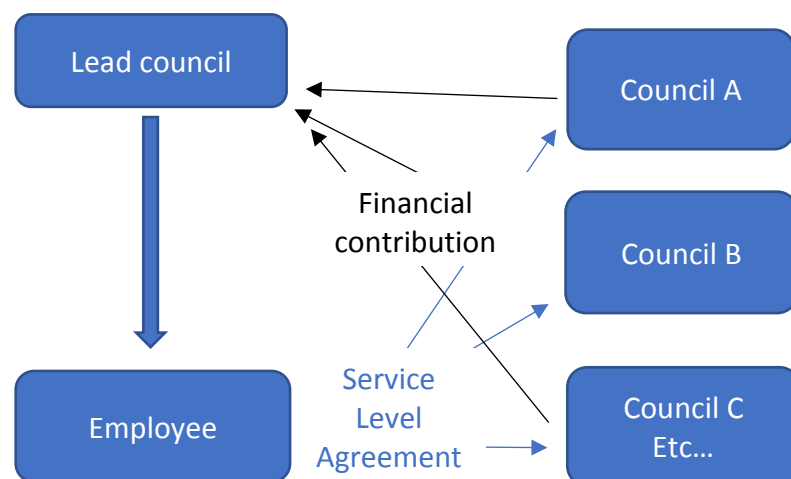
4.3 Governance: Council Auspice Model

The auspice model would involve delivery of services by 'auspicing' them within a host Council. This model envisages the auspice local government(s) effectively acting as agent(s) for the collective of member councils who co-fund the role and may in addition receive ancillary services on a user-pays basis.

The model under this option is illustrated below:

Under this model:

- The auspicing Council (lead Council) would take ultimate responsibility for the service and all associated risk and accountabilities.
- Integration within existing organisational structures of the auspice Council(s) is necessary.
- A separate committee with cross-organisational representation would be established under its own charter to maintain high-level oversight of all service delivery.
- The auspicing Council would be funded specifically by respective member councils to deliver the specific services within the defined specification and guidelines of a Service Level Agreement.
- Funding to auspice Council would be based on an agreed formula with funding provided to cover both direct and attributable overhead costs.



Advantages/Benefits:

The advantages of this 'auspice' model are:

- This model ensures IP and talent 'ownership' by councils
- The model provides direct control and ownership of the service and accountability for the outcomes.
- A foundation of healthy inter-organisational relationships exist with comparative service levels.

Risks/Disadvantages:

The disadvantages and risks of this 'auspice' model are:

- The premise for this study is based on the most efficient councils (Wangaratta and Wodonga) auspicing the model however the appetite for taking on the service is not tested.
- The method of selecting and choosing 'auspice' councils may become politicised and divisive. The means of selection may involve an expression of interest process.
- Taking on and delivering services on the membership's behalf necessarily involves a very substantial risk profile for that auspice council(s) including financial risk, governance, legal and political risk as well as operational and other risks. This level of risk is, by definition, disproportionate to the service delivery responsibility of an individual council.
- The nature of the contractual relationships envisaged under this option requires individual councils to undertake their own risk assessments.

CASE STUDY – Goulburn Broken Greenhouse Alliance (GBGA) Executive Officer role

The GBGA was established in 2007 to promote and support regional action on climate change. Members are currently drawn from the Goulburn Broken Catchment Management Authority, North East Catchment Management Authority, DELWP Hume, and eleven municipalities. The GBGA promotes the opportunity for key agencies to work together collaboratively for a coordinated response to climate change issues in the Goulburn Broken region. It is one of a network of regional greenhouse alliances across Victoria, working with Local Government and other organisations to respond to climate change through the development of a variety of projects.

The Alliance was established through an auspice agreement with the Goulburn Valley Waste and Resource Recover Group (GVWRRG) and in 2017 GBGA reviewed the auspice arrangement citing in its Annual Report, "Much of the success of the GBGA in the past has been born out of a solid and supportive auspice agreement".

The Alliance is funded solely by membership contributions paid annually by GBGA members. Member organisation financial and in-kind contributions support a 3 day a week staffing resource to run alliance operational functions.

Full GBGA membership is restricted to Local Government and Catchment Management Authority, although there are opportunities for other groups and businesses to join as associate members on a case by case basis.

The operation of the GBGA is governed by the GBGA Memorandum of Understanding and Rules of Operation, of which all members have endorsed and accepted. Daily operation of the Alliance is conducted by the Executive Officer and regular member meetings are held throughout the year.

5. Change Management Context

Lack of expertise, the cost of the initial investment, and lack of capacity are key obstacles to change. Changes to staff reporting arrangements, perceived risks associated with reduced headcounts, and relocation of staff are cited as difficult points on which to reach agreement. New arrangements require a council's management team to think more strategically, and governance structures need to be based on a robust change management process. Leading and managing change is the most critical enabler to reduce service disruption and the associated financial and reputational costs and to establish a foundation for success. Change leadership requires identifying and prioritising stakeholders, developing a strategic communications approach and plan and effectively engaging stakeholders to maintain positive momentum.

Council Policy

The community increasingly expects all levels of government to play a leadership role in reducing Australia's greenhouse gas emissions.

Policies exist within each council pertaining to their respective financial and environmental imperatives; with financial sustainability and a reduction in environmental impact consistent themes in policy and decision making. Energy efficiency is a service that most councils are not yet adopting on behalf of ratepayers, so the opportunity to reduce costs and greenhouse emissions as a shared service has merit in supporting existing and emerging financial and environmental policy.

As members of the Goulbourn Broken Greenhouse Alliance (GBGA) the initial potential shared service partner councils have a shared commitment with Wodonga City's goal of energy efficiencies. The GBGA mission is "In partnership, raise the awareness and capacity of the region to response to a changing climate". All member councils have an aspiration for climate change mitigation and adaptation. The individual councils then expand on this aspiration within an Environment or Sustainability Strategy. In the stakeholder survey, 87.5% of the respondents stated their council has a commitment in their environment/sustainability strategy or council plan to improve energy efficiency of council owned building.

5.1 Transition - Carry-over Contractual Issues

It will be important to carefully manage the transition of any existing contracts with third party providers of energy management services.

5.2 Transition – Service Level Agreement (SLA)

SLAs are critical to manage member expectations and to monitor performance for reporting and improvement. A flexible and transparent approach to developing the SLA must be supported by effective monitoring and uncompromising adherence and accountability to its requirements. Any SLA must be agreed and committed to in full before any service is entered in to.

5.3 Participation/Take-up Thresholds

This business case makes no assumptions regarding the number of participating councils nor does it suggest a threshold at which the model is viable. Rather, the role of an in-house energy efficiency officer can be tailored to specific demand established in the design phase.

6. Conclusion

An all-of-region (or subregion) approach can improve access to critical skills for member Councils to undertake energy assessments.

Next steps would include an expression of interest process to gauge commitment and service level requirements of participating Councils from which to develop a Position Description and identify an auspice Council. The PD would be taken to market to recruit and engage an appropriately skilled officer. Service Level Agreements would be drafted and entered into and the service reviewed for expansion and replication.



ENERGY EFFICIENT COUNCIL BUILDINGS CASE STUDY: CITY OFFICES

Wodonga Council

2017

The **Wodonga council city offices** are located in the Central Business District of Wodonga and are the main headquarters for the council. The building hosts approximately 120 staff, the council chambers and customer service centre.

Originally completed in 1977, the building is now undergoing progressive upgrade and modernisation. It is the highest electricity consuming facility under Wodonga council's operational control. A type 2 energy efficiency audit was undertaken in accordance with AS 3598.1:2014: Energy Audits Part 1: Commercial Buildings. This involved live monitoring of the building and HVAC

Recommendations	Total Cost (purchase & install, less any rebates)	Total benefits (annual electricity bill saving + maintenance)	ROI (Months)
Switchboard Modifications	\$20,000	N/A	N/A
Power Factor Correction	\$18,835	\$6096	37.08
Automatic Voltage Optimisation	\$75,000	\$15,657	57.48
Solar carpark (300kW)	\$545,000	\$110,334	59.27
LED lighting for remaining wings	\$23,080	\$8464	37.72
Variable speed drives	\$10,000	\$3,000	40
Removal of green energy subsidy	N/A	\$3,555,26	N/A
Totals	\$671,915	\$147,105	56.44



Wodonga city offices

The energy efficiency assessment identified:

- ⇒ Ongoing savings of \$147,105 per year
- ⇒ Return on investment of 4.7 years
- ⇒ Green house gas emission reduction by up to 94%

If all recommendations are implemented

ENERGY EFFICIENT COUNCIL BUILDINGS

CASE STUDY: THE CUBE WODONGA

Wodonga Council

2017

The Cube Wodonga was completed in August 2012 and is situated in Wodonga's central business district. It has the capacity to host diverse events, including touring bands and theatre shows, local community performances, film screenings, conferences and much more. The Cube includes a café and kitchen, courtyard with lighting and big screen, and a lit carpark.

Although the Cube is a relatively new building with a 20kW solar system installed on the roof, the energy efficiency assessment highlighted opportunities to further reduce the electricity bills and greenhouse gas emissions from this facility.

The energy efficiency assessment:

- Was conducted in accordance with AS 3598.1:2014: Energy Audits Part 1: Commercial Buildings.
- Involved a review of 12 months of electricity bills
- Installed a data logger on the main switchboard to capture the electrical load profile of the site
- Analysed data from three weeks of live monitoring during all events, including a large electro-digital music performance
- Logged the solar system separately for three weeks
- Included site inspection and staff consultation



The Cube Wodonga



Above: The Cube Auditorium

The energy audit found there was mix of energy efficient LED light fittings with inefficient incandescent fittings. There isn't a precedent for the mobile auditorium lighting in the VEET (Victorian Energy Efficiency Target) scheme. Wodonga council will apply for the VEECs (Victorian Energy Efficiency Certificates) for these lights, but if the aren't able to be claimed the lights will instead be donated to a community theatre group. Note: for VEECs to be generated the lights must be disposed of, and cannot be re-used.

The energy efficiency assessment identified:

- ⇒ Ongoing savings of \$34,576 per year
- ⇒ Return on investment of 4.16 years
- ⇒ Green house gas emission reduction by over 50%

If all recommendations are implemented

ENERGY EFFICIENT COUNCIL BUILDINGS

CASE STUDY: WODONGA LIBRARY AND ARTS SPACE

Wodonga Council

2017

The **Wodonga Library and Arts Space** share the same building in Wodonga's central business district. The Wodonga library is a large multi-purpose space that in addition to housing a large collection of books, magazines, DVDs and newspapers, offers a range of programs for the community, including meeting rooms, free Wi-Fi, printing, fax and scanning services. The library is open 10 am—5:30pm Monday to Friday and 9-12am on Saturday.

Arts Space is a vibrant and accessible contemporary art gallery and multipurpose venue. With up to 12 exhibits, Arts Space receives over 40,000 visitors per year. Arts Space also houses interactive workshops and a retail shop. Some of the exhibits have required a constant temperature to be maintained in the gallery.

The energy efficiency assessment:

- Was conducted in accordance with AS 3598.1:2014: Energy Audits Part 1: Commercial Buildings.
- Involved a review of 12 months of electricity bills
- Installed a data logger on the main switchboard to capture the electrical load profile of the site
- Analysed data from three weeks of live monitoring
- Included site inspection and staff consultation



Wodonga library and arts space

The energy efficiency assessment identified:

- ⇒ Ongoing savings of \$20,551 per year
- ⇒ Return on investment of 5.25 years
- ⇒ Green house gas emission reduction of 30%

If all recommendations are implemented

ENERGY EFFICIENT COUNCIL BUILDINGS

CASE STUDY: INDIGO SHIRE OFFICE ‘THE PINES’

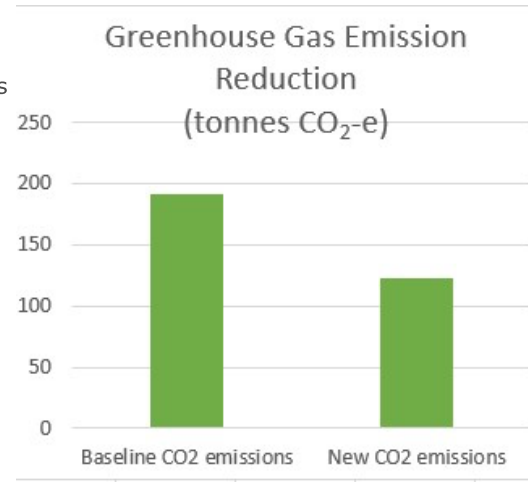
2017

Indigo Shire’s main office building, “the Pines” is located in Beechworth, Victoria. Once part of the Mayday hills asylum, this iconic heritage listed building was built in the 1930s and had a significant internal upgrade when the council purchased the building in 2013. The building accommodates around 45 staff, meeting rooms and the council chambers. The building does not currently have rooftop solar PV.

Wodonga council staff undertook an energy efficiency assessment on the Pines as part of a joint project with Indigo Shire funded under DELWP’s Collaborate Council’s Sustainable Fund Partnership Program.

The energy efficiency assessment:

- Was conducted in accordance with AS 3598.1:2014: Energy Audits Part 1: Commercial Buildings.
- Involved a review of two years’ of electricity bills
- Installed a data logger on the main switchboard to capture the electrical load profile of the site
- Analysed data from three weeks of live monitoring
- Included site inspection and staff consultation



The energy efficiency assessment identified:

- ⇒ Ongoing savings of \$13,484 per year
- ⇒ Return on investment of 5.5 years
- ⇒ Green house gas emission reduction of 36%

If all recommendations are implemented



The Pines at Beechworth