RE-IMAGINING ENERGY CASTLEMAINE

October 7–9, 2018
LAGI 2018 Workshop at the Goods Shed
Castlemaine

LAGI 2018 SPONSOR AND HOST
VICTORIA State Government

LAGI2018
renewable energy can be beautiful

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Re-imagining Castlemaine is an invited design workshop to bring forward ideas for an energy generating public artwork for a site in Castlemaine and is a part of the Regional Centre for Culture program of events.

The project is a regional component of the Land Art Generator Initiative 2018 (LAGI), a global ideas competition for art and renewable energy hosted by the State of Victoria and focused on the St Kilda Triangle site in the City of Port Phillip.

The design process for the Castlemaine artwork will take a creative placemaking and community-oriented design approach while merging on-site renewable energy infrastructure with the landscape, the architecture, and with other environmental sustainability measures.

The Castlemaine workshop will also provide professional development opportunities to local artists, architects, designers and engineers interested in employing energy technologies as the material for their work, and will point to pathways for innovation and experimentation in the delivery of public art.

While there is not yet a commitment to construct the outcome of the Castlemaine workshop, the intention is that the exhibition of the designs from the workshop will lead to a broad community conversation around the future of the site and potentially to the implementation of a project that is informed by the outcomes.
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AGENDA

OCTOBER 7  10am–5pm
10am: Welcome and Presentation:
Renewable energy and the design of public space in the context of a 100% carbon-free economy
10.30am: Introductions over morning tea:
Presentations of participants’ practice
11.30pm: Overview of Design Guidelines and opportunities: Presentations on site history, materials and context
12.30pm: Lunch (catered)
1pm: Exploration of the site and development of a conceptual framework
2pm: Studio work developing initial gestural sketches and narrative
4pm: De-brief

OCTOBER 8  9–5pm
9am: Energy exploration of site and energy audit
11.30–4pm: Studio work, collaborative design and iteration (BYO lunch)
4pm: Debrief

OCTOBER 9  9–7pm
9am–3pm: Studio work - collaborative design and iteration (BYO lunch)
3pm: Production of designs for presentation
5.30pm: Presentations to stakeholders
Networking drinks & nibbles
The Renewable Energy Action Plan sets out how Victoria will ensure a renewable, affordable and reliable energy supply, which uses large-scale renewable energy technology and ensures grid stability. During this time, we will support Victoria’s pathway from a carbon-intensive to net zero emissions energy sector by 2050.

Victoria’s Climate Change Act 2017 establishes a target for Victoria to have net zero greenhouse gas emissions by 2050. Victoria’s Climate Change Framework makes it clear that moving to a clean energy supply by increasing renewable energy generation is a key pillar of the state’s approach to emissions reduction.

Our transition to a modern and renewable energy future is already well underway. Renewable energy is already the cheapest and cleanest new source of energy supply. Increasing our electricity generation capacity will help to reduce power prices. This is one important reason why we have set Victorian renewable energy targets of 25 per cent by 2020 and 40 per cent by 2025. We are continuing to carefully support the transition from emissions-intensive, centralised sources to cleaner and more distributed sources of electricity. Victoria can benefit economically, socially and environmentally from this transformation.

— Minister D’Ambrosio

We contribute to meeting our renewable energy generation targets of 25 per cent by 2020 and 40 per cent by 2025 through running a competitive process for new renewable energy generation projects. The VRET scheme will complement the Commonwealth RET scheme until 2020. The design and flexibility of our scheme will deliver the best projects at least cost.

Energy systems around the world are transforming, driven by rapid development of technologies, changing consumer behaviour, and global demands for cleaner energy. New sources and methods of supply, such as self generation, are emerging at the same time as demand patterns are changing.
Proven technologies are already available to support modernisation of our energy system. These include energy storage, renewable energy generation, demand management and smart grids. By acting now, we give ourselves the best opportunity to capitalise on the transformation and transition smoothly, reducing the risk of higher late adoption costs.

Victoria’s long-term electricity generation profile is transforming and a significant increase in renewable energy generation, from household systems to utility-scale sources like wind and solar farms is anticipated. Today, large-scale renewable energy is already the cheapest source of low-emissions generation.

The transition will gather momentum as renewable energy generation becomes more cost-effective and efficient at residential, commercial and utility-scales.

- Investing in energy storage—We will support commercial investments that aim to provide Victoria with at least 40 MW of battery storage and over 100 MWh of capacity by summer 2018, to help security and reliability of supply and encourage downward pressure on energy bills.

- Investing in large-scale solar energy to power Victoria’s trams —The projects will provide equivalent electricity load to power Yarra Trams’ 400-strong tram fleet, and create up to 300 jobs and $150 million of investment.

Our approach to transitioning the energy system will create jobs, build skills and knowledge for local application, international export of services, and attract capital and investment to our state.

Victoria has a highly skilled workforce underpinned by a world class education system. Building collaborative relationships between research and educational institutions, and international and local businesses, is critical to capitalising on our capabilities within the renewable energy sector.
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DESIGN SITE
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SITE BOUNDARY

Secondary Boundary Area

Primary Boundary Area
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DESIGN BRIEF

Please design your artwork using the following guidelines.

- Consist of a three dimensional sculptural form that creates a pleasing and interesting experience for visitors to the site, designed as a permanent installation that will serve as a contemporary, relevant, and lasting cultural attractor that provides a recognizable image to bolster local character and be proudly associated with the place;
- Capture energy from nature, convert it into electricity, and have the ability to safely store, and/or distribute electrical power to the Goods Shed building;
- Not generate greenhouse gas emissions or other forms of environmental pollution;
- Consider the creation of additional amenities such as shade structure for parked cars, water harvesting for trees, or potential for structure supporting or hosting outdoor events;
- Be pragmatic and constructible, and employ technology that can be scalable and tested;
- Be informed by the history and the details of the design site, and the broader contexts of Castlemaine, Mount Alexander Shire, and the State of Victoria, and their strategic plans;
- Be designed specifically to the constraints of the design site boundary. Proposals may extend overhead to engage with the Goods Shed roof as shown in the plan, but are not required to do so;

You may want to reference other design approaches such as biophilia and environmentally sustainable design. Consider other environmental impacts and relevant design responses to elements such as: stormwater management and water conservation, biodiversity and habitat, embodied energy and water of materials.
SUPPLEMENTAL MATERIALS

The following online materials might be useful as you begin the design process.

**Design Site Photos**
https://www.landartgenerator.org/castlemainesitephotos.zip

**State of Victoria Renewable Energy Action Plan**

**Mount Alexander Shire Council Climate Change Action Plan 2016–2020**

**Mount Alexander Shire Council Environment Strategy 2015–2025**

**Mount Alexander Greenhouse Action Plan**

**Mount Alexander Urban Living Strategy Report**
https://static1.squarespace.com/static/58b7837a8419c2a168e945fa/t/58b9dee69f7456df8f50d4e/1488576240940/MA_Urban_Living_Strategy_2004_Final.pdf

**Southern Loddon Mallee Regional Climate Adaptation Plan and Report**
Supplemental Materials

CONTINUED

Mount Alexander Sustainability Group (MASG) Reference Links

Castlemaine Urban Design Framework 2002

Solar Energy Installations on Heritage Buildings

VicTrack

Castlemaine Goods Shed and Parking Lot
https://www.savekennedystreet.com/victrack-proposal/

Castlemaine Goods Shed Heritage Assessment

City of Castlemaine Architectural and Historical Study 1981 (hard copy available)

Parking Lots
https://www.citylab.com/transportation/2012/03/how-make-better-parking-lot/1628/
Jodi Newcombe is a curator and creative producer specialising in artistic responses to environmental challenges. In 2010, Jodi founded Carbon Arts to facilitate an increased role for artists in generating awareness and action on climate change.

Carbon Arts works with forward-thinking governments, businesses, artists and designers to inject creative talent and thinking into decision-making and to reach broad audiences. Projects include targeted and timely public art commissions, events, workshops, research and curated exhibitions at the nexus of art, science, food, sustainability, policy and design.

Newcombe founded Carbon Arts following an international career as an environmental economist and sustainability consultant. Her work on natural resource management and policy design, green technology and low-carbon urban design inform her work with the creative sector.

In 2014 Newcombe was awarded an Australia Council grant for artistic leadership, which afforded her the opportunity to work closely with global leaders at the forefront of art, science and ecology including the Science Museum in Dublin, Future Everything in Manchester, the Cape Farewell Project in London and COAL in Paris.

Newcombe is a member of the International Advisory Committee of ISEA International (the International Symposium of Electronic Arts); a research associate with RMIT’s Centre for Art Society and Transformation and is currently a PhD candidate at QUT in Creative Industries.
Geoff Crosby, architect, moved his practice CROSBY architects from inner Melbourne to Castlemaine in 2008 to concentrate his efforts in the regional town.

Back in 1993 he established Green City Homes to work alongside the Australian Conservation Foundation and Energy Victoria to franchise energy efficient project homes for the mass housing market. Unfortunately this did not get traction at the time but led to many single house designs that looked at materials selection, energy use and occupant behaviour as guiding principals.

In 2006 he designed Elwood Green, a 27 unit residential building in Melbourne incorporating cross ventilated appartments, water tanks and a PV array with lobby monitoring. It was also the first apartment building in Australia to include a wind turbine to generate electricity.

In conjunction with Lifehouse Design from Castlemaine, Crosby won the inaugural Building Designers Association of Victoria 10 Star Challenge, in 2011, for his design of the FLIP_FLOP house.

In 2013 the Bull Street Terraces designed by Crosby became Australia’s first medium density residential project to be registered with the Living Building Challenge. This was followed by the design of the Paddock, a cluster housing development of 27 homes in Castlemaine, also registered with the LBC and about to start construction.
Elizabeth Monoian is the founding co-director of the Land Art Generator Initiative (LAGI). In this role she is developing global partnerships between private and public entities around interdisciplinary projects that address issues of climate and sustainability through the lens of creativity. She works closely with cities, universities, corporations, arts organizations, and community groups to design customized approaches to renewable energy installations.

She has published, exhibited, and presented globally on the aesthetics of renewable energy and the role of art in providing solutions to climate change. Under her leadership, LAGI has received multiple National Endowment for the Arts grants and has been awarded the J.M.K. Innovation Prize, a program of the J.M. Kaplan Fund. She holds an MFA from Carnegie Mellon University.

Robert Ferry is the founding co-director of the Land Art Generator Initiative and Studied Impact Design. His architectural focus is on designing places that achieve complete harmony with their local and global environments and with the people who use them. His “positive-impact” buildings that double as renewable energy power-plants have been published in Superlative Emirates (Daab Publishing), Popular Science magazine feature articles, and have been shown at international exhibitions.

With roots in new urbanism and environmental design, Robert has had the privilege to design and work on a wide range of net-zero and LEED certified developments, from single-family residential through $500 million mixed-use projects including Project 1 at Masdar City, Abu Dhabi. Robert is a graduate of Carnegie Mellon University and a LEED-accredited licensed architect.

As co-director of LAGI he has received multiple National Endowment for the Arts grants and has been awarded the J.M.K. Innovation Prize, a program of the J.M. Kaplan Fund.

Euan Williamson brings extensive skills and knowledge to any project team built on over 17 years experience in sustainable design (ESD) and sustainable energy project development. He is currently the ESD Advisor to the Statutory Planning Department at the City of Yarra, and continues consulting for business and government on sustainable energy projects in Victoria, New South Wales and India. As part of his business, Creative Environment, Euan built Germinate, Australia’s largest fully integrated mobile renewable energy powered sound and lighting system, and has decades of experience working with the arts and events industries.
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Samantha Downing
Samantha Downing is a landscape architect with a career-long focus on people and landscapes that has taken her through the realms of education, permaculture design and performance. Sam has a particular interest in process in design, engaging with how landscapes change over time, and the value of making small interventions for maximum benefit. She loves the experience of wild landscapes. Exploring participation through dance performance led to the development of her dance workshop project the Body Appliance Revival Experience (B.A.R.E.). Sam is currently lecturing and tutoring in urban ecosystem design at the University of Melbourne.

Jim Coad
Jim Coad has presented works at numerous Arts Festivals and events in Australia, including the Gertrude Street Projection Festival, Castlemaine State Festival (Vic.), Alice desert Festival (NT.), Junction Arts Festival (Tas.). Other projects have included gallery installations, collaboration with theatre makers and public interventions. He established Video Architecture in 2011 as a platform for large scale architectural projection works, and has collaborated with numerous artists both in Australia and Europe.

Although working in the digital realm, his work usually originates from physical arts media, (paint, charcoal and pencil) resulting in pieces that have a uniquely organic nature. He has also worked in remote indigenous communities as a filmmaker. His works often incorporate themes relating to community, social and environmental justice. There is also a strong interactive and community engagement aspect to much of his work.

www.videoarchitecture.com.au

PARTICIPANTS
Dr Greg Giannis
My practice involves the creation of public art that engages environmental issues. I utilise cutting-edge technologies giving me the ability to work across the disciplines of art and technology. I run maker spaces for children where the emphasis is on sustainability, recycling and creative reuse of discarded electronics, and I am one of the organisers of SCANZ 2019, an art festival in Central Queensland, addressing reef issues.

Callan Morgan
Callan Morgan is inspired by both the natural world and the mechanical world. His sculptural work melds these polarities by combining modern technology and biological themes to create seemingly unlikely harmony between the two. He is also the founder and director of Pelican Studios in Coburg, a Creative space that provides a platform for large-scale collaborations that blend a wide range of technical, design and artistic skills.

Cy Gorman
Nurobodi founder Cy Gorman works with individuals, groups, and communities to redefine and design the roles that ambient light and sound spectrums play in enhancing wellbeing.

As a researcher his focus is on developing quantitative and qualitative data links between microtonal differences of pitch perception & colour saturation or brightness that stimulate and relax cognitive & emotional feedback loops between the limbic and autonomic nervous systems.

www.cygormanvisual.com

Open Spatial Workshop (OSW)
Open Spatial Workshop (OSW) is a collaborative art group comprising Bianca Hester, Terri Bird and Scott Mitchell. Over the past 13 years OSW has produced a broad range of work spanning public art, sculpture, installation, curated events, publications and video production. OSW's most recent projects, such as the 2017 exhibition Converging in Time at MUMA, have explored connections between materiality, the shaping of territories and the various politics inscribed in place.
Jordana Maisie

Jordana Maisie’s work has a profound commitment to user experience; creating innovative design-solutions with a dedication to artistic thinking and the latent potential of materials, craftsmanship and technology. Maisie has made work for Vogue, IBM and Feit. In 2014, she was invited to The White House to create an installation for The First Lady, Michelle Obama. After working for world-renowned studio Diller Scofidio + Renfro in NYC, Maisie made the move to LA where she is Creative Director of an Inter-disciplinary design studio focusing on an array of architectural, object and lighting design projects.

With a background in photography, video production, sound engineering and interactive installation art, Maisie brings a fresh interdisciplinary approach to the art, architecture and design contexts.

Andy McDonell

Andy’s design proficiency is wide and diverse. His toolset includes digital and paper based concept visualisation, 3d modelling, detailed structural drafting, and presentational plan sets combined with hands on fabrication across a full spectrum of materials and machinery.

He began working in theatre and film in 1999, gathering broad experiences in props model making, set building, sculpting and special effects.

In 2005 he began the Bachelor of Theatre Design at NIDA, graduating with the William Fletcher Trust Grant in 2007. He has since extended his training with both Urban and International Development permaculture design certificate’s in whole system ecological design.

From his love for the moment fostered in temporary, or semi permanent design, Andy is extending his practice to design environments to facilitate the evolving stories of people on a trans-generational timescale.
Pierre Proske

Pierre Proske is an electronic media artist specialising in interactive installations and immersive experiences. He is also the founder and director of electronic media arts organisation Media Lab Melbourne and runs his own design studio Sensory Empire.

Pierre is intrigued by the pervasiveness of technology in science and culture and its relationship to nature. After years of juggling parallel interests in technology and the arts, Pierre tired of the schizophrenia and finally discovered that it was socially acceptable, in fact highly desirable, to merge the two. Consequently he has taken on the ambitious task of rendering computers accountable to our sometimes misplaced but inevitable humanity.

Proske’s work involves exposing the unspoken relationships we have with technology and harnessing machines into exploring new aesthetics. Both resisting and exploiting modern techno-utopian trends, Proske employs humour and a whiff of self-deprecation as weapons against the invasion of computer augmented realities. Alongside electronic art projects he also works as a sound designer and electronic musician. He has exhibited or performed in Australia, Sweden, Bhutan, Peru, Canada, Iceland, Brazil, Japan, Austria and the Netherlands.

www.sensoryempire.com

Cameron Robbins

Cameron Robbins works to make tangible the underlying structures and rhythms of natural forces. He has a studio and travel based practice, making installations and exhibitions transcribing natural forces into drawings and sound works, in art centres and other sites in Australia and around the world including Japan, Norway, Switzerland, South Korea, China, Denmark, Germany and the UK. He has mounted over 20 solo exhibitions.

In 2016, Cameron presented in Museum of Old and New Art (Tasmania) their first solo exhibition by an Australian artist.Field Lines 2016 over 9 galleries within, and installations outside, the Museum.

In 2018 Cameron installed a new major permanent work at MONA. Wind Section Instrumental is a 50 year wind drawing project installed outside and inside the Roy Grounds library, destined to produce over 2000, 5 metre/10 day long ink drawings on watercolour paper.

Robbins performs as a jazz and experimental musician on clarinet and saxophone. He is a part time lecturer in Sculpture at RMIT since 2000. Studied Fine Art (Sculpture) at RMIT and the VCA to 1990; awarded Australia Council Visual Arts Fellowship in 2015, and New Work Grants in 2011 and 2013. He lives and works from Castlemaine Australia. He is represented by MARS Gallery in Melbourne, and Stockroom in Kyneton, Victoria.
Alex Sanson

Alex Sanson has been working as a sculptor and designer since the early 1990s, with a focus on interactive, kinetic and playful works as well as architectural and domestic metalwork and design.

His award winning smaller-scale pieces have been on show in many galleries including Flinders Lane Gallery, Living Arts Space in Bendigo, Horsham Regional Art Gallery, Lost Ones in Ballarat, Stockroom in Kyneton, Lot 19 in Castlemaine and Yering Station in the Yarra Valley.

Larger scale works include: Spherophyte and Nebulous installed in Melbourne for White Night 2017; Small Revolutions, an interactive and kinetic installation, commissioned by Melbourne Fringe Festival for Federation Square and kinetic and other installations at Real Festival in Sydney, Spilt Milk Festival in Canberra, WOMAD, Rainbow Serpent Music and Arts Festival, Stringybark Sustainability Festival, The Outback Eclipse Festival…

Permanent works include an interactive tactile fountain for the SCOPE Chelsea Day Centre for people with cerebral palsy; works at many primary schools; sculptural lighting installations for various restaurants, sculpture for a roadhouse in the desert…

Alex is currently working on a ‘Dangerous Art’ sculpture with a school in the Mallee and two kinetic, landmark commissions.

www.metaform.net.au

Maria Simonelli

I work and play at the intersection of the arts and sciences to provide creative and energising approaches to build individual and organisational capacity and ultimately social change. My vision is to create vibrant and sustainable communities through facilitating partnerships.

I believe the arts, through all its creative expressions, can act as a powerful facilitator for social change and sustainability is the thread that links all my work.

I’m interested in working with projects and people that foster collaboration and knowledge exchange between disciplines, opening up new ways of seeing, experiencing and interpreting the world around us.

www.msimonelliportfolio.com.au
Jane Toner

As Australia’s first certified Biomimicry Professional and Specialist, Jane Toner brings a unique skillset and point of view to all of her endeavours. Jane seeks to inspire innovative regenerative design solutions by drawing on the successful strategies Nature has evolved over 3.8 billion years of evolution. Jane is the Founder of Biomimicry Australia, a collaborative dedicated to promoting the understanding and uptake of Biomimicry.

With over 15 years experience as a Sustainability Consultant, Jane has developed an in-depth knowledge of, and experience in working with, a vast array of Ecologically Sustainable Design (ESD) Assessment tools that include: the Living Building Challenge, Green Star, LEED, EC3 Ecotourism standards and One Planet Living. Jane’s expertise has been recognised by invitations to adjudicate sustainability awards and competitions, including the AIA Victorian Chapter Sustainability Prize and Biomimicry Global Design Challenge.