



# **GATERIDGE COURT OFFICES** Commercial Development 102.5 kW

# FOUNDER'S LETTER

I firmly believe in the power of clean energy to transform our world.

In 2006, I returned home to the Midwest after spending 12+ years serving in the US Navy SEAL teams and working elite security details in Asia, Africa, and the Middle East. I was intimately aware of the issues surrounding carbon-based energy sources and wanted to pursue energy alternatives that could increase global security and create a healthier planet. This became my mission.

When we incorporated Ideal Energy in 2009, we were among the first dedicated solar energy firms in lowa. We saw a tremendous resource in the Heartland's abundant sun. lowa's solar industry was just beginning with a few small demonstration projects across the state. We saw the opportunity to bring solar technology to the forefront and participate in building the industry from the ground up.

I'm proud to say that today Ideal Energy has grown into one of the leading solar firms in the Midwest, installing clean solar energy systems for residents, businesses, farms, communities, and utilities. From our headquarters in Fairfield, lowa, we engineer, design, deploy, and maintain the Midwest's highest quality solar installations.

We're committed to this industry because of the positive effects we see from it: the cumulative effect of carbon emission reductions, contributing to creating greater resource security, the power to bring communities together, and the opportunity for economic growth that creates a more vibrant world. Solar energy is changing our lives and the way our world is powered.

I invite you to join us on this journey.

Sincerely,

Troy Van Beek Founder, CEO



# COMPANY OVERVIEW

ounded in 2009, Ideal Energy is Iowa's pioneering solar energy firm.

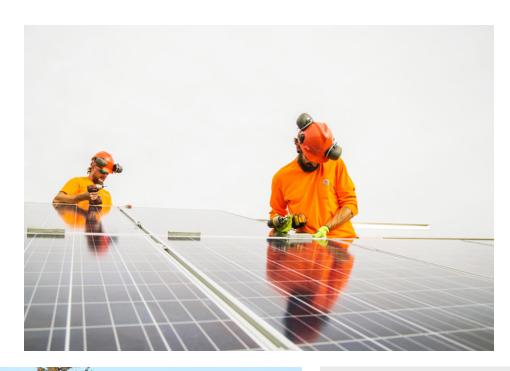
Our significant installation experience, comprehensive portfolio, and innovative financing have made us a leader in the Midwest.

Ideal Energy's in-house design, construction, and service teams manage all aspects of our solar installations with professional engineering, procurement, and construction (EPC) services, providing a single point of contact for your project.

With 100+ operational solar installations across the Heartland, Ideal Energy is an experienced industry leader. Our expertise is demonstrated in the reliability of our system design and construction, verified solar production, optimized system integration, and satisfied customers.

Our company is committed to providing forward-thinking solar solutions, outstanding service, and the highest quality construction available in the solar industry today.

We empower businesses, governments, institutions, and utilities to evolve with quality solar energy solutions that are secure, efficient, and affordable.

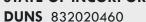






# **COMPANY INFORMATION**

NAME Ideal Energy, Inc.
YEAR INCORPORATED 2009
STATE OF INCORPORATION Iowa



CAGE 6K4X3

NAICS Primary: 221114 (Solar Electric Power Generation) Related: 237130, 238210,

238220, 238290, 493110, 541330, 541611, 541690

**SDVOSB** Ideal Energy is a certified Service Disabled Veteran Owned Small Business

**NABCEP** 102451-011916

LICENSED ELECTRICAL CONTRACTOR EL-115373-EC





# SEAMLESS SOLAR INTEGRATION

The Ideal Energy team offers industry-leading Engineering, Procurement, and Construction (EPC) services for solar projects of many sizes.



# **DESIGN**

**ENGINEERING STUDIES:** We start with an in-depth engineering study to determine the specific structural and electrical needs of your project. We specify world-class modules, inverters, racking, monitoring, and storage solutions with proven long-term durability and performance, prioritizing American-made products.

**FINANCIAL ANALYSIS:** We prepare an investment-grade financial report based on the project specification, analyzing the project for financial incentives to maximize your return on investment.

**SPECIALIZED CONSULTING:** We offer niche consulting services for project development, including feasibility studies, interconnection agreements, rate structure analysis, equipment comparison, and more.

# BUILD

**PROJECT MANAGEMENT:** Your dedicated Project Manager will guide you through the entire installation process, coordinating all activities between project development and final commissioning. We take pride in delivering quality installations on budget and within project deadlines.

**SOLID, SAFE CONSTRUCTION:** Ideal Energy follows the highest safety and construction standards available in the solar industry today, including NABCEP certified design and Cal-Fire Regulations. Our teams are OSHA certified and frequently conduct advanced safety training and reviews.

**COMMISSIONING & TURNOVER:** After system commissioning and performance verification is complete, we turn over the project with complete documentation and system warranties, and provide owner training.

# **MAINTAIN**

**LIVE MONITORING:** Our systems are outfitted with state-of-the-art monitoring hardware that ensures the solar installation is running optimally. Our software aggregates data, including production and weather data, giving a complete picture of system performance. Our monitoring portals are accessible through any Internet-connected device.

**OPERATIONS & MAINTENANCE:** Our service team performs preventative, predictive, and corrective maintenance, emergency response as needed, and remote monitoring of production data. Our recommended annual service includes cleaning panels and physically checking connections.

**WARRANTIES:** We offer an in-house, five-year service warranty on our solar installations. Our solar components carry warranty options up to 25 years. Our financial modeling includes warranties and product life-cycle on your payback analysis.



# FORGED IN THE SUN

**Steffensmeier Welding & Manufacturing is anticipating a bright future.** Completed in 2015, the company's solar field is one of the largest projects of its kind in lowa.

The installation will provide 100% of the company's current electrical needs for fabrication, manufacturing, and delivering the fine craftsmanship that is the cornerstone of the Steffensmeier tradition. The company is the first fully solar-powered manufacturing and fabrication business in lowa.

"There has been a history of development and growth at Steffensmeier, which will only get stronger as we're able to use our solar savings to grow our business and provide more classes, training, and benefits to our employees.

-Jenny Steffensmeier
Owner, Steffensmeier Welding & Manufacturing

**LOCATION** 

Pilot Grove, IA

PROJECT SIZE 430.66 kW

**ANNUAL PRODUCTION** 548,981 kWh

ANNUAL SAVINGS \$92,000

**25 YEAR UTILITY SAVINGS** \$2,480,012

**CARBON EMISSION REDUCTION** 8,917 metric tons of CO2







# EXPERIENCE **TERRY'S FEED** Agricultural 32.24 kW

# OUR **EXPERIENCE**

# We design and install reliable solar installations with proven results.

Ideal Energy holds the distinction of being one of the first established solar energy firms in lowa. Our construction standards, industry expertise, and political involvement have helped to shape the state's clean solar economy, setting the bar for quality installations.

Performance is our priority. With hundreds of solar installations under our belt, we've meticulously monitored our production results. Our return on investment (ROI) and production estimates are based on real solar data, and give a solid picture of what a realistic payback should be.

We understand the specific concerns when transitioning to solar energy, including maximizing the project economics and return on investment, minimizing site impact and working around existing infrastructure, permitting and approvals, weatherproofing and wind-loading, and creating minimally invasive interconnection points.

Join the hundreds of Midwest organizations, including farms, businesses, governments, and educational institutions, who have chosen Ideal Energy for their solar energy provider.

# **INDUSTRIES WE SERVICE**

- Agriculture
- Commercial
- · · · · ·
- Industrial
- Utility
- Government
- Educational
- Developers
- Residential



# **FAIRFIELD PUBLIC LIBRARY**

**LOCATION** Fairfield, IA

**PROJECT SIZE** 17 kW

**ANNUAL PRODUCTION** 22,221 kWh

**25 YEAR UTILITY SAVINGS** \$69,774

**CARBON EMISSION REDUCTION** 361 metric tons of CO2



# **SCHAUS VORHIES MANUFACTURING**

**LOCATION** Fairfield, IA

**PROJECT SIZE** 500 kW

**ANNUAL PRODUCTION** 651,809 kWh

**25 YEAR UTILITY SAVINGS** \$2,301,319

**CARBON EMISSION REDUCTION** 10,587 metric tons of CO2



# STUFF ETC

**LOCATION** Coralville & Cedar Rapids, IA

PROJECT SIZE 443 kW

**ANNUAL PRODUCTION** 518,668 kWh

**25 YEAR UTILITY SAVINGS** \$1,360,369

**CARBON EMISSION REDUCTION** 7,955 metric tons of CO2



# **IOWA STATE BANK**

**LOCATION** Fairfield, IA

**PROJECT SIZE** 64 kW

**ANNUAL PRODUCTION** 71,188 kWh

**25 YEAR UTILITY SAVINGS** \$163,853

**CARBON EMISSION REDUCTION** 1,361 metric tons of CO2



# **GRINNELL COLLEGE**

**LOCATION** Grinnell, IA

**PROJECT SIZE** 

19.5 kW

**ANNUAL PRODUCTION** 27,675 kWh

**25 YEAR UTILITY SAVINGS** \$70,327

**CARBON EMISSION REDUCTION** 474 metric tons of CO2



# **MAHARISHI UNIVERSITY OF MANAGEMENT**

**LOCATION** Fairfield, IA

**PROJECT SIZE** 54.5 kW

**ANNUAL PRODUCTION** 61,784 kWh

**CARBON EMISSION REDUCTION** 941 metric tons of CO2



# SCHOOLHOUSE APARTMENTS

# **Reviving Public Infrastructure**

Derelict school buildings dot the prairie in lowa's small towns.

The Fort Madison Middle School was one of them until Todd Schneider, a southeast lowa visionary, purchased and renovated it. Built in 1922 and decommissioned in 2013, the Middle School almost ended up in a landfill: when Schneider got involved, the city was already accepting bids for its demolition. From his previous experience renovating a Catholic school, Schneider knew he could successfully transform the Middle School into high quality, affordable apartments.

The retrofit incorporated a 300 kW solar array (200 kW roof mount and 100 kW car port) which powers 37 apartments, each with a unique floor plan, ranging in price from \$600 to \$1,300, including all utilities and Internet service. Months after completion, the building was 90% occupied.

LOCATION

Ft. Madison, IA

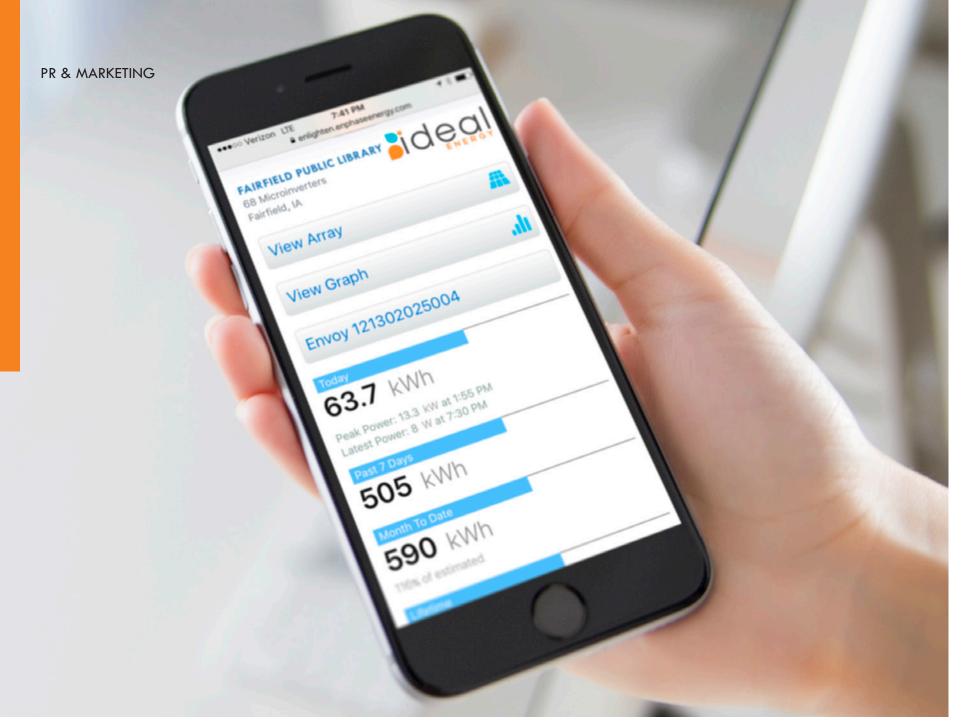
PROJECT SIZE

300 kW

**EST. ANNUAL PRODUCTION** 403,192 kWh

**EST. 25 YEAR UTILITY SAVINGS** \$1,019,226

**EST. CARBON EMISSION REDUCTION** 6,905 metric tons of CO2







# PR & MARKETING **SERVICE**

We help you create meaningful & effective brand recognition around your solar transition.

# **INTERACTIVE MONITORING KIOSKS**

Showcase your clean energy production with our custom touchscreen monitoring kiosks. Feature photos of your project, information about your organization, and a live energy production feed.

# **CONTENT CREATION & PLACEMENT**

Get media coverage about your solar project that strategically builds your brand and targets your key audience. Our storytelling capabilities bring your solar project to life in industry magazines, feature articles, newspapers, and in printed and digital media. We generate content and provide media training for successful PR interactions.

# **VIDEO PRODUCTION**

Inspire your audience to take action with the story of your transition to solar energy. The creative team at Ideal Energy offers quality video production services, including filming and editing.

# **PUBLICITY EVENTS**

Events can have a big impact in sharing your solar success story and create the opportunity to build relationships and community support. Complement your solar transition with an event that makes you the focal point. Our team will assist with planning press announcements, ribbon cutting ceremonies, and tours that will draw an audience of press, politicians, special guests, and community members.

# **TROY VAN BEEK**

#### **FOUNDER & CEO**

Troy founded Ideal Energy because he recognized an urgent need to implement sustainable solutions to growing environmental and homeland energy security issues. Hailing from a background in the elite military, Troy possesses an intimate understanding of the true cost of securing energy resources, and the demonstrated positive solutions that clean, renewable energy can offer. Troy has transformed his unique leadership skills gained in the Special Forces to create a company and dedicated team that is committed to deploying forward-thinking solar solutions, outstanding service, and the highest quality of construction available in the solar industry today. Troy has extensive experience in implementing sustainability strategy on a community scale. He has served on the Go Green Commission for Fairfield, lowa, where he participated in the drafting and implementation of a comprehensive sustainability plan for the City, of which many objectives have been achieved today.

Troy is a former member of the United States Naval Special Warfare Command, where he served on the Navy Sea, Air and Land Team (SEAL Team) both in active duty and as an instructor. Troy has conducted post-military operations through the United States Department of State (DoS), including the role of Lead Sniper on the Presidential Security Detail for Hamid Karzai, Kabul, Afghanistan where he managed detailed operations for 40+ man crews of both US and Afghani troops. Troy holds a BS in Sustainability from Maharishi University of Management.

EMAIL: troy@idealenergyinc.com

## **BRIAN ROBBINS**

## **ELECTRICAL TEAM LEADER, LICENSED MASTER ELECTRICIAN**

Brian is a seasoned master electrician with superior knowledge of photovoltaic technology, including ongrid/off-grid system design and battery-based systems. Brian is diligent and detail-oriented, and delivers top quality electrical work that frequently exceeds code requirements. Brian has a demonstrated ability to complete projects within time-frames and on budget while providing leadership to multiple teams. Brian is exceptionally adept in training junior and apprentice electricians in photovoltaic and battery technology. Brian is knowledgeable regarding OSHA and NEC issued safety protocols applicable to photovoltaic electrical engineering and maintains Ideal Energy's NABCEP certification.

**LICENSES:** EL-096813-MA, NABCEP CERT # 102451-011916

**EMAIL:** <u>brian@idealenergyinc.com</u>

#### **BRANDON NEIL**

#### SENIOR PROJECT AND OPERATIONS MANAGER

Coming from a strong background in construction, Brandon has quickly risen as a manager at Ideal Energy. Brandon's resourcefulness, flexibility, and innovation make him a professional project manager with considerable knowledge of renewables and sustainable construction technology. Brandon is one of Ideal Energy's longest serving employees and has extensive experience across all facets of Ideal Energy's operations, including siting, engineering, design, construction, permitting, and project management. Brandon possesses excellent organizational, planning, and time management skills as well as a consistent track record of improving efficiency. Brandon manages and coordinates all company construction activities and consistently delivers quality projects on or ahead of schedule. Brandon holds a degree in Sustainable Living from Maharishi University of Management.

EMAIL: brandon@idealenergyinc.com

#### KATIE GREENFIELD

#### CHIEF FINANCIAL OFFICER

Katie is Ideal Energy's Director of Finance and administers all activities and company policies relating to treasury and finance. Katie has over a decade of experience between the construction and finance industries. Originally a managing partner of Greenfield Properties, Katie oversaw the development of 22 construction projects in two years, including the development of an off-grid community. Prior to joining Ideal Energy Katie owned a financial consulting company in Los Angeles servicing start-up and medium-sized companies, as well as non-profit organizations, in over 10 different industries. Katie is responsible for the development and procurement of financing for Ideal Energy's first power purchasing agreement (PPA), which was put into service in January of 2015 and was one of the first operational PPAs in Iowa. Katie graduated from Maharishi University of Management with a BS in Business Management.

EMAIL: katie@idealenergyinc.com

#### **CHANNING CONGDON**

## **DIRECTOR OF DESIGN, FINANCE & DEVELOPMENT**

Channing leads Ideal Energy's design department, and directs business development and strategy at Ideal Energy. Channing has a background in financial modeling and IT, and has developed Ideal Energy's proprietary solar proposal and job costing software. Prior to joining Ideal Energy, Channing worked with Centerpoint Investment Strategies, where he developed model portfolios with senior wealth advisors, studied asset allocations for different risk tolerances, and modeled portfolio implementation. Channing has studied at the University of Iowa College of Engineering and holds a Bachelor of Mathematics from Maharishi University of Management, where he co-founded the University's Sustainability Club.

**EMAIL:** <a href="mailto:channing@idealenergyinc.com">channing@idealenergyinc.com</a>

# **ROBERT GONGWER**

#### **SENIOR CONSULTANT**

Robert has comprehensive knowledge of the solar electric generation industry, including project development, design evaluation, implementation, and production analysis. Robert has supervised the engineering, procurement, and construction (EPC) for a diverse range of photovoltaic installations, from residential projects to large-scale commercial installations in lowa. Robert possesses in-depth knowledge of industry-specific application tools and design software and is familiar with the construction standards and guidelines of the solar power generation industry. Robert's decade-long background in organizational management makes him proficient in generating sales, managing teams, streamlining processes, creating effective communication, identifying issues, and creative problem solving.

Robert holds a Bachelor of Arts in Industrial and Organizational Psychology (I/O) from California State University, Fullerton, and a Masters of Business Administration & Sustainability from Maharishi University of Management.

EMAIL: robbie@idealenergyinc.com



