



SOLON Solar Solutions for Wastewater Treatment Plants.

SOLON
Don't leave the planet
to the stupid

Solar power pays off for the environment.

Purchasing solar energy today will save up to 30% of your energy costs over the lifetime of the system, helping you lower your operating costs immediately – especially when you have an experienced partner at your side. SOLON offers a full-range of services for solar power plants from manufacturing the solar panels to commissioning the turn-key power plant and putting financing in place with a PPA (Power Purchase Agreement).

Saving energy costs. Today and tomorrow.

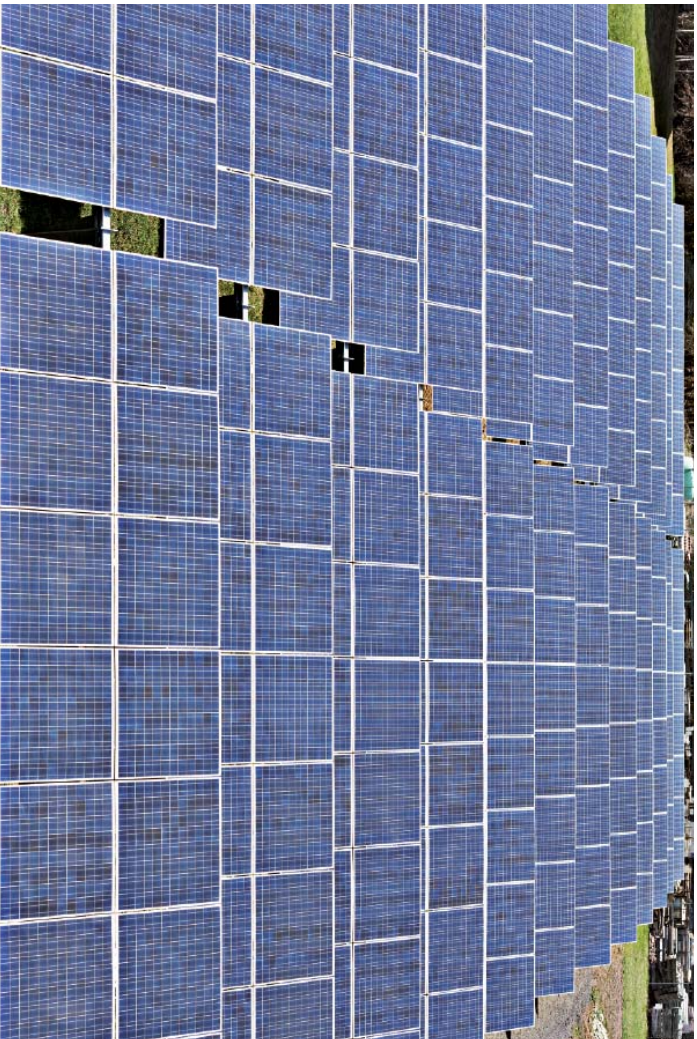
Energy costs associated with operating a Wastewater Treatment Plant (WWTP) account for 15 – 40% of a facility's total budget; they're also one of the easiest expenses to control. With conventional sources of energy, fluctuating costs are directly passed down to the treatment rates for users. Solar energy helps to reduce and stabilize these costs.

Costs for solar power are constant as the rates are locked today for the next 20 – 30 years. Supplementing your power portfolio with solar energy today is an ideal way to hedge against the unpredictable rising cost of electricity.

Why not benefit today and in the future from cuts in annual electricity costs – and save ratepayers' money?

Benefits of Solar for Wastewater Treatment Plants

- > Sustainable energy source: the sun is an infinite resource that generates zero pollution
- > Carbon-free electricity, corresponding to peak demand periods
- > Reduced electricity bills
- > Reliable performance
- > Minimal maintenance
- > Fast commissioning
- > Flexibility and scalability of systems
- > Efficient land use
- > Low risk



Blend green initiatives with low-cost energy – especially when demand is at its highest.

In some regions of the U.S., daytime electricity rates can be up to five times higher. The generation profile of solar energy ideally aligns with peak demand periods. Typically when the utility rates are also at their peak. Take control today and offset the most expensive electricity with solar.

Effective use for otherwise non-developable land.

Solar power is generated directly on-site, efficiently converting land to energy. Solar systems are modular and can be deployed roof-mounted or ground-mounted, fixed-tilt or single-axis tracking. They also can be configured in multiple sizes, from a few kW's up to hundreds of MW's.

Clean energy. Reliable energy.

Solar PV directly converts sunlight into electricity delivering clean, renewable power without any emissions or noise pollution. Solar is among the most reliable sources of energy with minimal volatility. It has no moving parts and requires only minimal maintenance, making it a highly reliable energy generation method.

Environmental excellence.

Achieve the best of worlds by both succeeding in the industry and taking a step ahead in environmental and ecological responsibility. Using solar power is as much an additional value to your customers as it is a commitment to sustainable water supply and wastewater treatment service.

By offering the complete service from technology to financing solutions, SOLON puts you in control to take all these benefits in stride.

The Secret to high yields. Experience and expertise.

As a general contractor, SOLON has many years in constructing turnkey power plants – from planning and construction to commissioning and maintenance. We have installed systems throughout the world with a total capacity of over 180 MW since 2005.

Superior quality.

SOLON modules are known throughout the industry for their high quality and efficiency. We use only premium module components, including highly efficient cell technologies, highly transparent solar glass, and innovative connection technology.

Intelligent system design.

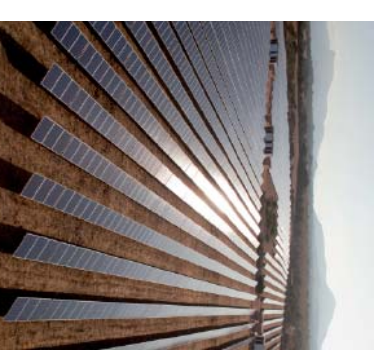
Using state-of-the-art technology and the most current safety standards, SOLON is a pioneer in the implementation of fixedtilt and as single-axis tracking photovoltaic systems, including implementation of an intelligent SCADA monitoring system.

Project management.

As an integrated general contractor, SOLON develops all planning steps for you from surface coverage to implementation. SOLON's systems are purposefully designed to provide the highest output kWh/kW solar power plants, with the fastest design, permit and construction cycle times.

Benefits of Solar for Wastewater Treatment Plants

- > Complete service from planning to financing
- > Innovative SOLON systems for every location and customer requirement
- > High-efficiency technology and supreme quality for high long-term high
- > Components optimally tailored to one another for maximum performance and comprehensive guarantees
- > Internationally proven and standardized PV systems
- > Proven track record with optimally integrated WWTP plants



SOLON capital investments with solar electricity

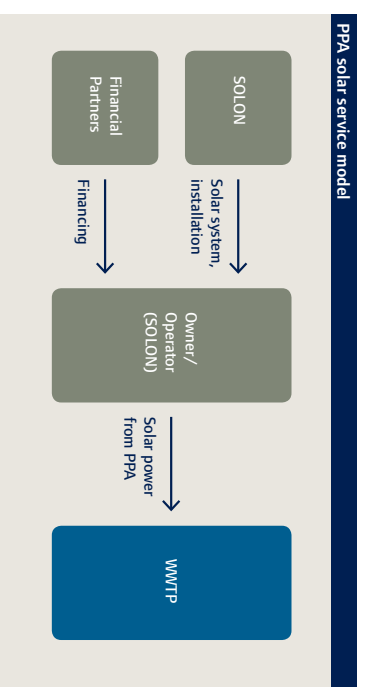
Your investment pays off for the environment. But most of all, it pays off for you.

Purchase green energy through upfront ownership or a long-term PPA.

When it comes to buying a solar power plant, there are a variety of financing options. You can choose between an upfront purchase and ownership of the plant, or entering into a Power Purchase Agreement (PPA), which has the benefit of having predictable rates over the life of the contract, with predictable rates, and with options to buy throughout the contract.

PPA is a low risk option.

With SOLON as the finance provider, we assume all responsibility for the entire plant management over the entire period of operation. SOLON drafts a business plan, sets up the right type of company for the respective legal and fiscal conditions, reducing time and effort for WWTP to a minimum.



For wastewater treatment customers this means that buying solar energy will be as common as buying electricity from your current utility. The structured long-term PPA has no upfront costs and delivers immediate savings on electricity costs.

Success story: Wastewater Reclamation Facility Roger Road

\$2,000,000 savings over the 20-year PPA agreement.

"SOLON is a highly valued member of our local community. SOLON's 1MW project is our first and presented several unique contractual, utility and siting challenges. SOLON provided great leadership, flexibility and collaboration regarding resolution of all issues. We look forward to establishing additional solar electric solutions with SOLON."

Terry Firenack, CPM, Chief Contracts & Procurement Manager, Pima County

The Pima County Regional Wastewater Reclamation Department (PCRWRD) operates two large metropolitan facilities in and around the Tucson, AZ area.

As a leader in sustainable business practices, the Roger Road plant (41 mgd) had already implemented several measures to minimize energy use and reduce costs, including a Combined Heat and Power (CHP) system and energy production from digester gas .

SOLON was selected to provide engineering, construction and operation of the single-axis tracking system and further offered a financial strategy, selling electricity at a fixed rate.

A winning combination for all, especially PCRWRD's ratepayers who will save \$2,000,000 through the 20-year PPA agreement with SOLON.



Roger Road, Arizona	
System	Single Axis tracking
Nominal output	1.07 MW
Modules	3,960 modules SOLON Blue 270
Annual energy output	2,245,000 kWh/a
Installation completed	Q1 / 2010
Energy replaced	15%
Production over 20 years	42,031,850 kWh
Annual CO ₂ savings	1,777 t/a

Success story: City of Boulder, CO

Savings of \$43,000 in the first year.

"SOLON has done a very good job constructing the PV facility. Their work quality has been excellent. SOLON has been easy to work with, specifically their patience and flexibility regarding a few significant site obstacles including the relocation of a prairie dog colony, and working around delineated wetlands. I would welcome the opportunity to work with SOLON staff on another project."

Douglas Sullivan, PE, Utilities Project Manager, City of Boulder

The City of Boulder is constantly evaluating various renewable energy technologies as part of the city's Climate Action Plan in an effort to reduce the city's energy use and carbon footprint.

Serving over 100,000 people, the wastewater treatment plant (with approximately 7.4 MWh annual electricity usage) represents the city's largest single energy requirement, so the opportunity to reduce the plant's electricity costs was a high priority.

The construction of a Solar PV facility at the wastewater treatment plant was a good match because it had available acreage to construct the facility on city property. Replacing 15 – 18% of its electricity load with clean power, the city realizes savings of \$43,000 in its first year of operation.



City of Boulder, Colorado	
System	Fixed-Tilt
Nominal output	1.0 MW
Modules	4,452 modules, SOLON Blue 220
Annual energy output	1,553,000 kWh/a
Installation completed	Q1/2010
Energy replaced	15 – 18%
Production over 20 years	28,957,776 kWh
Annual CO ₂ savings	1,229 t/a

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