



eviShine

your energy app

www.evishine.com

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The objective with eviShine, as an all-in-one solution, is to make renewable energy easy to use and understand for many stakeholders e.g. decision makers, technicians, scholars and end-users.

In short, eviShine collects and visualises Energy Generation (e.g. solar panels, heat pumps, windmills) and/or Energy Usage (e.g. electricity, water, heat) along with Energy Sensors such as solar irradiance and temperatures. All energy data through eviShine can be applied differently and adapted by need; e.g. a customised web page for public review, smartphone applications for iPhone/Android, Monitor solutions for the reception/lobby, education modules for kindergardens, elementary school and high schools. In addition, a large number of accessories are available to support eviShine users.

With eviShine as a toolkit, energy data becomes available at all times on one single platform, which can be aesthetically designed for public view to demonstrate energy results, behavior and savings. This means that complex energy information becomes easier to understand for everyone.

For instance, a public school in Denmark (e.g. Parkvejens Skole, Odder Municipality) saved more than 12000 EURO in energy usage costs during 3 months, where staff, teachers and pupils all contributed with analysis and creative ideas to learn about their water, power and heat consumption. Consequently, the public school has not only contributed significantly to save energy in the municipality, but also demonstrated best-practice for other municipalities in Denmark to comply with political goals, which is set by the Danish Government.

Facts

- Released 2012
- Danish software
- Cloud-based solution
- No configuration, only internet
- Collects and visualise data in real-time, with a frequency of 5 seconds.
- Supports market leading products; inverters (e.g. Power One/ABB, SMA, SolarEdge), heat pumps (e.g. Sonnenkraft), power meters (e.g. Carlo Gavazzi, Northern Design and ABB) and sensors (e.g. solar irradiance, temperature)
- Supports existing systems through web integration (e.g. BMS, BAS, HVAC)
- With the eviShine smart phone app, you will always have the actual data at hand.



eviShine Product Portfolio Overview

What`s in the box

eviShine can be applied with a standard license or a professional license. When eviShine are delivered for both solutions, you will receive the following:

- Web page (url-address is registered together with the eviShine)
- eviShine App for iPhone eller Android, available on AppStore or Google Play
- Converter box with power adapter (UL approved) and wire (RS485/RS232) for inverter/energy meter
- Installation manuals (e.g. internet set-up, inverters, energy meter, sensors)

eviShine solution with Professional License vs. Standard License

- eviShine shows energy data for each location and data logging unit (e.g. inverters, energy meters)
- Access to web portal to review technical data and values, notifications with alarm, operation reports and GPS map with an overview of sites with eviShine solutions.
- Customised web pages for public view will be able to demonstrate renewable energy results with real-time data.

eviShine Solutions

With an eviShine Standard License, you can follow accumulated energy data on an eviShine Standard Web page along with a Normal and Beta View as shown respectively here below. This page illustrates Egedal Municipality with both energy generation from solar panels and energy usage of electricity. <http://www.evishine.dk/egedal/>

eviShine with Standard License

Production

Now:	39,5 kW
Max:	986,4 kW
Today:	23,7 kWh
Total:	1.659,9 MWh
CO ₂ total saved:	908,0 t

Network

Converter(s):	17 of 17 is online	✓
Unit(s)	69 of 69 is online	✓

Year (Total 963,3 MWh)

1	7	31	365
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Production (MWh)

Month	Production (MWh)
1	~5
2	~35
3	~80
4	~110
5	~115
6	~115
7	~120
8	~110
9	~95
10	~40
11	~15
12	~10

2014

88823,7 kWh

39,5 kW

88811,2 kWh
1659,9 MWh

DrivhusEffekten
-walk your talk-

In the MENU BAR on this STANDARD WEB PAGE, you can select PV production, energy usage.

On the STANDARD WEB PAGE, you can review the energy effect value, historical facts and status information; production values, energy savings in CO₂ and network.

CO₂

88908,0 t

16/02/2015

Day (Total 238,1 kWh)

Production (kWh)

Day	Production (kWh)
1	~5
2	~10
3	~15
4	~20
5	~25
6	~30
7	~35
8	~40
9	~45
10	~50
11	~55
12	~60
13	~65
14	~70
15	~75
16	~80
17	~85
18	~90
19	~95
20	~100
21	~105
22	~110
23	~115

24 kW

88811,2 kWh
1659,9 MWh

Converter(s): 17 of 17 is online ✓
Unit(s): 69 of 69 is online ✓

With the STANDARD WEB PAGE, you can follow the energy values in large scale.

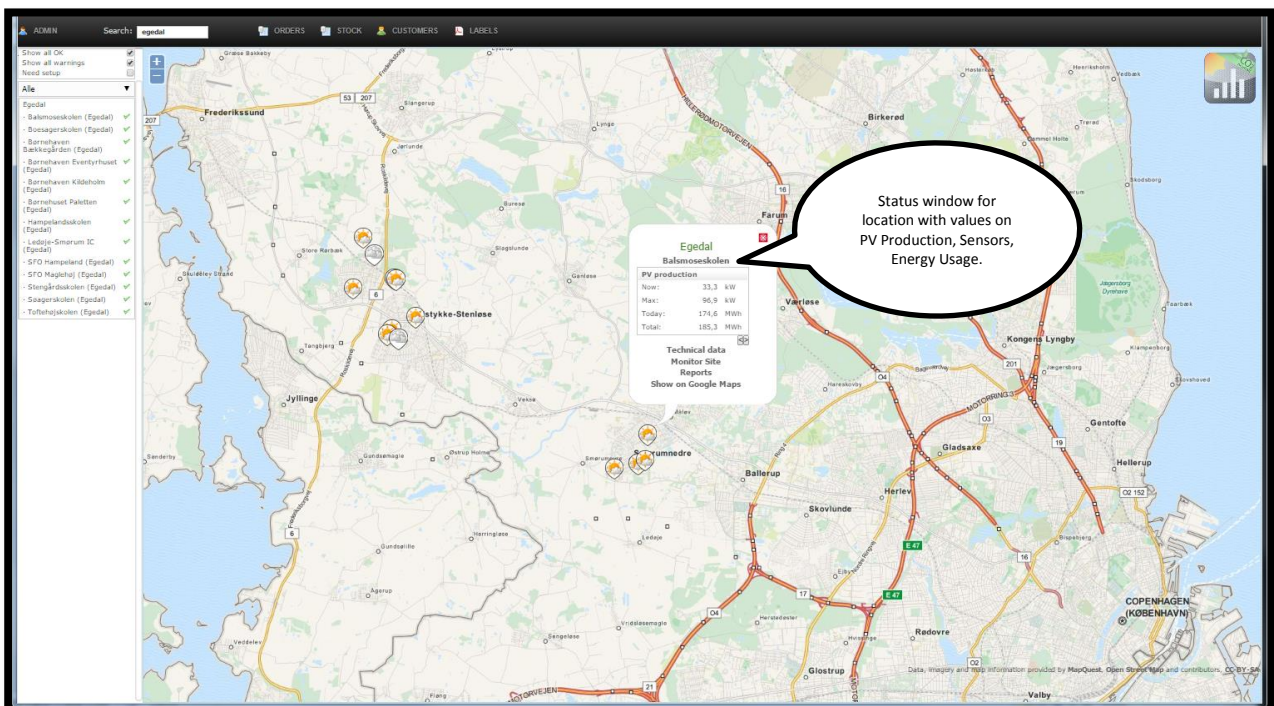
eviShine with Professional License.

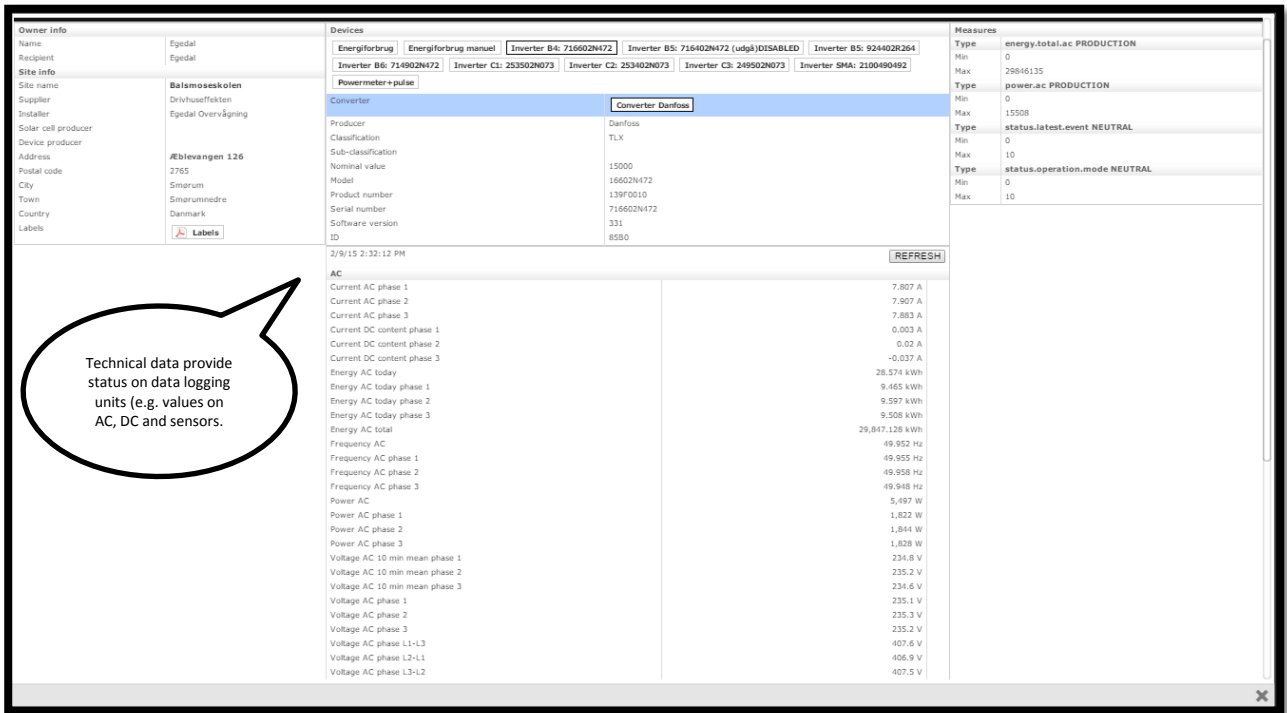
In this case, Egedal Municipality has acquired an eviShine with professional license, where they can follow the energy values for each location e.g. Egedal City Hall, public schools and kindergartens.



<http://www.evishine.dk/egedal>

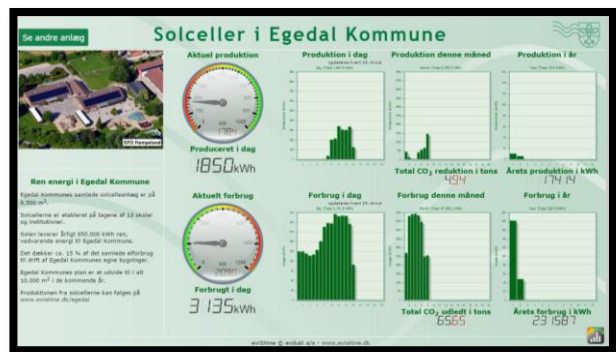
As shown in the following, technicians can also follow details on inverters and meters through the eviShine web portal with access to GPS map on locations and Operation Reports for each location:





Customised web page for public view

The Danish Municipality Egedal has also required a customised web page for public view; through the web site, in the lobby, the City Hall. Please take a look at pictures here below or at the site <http://www.evishine.dk/sites/egedal/>



This customised web page include:

- Company profile with text about PV site
- Pictures
- Visual identity
- Renewable energy facts with real-time data.
- eviShine features
- Weather forecasts

Please visit translated sites for similar customised web pages:

- <http://evishine.dk/sites/dafa/uk/>
- <http://evishine.dk/sites/hundslundskole.dk/uk/>
- http://evishine.dk/sites/yit/uk/halsn%C3%A6s_kiosk_all.html

Technical Information

eviShine is independent of equipment (e.g. inverters, energy meters, m-bus, sensors) and is able to monitor technical data for each installation and data logging units. Does the installation apply an existing centralised system (e.g. Building Management Systems), eviShine will be able to adapt these system with web services, data exchange and adaptation of recipient's interfaces. Other available service functions are alarm notifications based on physical units and self-defined values for production and/or consumption.

Data are collected on a central web server. This means that data are available for eviShine users, even though the units are turned off (e.g. inverters). With several installations, all numbers can be accumulated with total production value. The centralised collection of data through eviShine allows presentation of values on several platforms (e.g. web site, smart phone applications, HD monitors). Through eviShine components, i.e. converter, connection is established between data logging units (e.g. inverters) and the centralised web server on the internet.

Support

- 1./2. Level support
- Instruction and education
- eviShine team can be contacted 24/7
- Team Viewer or Skype for remote assistance.

Distributors/installers and eviShine users with a professional license, for instance in a Municipality, will get access to the eviShine management portal through their own login and password – thus access to data from units, which technicians uses for Operation and Maintenance. As mentioned above, you will be able to monitor all locations on a GPS map with status information on sites, which produces energy from PV, or sites with installations, where energy usage is followed.

Overall Product Specifications

- Cloud-based; HTML5 compatible browser (e.g. Chrome, Safari, Firefox, IE9 or newer)
- eviShine License; standard or professional.
- eviShine standard web page
- Customised web page for public view
- Free eviShine App for iPhone/Android, download from AppStore or Google Play
- Converter Box with power adapter (e.g. CE, UL, UK)
- Serial Interface; RS485/RS232/RS422
- Communication protocol e.g. Modbus
- Collects and visualise energy data in real-time, historic with a frequency of 5 seconds.
- Supports increasing number of market leading products; energy meters (e.g. ABB, Carlo Gavassi, ND Meter, Enviro Meter), inverters (e.g. Power One/ABB, SMA, SolarEdge).

For further information, please read the enclosed data sheets on selected components for eviShine, or through the following hyperlink.

Converter box http://www.estcp.com/documents/datasheet/ds_cseh55nen.pdf

Controller box (e.g. BMS, BAS, HVAC) http://www.basystems.dk/files/gb/bas914S_datasheet_gb.pdf

Read also www.evishine.com

Featured Installations

Based on cost-effective solutions with eViShine, stakeholders will be able to compare the balance between energy generation and energy usage. To this date, more than 1500 customers are using eViShine as their solution in Denmark and other countries. In addition, eViShine has installations across Europe such as Sweden, Ireland, United Kingdom, Czech Republic, Poland and Benelux along with overseas countries like Greenland, Canada, Australia and China.

eViShine has many types of users; research institutions (e.g. Samsø Energy Academy¹), state owned companies (e.g. Defence Command Denmark, the Danish Police), regions (Region of Southern Denmark) and more than 30 municipalities including several schools. In addition, eViShine has several users among private companies and private consumers. To support the markets, eViShine is distributed by an increasing number of resellers/installers.

Featured eViShine solutions with customised web page:

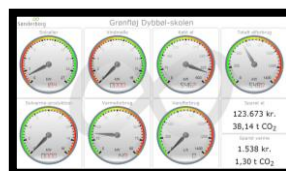
[Defence Command Denmark](#)



[GEO Group](#)



[Sonderborg Municipality, public school](#)



[Nykredit - Danish Bank](#)



[Esbjerg Municipality, holiday camp](#)



[Region of Southern Denmark](#)



[Super Market Chain LIDL](#)



[Social Housing Organization Lejerbo](#)



[Super Market Chain Coop](#)



[Svaneke Brewery](#)



¹ Read article in The New York Times about Samsø Energy Academy

<http://www.nytimes.com/2015/01/18/business/energy-environment/green-energy-inspiration-from-samsø-denmark.html>

About evikali a/s

The company behind eviShine was established in 2000 and converted into a public limited company in 2002. Since then the company has consolidated with an increasing number of customers. Currently, **evikali** has 7 employees with office in the business house EcoPark in Aarhus.

evikali was appointed Gazelle company for demonstrating growth by the acclaimed business newspaper Børsen. Furthermore, the company has been granted a AA rate of creditworthiness.

evikali specialises in the development and implementation of IT solutions and IT assistance to business and industry such as

Integration
web-enabling
Advising
Support
IT-assistance

Our Vision

Our vision is that evikali wants to be one of the most progressive and innovative companies in practical and profitable use of IT. And we enjoy working with IT.

The joy of being able to observe a value-added effect due to the solution that was conceived and designed is what drives employees at evikali
Platform og værktøjer

Platform and Tools

We're open-minded about the choice of platform and tools. We use and adapt the best technology available on the market. We are independent from other suppliers and uses both open-source and commercial software. We make decisions solely on economics, risk and functionality.

Standards and transparency

We are big supporters of standards for exchange and storage of data. Transparency solutions is important in order to achieve maximum use of the software. Transparency is an essential requirement when you want to integrate and automate business processes.

