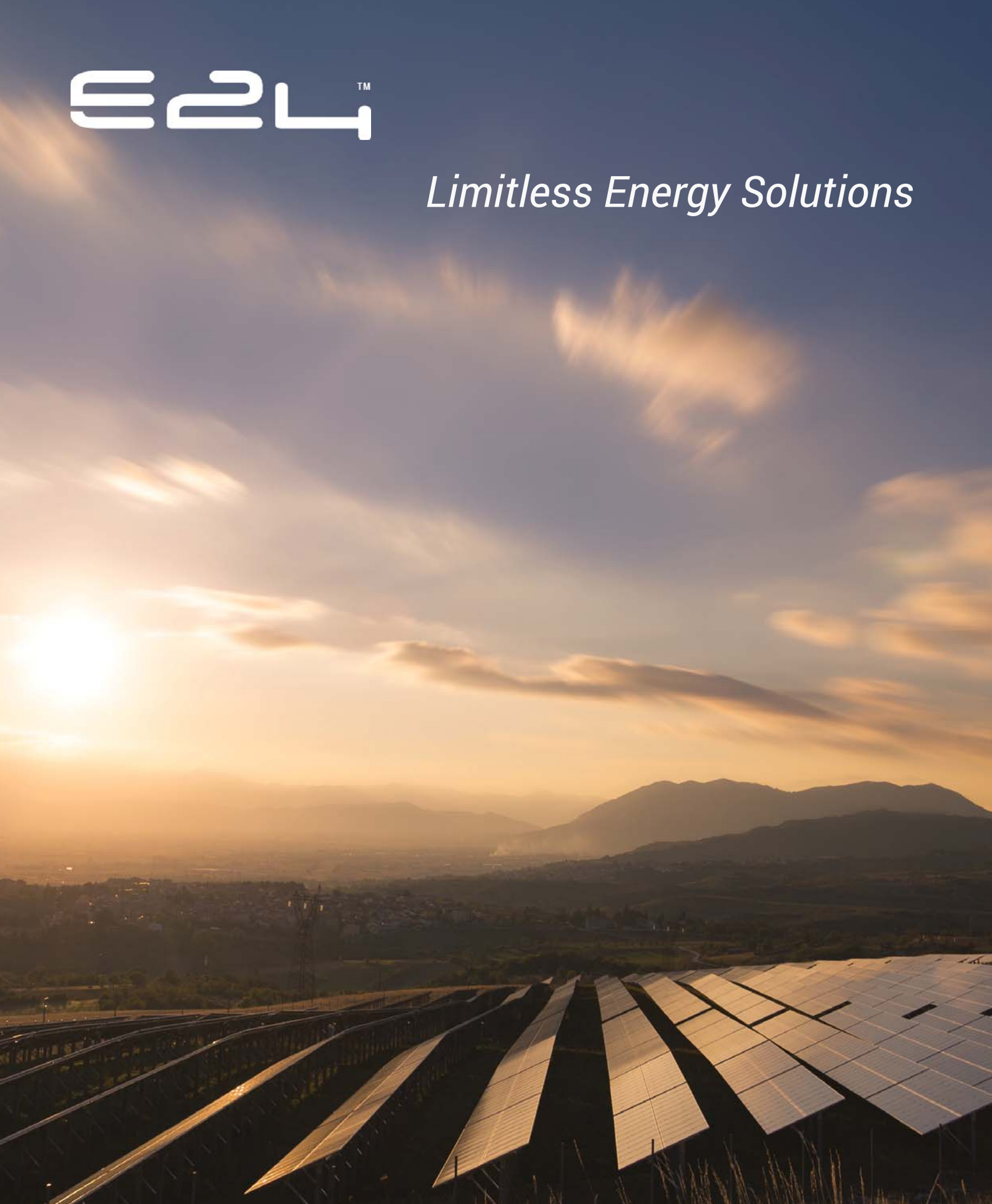




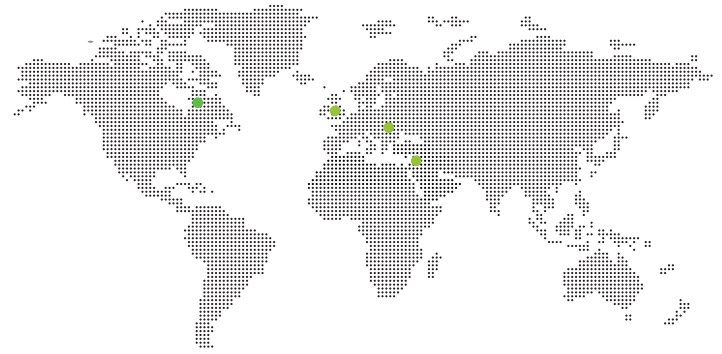
Limitless Energy Solutions



Corporate Brief



Worldwide Reach



E24 is a leading provider of energy generation, conversion, storage, transmission and Billing solutions. E24 designs and manufactures the most durable, efficient and reliable energy solutions on the market tailored for the most demanding applications and locations around the world.

At E24, we take the time to understand customer needs and develop adapted solutions that lower energy costs, preserve the environment and improve quality of life.

E24 understands the challenges of poor electrical infrastructures and takes into account the worst operating conditions available in some locations. E24 solutions are designed to operate and accept bad quality energy sources while providing a clean uninterrupted power to your critical load.

Blackouts, brownouts, and surges may be extremely damaging and costly E24 builds solutions that include multi-level redundancies to safe keep its customers even in the remote event of equipment failure.

Energy needs are constantly evolving. E24 Solutions dynamically accompanies customers by being modular and scalable allowing them to upgrade rapidly and cost-effectively.

Through its regional sales and support offices, E24 energy consultants are at your disposal to help you configure the optimal solutions for your applications. E24 network of partners and installers insure prompt delivery and support.

E24 solutions can be remotely monitored allowing E24 to oversee every step of the execution of some of the most complex projects.

Operating in a fast-paced industry, E24 continuously invests in R&D to ensure that it remain at the forefront of renewable energy innovations.

« At E24, we take the time to understand customers' needs and develop adapted solutions that reduce energy costs, preserve the environment and improve quality of life »



E24 operates regional offices to serve customers over **North America, Europe, Eurasia, Middle East & Africa.**

Innovative Energy Generation Solutions

At E24, we understand that generating renewable energy can be challenging: Solar Energy generation requires space that may not always be available. Depending on the customer's profile and utility tariff, energy storage may or may not be needed to store the energy generated.

It is in this spirit that E24 has developed pre-engineered energy generation solutions that may be combined with Energy Storage Solutions to solve elegantly, cost-effectively and reliably the most complex energy challenges. We build the most innovative, reliable and versatile energy generation solutions with a particular attention for esthetics.

E24 interacts with customers through its team of « Energy consultants » who take the time to listen to your problems in order to optimally configure the needed solution.

E24 Energy consultants provide in-depth simulations and financial projections, giving clients a clear vision of the expected performance of their investment prior to decision-making. E24 ensures that solutions are optimally configured to meet client requirements, achieving the highest return on investment.

E24 energy consultants work together with clients to reach a suitable payment plan - either rental, purchase or Pay As You Go (PAYG) - that allows them to remain within budget and allocated cash-flows.

“We build the most innovative, reliable and versatile energy generation solutions with a particular attention for esthetics”



E24 Energy Generation Solutions:

E24 offers modular Energy Generation solutions pre-engineered to best fit their intended applications:

eSolar-Ongrid™ is a pre-engineered on-grid PV energy generation solution ranging from rooftops to utility scale.

eSolar-Offgrid™ is a pre-engineered off-grid PV energy generation solution ranging from rooftops to multi-megawatts.

eSolar-Hybrid™ allows the solar energy to be either fed to the grid through net-metering (on-grid) or directed to an energy storage solution to be used when needed.

eAgri™ is a solution specifically designed for agriculture, providing cost-effective electricity on the field to power water pumps without the need for bulky generators.

eParking™ is a modern, elegant parking shelter that provides shading for vehicles, optimizing unused space and generating renewable energy for your home or business.



E24 Combines Energy Sources:

E24 Energy Generation Solutions can be combined to create hybrid energy generation systems:

Diesel/Solar: connect diesel generators and solar power plants together through controllers. Solar power generation is prioritized during the daytime, saving on fuel and maintenance, while generators provide energy at night. This technology is particularly adapted for large off-grid power plants installed in remote areas where fuel is cheap.

Diesel/Solar/Storage: combines Solar PV and diesel generators, with added storage for additional versatility and autonomy. Solar energy generated during the day is stored to be used at night, and generators are kept as emergency backup.



fig.1



fig.2



fig.3



fig.4

- fig.1 E24 Rooftop Solar for Tiles (anodized aluminum)
- fig.2 E24 Rooftop eSolar Solution powering a building
- fig.3 Solar-Diesel power plant powering off-grid factory
- fig.4 E24 eAgri powering a pump to irrigate a corn field.

Advanced Energy Conversion Solutions

In today's «always on, always available» world, where energy is becoming more and more precious. E24 develops and markets a comprehensive range of Power Conversion Solutions including UPS systems, rectifiers, inverters, stabilizers and battery chargers to solve the world most complex power problems.

E24 philosophy is to build tailored designed products and solutions with the needed features fit to adapt to the customer requirements and not the other way around. We strongly believe that globalization does not mean standardization. This is why our products are built differently according to their target market. E24 comprehensive products & solutions are designed with the concern for every detail in order to provide the highest degree of satisfaction to their users.

Flexibility, adaptability, and upgradeability are constantly on the minds of our designers whether for residential, commercial or industrial applications, E24 supplies quality products, easy to use and practically built around today's and tomorrow's customer needs.

Whether standard or custom designed solutions are required, we go the extra mile needed to exceed the expectations of our customers.

“E24 develops and markets a comprehensive range of Power Conversion Solutions to solve the world most complex power problems”



E24 Energy Conversion Solutions

Uninterrupted Power Supplies (UPS) Ranging from 1 to 3000 KVA are available either as transformer based or transformerless. We use the most advanced high-frequency DSP (Digital Signal Processing) technology to reach the highest possible efficiencies and lightest, most compact units. Most of our UPS units can be connected in parallel to enhance reliability through N+X redundancy.

Rectifiers ranging from industrial to telecom may be custom designed to fit client requirements. Our standard models provide 24, 48, 60, 110, 220 VDC with output currents up to 500 A.



fig.1



fig.2



fig.3

Static Switches, External Bypass, Transformers & Stabilizers of the highest quality are provided either as standard or custom designed to fit client specifications.

Wide Choice of Batteries to best fit the required applications including but not limited to:

- AGM
- Gel
- OPZV
- OPZS
- Nickel Cadmium
- Lithium Iron
- Lead-Carbon



fig.4

- fig.1** SH-UPS Series
- fig.2** OL3DC-UPS Series
- fig.3** OL3M-UPS Series
- fig.4** OL3D-UPS Assembly Line

Cost-effective & Versatile Energy Storage Solutions

With the demographic and economical expansion of the planet, the growing use of electricity across all sectors, the time and resources required to upgrade the grid capacity and the deployment of decentralized renewable energy, it is becoming harder for utilities to stabilize the availability of energy on the grid.

On the power generation side, utilities are resorting to financial measures to either encourage or discourage consumption at given times of the day in order to attempt to keep consumption on the grid as steady as possible.

Power demand has outgrown supply in such a proportion that utilities are unable to avoid blackouts resulting from grid overloads. In some countries, the gap between supply and demand has grown so wide, that utilities are forced to ration the availability of power through regular blackouts.

On the Consumer Side, the gradual decrease in feed-in tariffs are making the energy bill grow higher even for those who have invested in on-grid PV and/or Wind energy. In countries where power is rationed, consumers are resorting to diesel generators that gave the following disadvantages:

- Air and noise pollution
- Required space may not be available
- Repetitive refueling
- Regular maintenance

E24 energy storage technology retrofits existing energy systems and guarantees substantial savings over any fuel based alternative while improving power quality, removing noise, environmental pollution, and limiting human intervention.

“E24 energy storage technology retrofits any existing energy system and guarantees substantial savings”



E24 Energy Storage Solutions

eHome™ is a cost-effective and compact energy storage solution providing 20A for small residential/commercial applications.

eVilla™ is an on-line energy storage solution designed for residential applications. eVilla is particularly suited for customers suffering from unstable grids and frequent power failures. eVilla will not only provide 24/7 electricity without any power cuts but will also guaranty a clean electricity to your load under any circumstance.

eBusiness™ is similar to eVilla with the added redundancy that might be of value when powering critical loads like data centers, servers, and telecom equipment.

eBuilding™ is a centralized energy storage solution designed to power buildings or multi-tenant applications. eBuilding includes the controls to monitor all tenants consumptions and distribute the cost of energy fairly among them.

eFactory™ is designed to power factories or industrial loads. It avoids load interruption in case of power cuts and combines solar energy to lower energy costs and delay the starting of generators in case of a power cut.



eTelecom™ is specifically conceived for mobile cell sites and relay stations in off-grid locations, providing 24/7 solar power with no need for maintenance.

eVillage™ is a turnkey storage solution for areas suffering from frequent power interruptions or no connection to the grid. Combined with E24 power transmission and billing technology, eVillage powers villages 24/7 mainly from renewable sources.

eGrid™ is specifically designed for utilities that require grid stabilization. eGrid is capable of peak shaving, load shifting and frequency regulation.



fig.1



fig.2



fig.3

- fig.1** E24 eFactory Solution providing 3 hours backup during blackouts for an industrial load.
- fig.2** E24 eVilla Solution providing 4 hours backup during blackouts.
- fig.3** E24 eHome Solution powering an apartment with 20A of power during blackouts.

Rural Energy Transmission Solutions

Today, 1.2 billion people worldwide - one in every six people on the planet - do not have access to electricity. Based on a business-as-usual scenario, some 780 million people are projected to remain without it by 2030. A radical new approach is needed if this trajectory is to be remedied..

One shocking similarity in this large number is the urban-rural divide: Upwards of 80 percent of sufferers of energy-poverty live in rural areas.

Because of lack of access to electricity and modern energy sources, people around the world, especially in rural communities, struggle to break out of the cycle of poverty. Reliable energy access empowers considerable socio-economic benefits, enabling shops and businesses to stay open longer, giving communities access to better healthcare, and providing children with domestic lighting for after-school study time. Electrification also substantially reduce crime and car accidents as it keeps streets illuminated at night.

E24 has developed a new and much cheaper way of distributing electricity. It not only uses smart grid technology to allow each user to monitor and control his energy consumption but it also includes fiber optics within the same power cables to provide internet to every household.

E24 offers pre-engineered modular transmission solutions specifically designed for rural areas where traditional electrification may be too expensive given the low energy consumption of the subscribers.

E24 transmission technology is rapidly deployable and designed in manner to be easily upgradable with the growth of the population.

“E24 energy transmission technology makes it possible to electrify any rural area with a very short capital recovery time”



E24 Energy Transmission Solutions

LV™ is a cost-effective low voltage power transmission network primarily designed for micro grids allowing to electrify areas having an average diameter of 0.5KM.

MV4™ is a cost-effective 4KV power transmission network primarily designed for micro grids allowing to electrify areas having an average diameter of 2.5KM.

MV7™ is a cost-effective 4KV power transmission network primarily designed for micro grids allowing to electrify areas having an average diameter of 10KM.



fig.1



fig.2

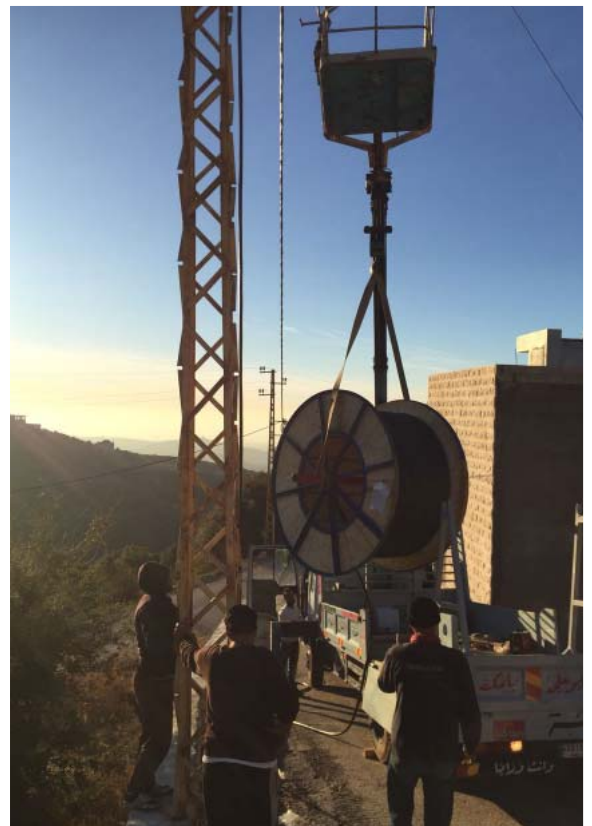


fig.3

- fig.1** E24 laying down an MV4 Cable (power and fiber).
- fig.2** E24 Smart Step Down transformer allow to control that no theft is possible on the network while providing valuable data related to consumer energy consumption.
- fig.3** E24 uses a simple, fast and rapid deployment technique allowing to cover rapidly a large area with minimal tools and resources.

Energy Billing Solutions

When trying to solve a complex problem, it is not only necessary for the solution to function but it must be adapted to the customer's profile: level of education, income level, practicality of the long term operation of that solution etc...

E24 understands that since it is trying to bring an end to end turnkey electrification solution to remote areas that are either un-electrified or subject to constant blackouts, it must also include a billing solution that solves the distribution of costs fairly and efficiently amongst subscribers while reducing as much as possible the administrative costs of collections.

E24 believes in a prepaid approach allowing each subscriber to be constantly aware of the budget he is spending on electricity and avoid being surprised by a bill he cannot afford. E24 offers three pre-paid solutions as follows:

- E24 Energy Cards Billing Solution
- E24 Energy Cards Plus Billing Solution
- E24 Token Billing Solution

Depending on the project, the operator of the E24 electrification solution may select the most adapted billing solution in a manner to optimally adapt to the subscribers' profile, the legal jurisdictions of the area of execution of the project and the optimal financial model to be applied.

With E24 Energy Card Plus and E24 Token, it becomes possible to include access to the internet to your subscribers and include this service in the fixed monthly fee.

“E24 Energy Billing technology is designed to best fit the profile of your subscribers as well as adapt to the business model you are seeking, minimize your administrative costs and optimize your revenues”



E24 Energy Billing Solutions

E24 Energy Cards Billing Solution: These are plastic smart cards (like a credit card) that subscribers purchase from a retail point and enter them in a slot in their E24 meter. Each card includes a pre-set number of KWh that transfers spontaneously from the card to the meter upon insertion. Before the meter runs out of KWh, an alarm warns the subscriber to purchase a new card before the meter disconnects the subscriber. The solution can be programmed to a flat fee per KWh without any monthly fixed Costs.

E24 Energy Cards Plus Billing Solution: This solution is similar to the Standard E24 Energy Card solution but the meters are designed to automatically debit a daily minimum number of KWh irrespective of the customer's electric consumption in order to cover for the fixed maintenance fees of the power plant and network.

E24 Token Billing Solution: This solution allows to avoid completely the distribution of energy cards and the logistics behind it. It works by allowing subscribers to purchase energy through their phone by receiving an SMS with a code that they would enter on their E24 meter to activate their connection to the E24 mini grid. This solution is ideal in areas where subscribers are educated and have access to smart phones.



fig.1



fig.2



fig.3

- fig.1 E24 Energy Cards.
- fig.2 E24 Energy Card Meters and Token Meters.
- fig.3 E24 Assembly of Energy Meters in a temper proof box that provides subscribers the priority of connection to the grid and automatically transfers them to E24 power plant in an event of power failure.

Advanced Software, IOT & Web Monitoring Technology

"That which is measured improves. That which is measured and reported improves exponentially."
- Karl Pearson

E24 Technology is all about optimization and automation allowing customers to save energy, save on the environment and improve quality of life.

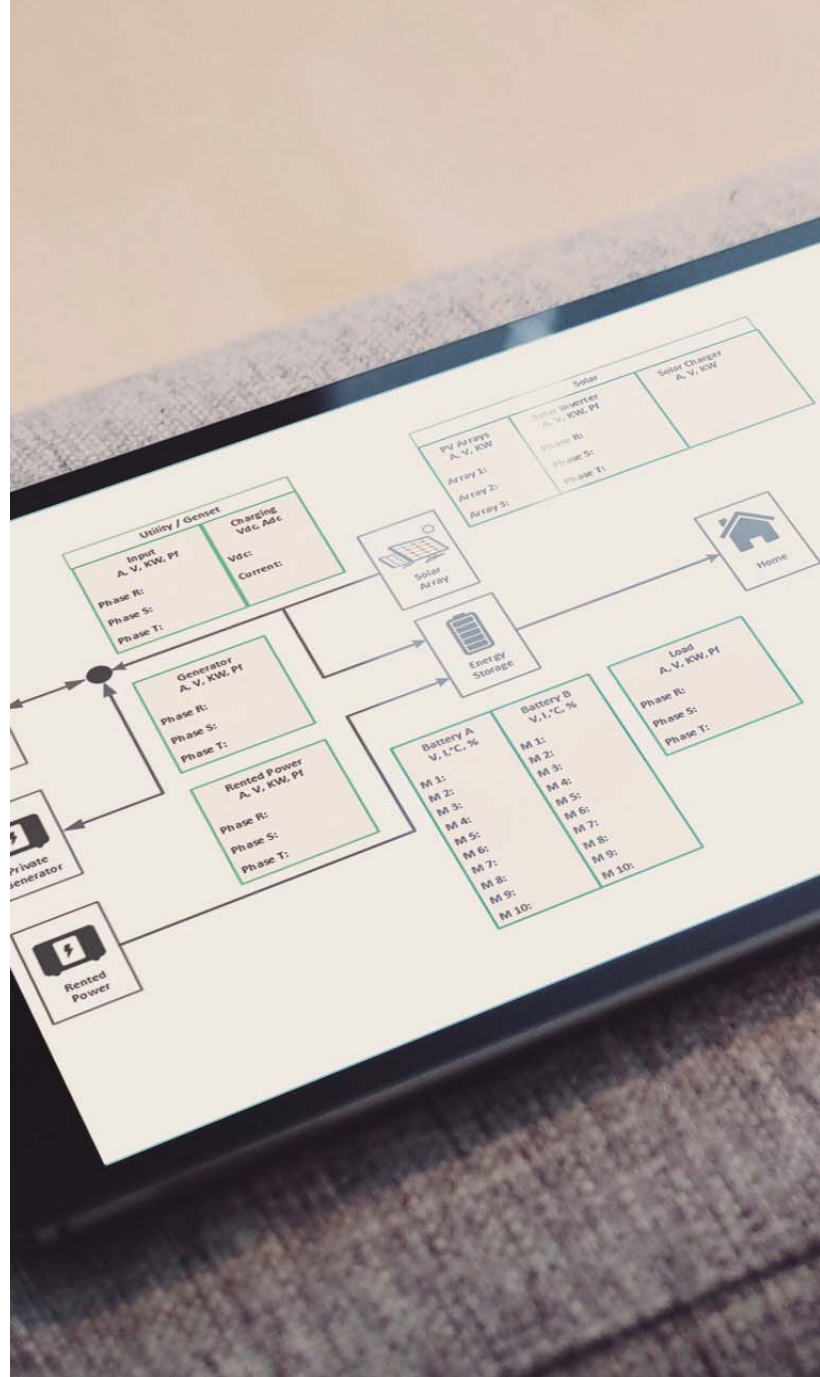
At E24, advanced software is at the heart of each solution provided allowing to simplify operations while optimizing return on investment.

All solutions are software customizable to best fit their working environment and the energy conditions and tariffs under which they are operated. Each customer, each application, and each region is different. This is why E24 software is designed to be easily configured upon commissioning to adapt perfectly to the application, customer requirements and load profile.

E24 offers IOT and Web monitoring services allowing customers to monitor all data related to their energy infrastructure. This includes equipment that may or may not be part of E24 provided solutions. E24 Software can, of course, be configured to notify customers of any anomaly or threshold reached for his needed actions.

Depending on the solutions purchased E24 offers adapted standard and custom designed IOT and Web Monitoring services that allow customers to monitor all data related to their energy infrastructure and see historical information dating up to 10 years.

"E24's technology thrives on optimization, automation, and advanced data monitoring"



E24 IOT & Web Monitoring Solutions

Cloud Monitoring add-ons allow customers to visualise all data related to their energy infrastructure from their PC, laptop or smartphone. Customers are also able to download their data dating back up to 10 years for their analysis.

IOT Solutions allow customers to view their data through a user-friendly interface, and accordingly take actions such as starting or stopping certain equipment, modifying settings or other actions, all done remotely from any internet device.



fig.1



fig.1



fig.2

Customization Services allow E24 to modify its software to best suit customers' existing energy infrastructure. This may include setting-up communication links with SCADA systems or any bi-directional exchange of information.

- fig.1** Analysing Energy Data from an E24 customer's system.
- fig.2** Monitoring a utility scale Power Plant.

Comprehensive Service Offering

In conjunction with its Solution and Product offering, E24 provides related services including:

- Site Assessment Visits
- Energy Saving Analysis
- Feasibility Studies
- Structural Designs
- Multi-Level Training Programs
- Commissioning Services
- Financing Services

All Services are provided by engineers operating from an E24 regional office covering the country where the service is to be provided. As a result, E24 customers benefit from a real and accurate data based on actual and relevant field experience and expertise.

E24 works closely with its clients to look at all aspects of their energy related costs and performance. This includes, how the production process utilizes the energy, what opportunities there may be for improvements, what are the operation and maintenance costs, and what are the potential opportunities to lower overall costs.

E24 operates under various business models to include:

- Sales of Equipment and Related Maintenance Services.
- Rental of Solutions for a fixed monthly fee.
- Sales of Energy under Pay As You Go Schemes.

E24 also offers a number of financing services allowing its customers to pay gradually for their equipment and partially finance their investments from the actual saving they provide¹.

“E24 works closely with its clients to look at all aspects of their energy-related costs and aspirations”

(1) Available in selected countries only.



E24 Comprehensive Energy Services

Site Assessment Visits (SAV) provide customers with E24 recommendations that optimize their energy consumption and improve their quality of life.

Energy Saving Analysis (ESA™) allows customers to understand and assess the financial impact of an investment before making decisions. ESA provides clear and realistic financial simulation of different scenarios and how each impacts P&L and Cash flows based on current available financing terms.

Feasibility Studies provide accurate financial expectations based on agreed initial assumptions for large infrastructure projects and power plants



fig.1



fig.2

Technical structures can be designed and developed to erect sophisticated solar arrays.

Multi-Level Training Programs and Certifications allow technicians to learn how to deploy, install, commission and service equipment.

Commissioning Services are available upon clients' request.

Financing Services E24 offers a number of financing options which include: sales with monthly instalments, rental of equipment and sales of energy models (energy as a service). The availability of financing models is project and country specific.

fig.1 Group Training at E24 ME&A Office

fig.2 Remittance of Training Certificate

Quality Technical Services

E24 provides products and services that meet customer expectations for performance, reliability and availability. Your success depends on uptime and output, and E24's comprehensive service offerings ensure that when you need support, E24 is available around the clock and a phone call or click away.

With support centres and knowledgeable personnel, E24's Customer Services organization brings an uncompromising commitment to customer satisfaction by providing:

- Warranty Extension Programs
- Comprehensive Maintenance Programs
- Field Service
- Overhaul & Refurbishments
- E24's certified parts

This commitment ensures customers' maximum productivity, extending equipment life cycle while reducing operating costs.

E24's foundation is its people, and its culture is one where individual contributions are valued and safety is emphasized in all aspects of the business. Quality, Health, Safety and Environmental programs enable E24's employees and customers to comply with their safety system requirements, ensuring no harm to people, assets and the environment.

E24 is also comprised of a diverse, dedicated and multitalented workforce working as a team committed to the common goal of delivering complete customer satisfaction.

"E24's foundation is its people, and its culture is one where individual contributions are valued and safety is emphasized in all its aspects"



Quality Technical Services

Warranty Extension Programs: E24 offers extended warranty programs on products and solutions. Refer to your authorized reseller for details.

Maintenance Contract: E24 offers preventive maintenance programs on all products and solutions offered.

Field Services: E24 provides field service installations and repairs through its network of resellers and contractors.



Overhaul & Refurbishment: E24 offers to overhaul existing infra-structures to upgrade and improve performance.

E24 Certified Parts: E24 stored E24 original parts and provides repair services.



fig.1



fig.2

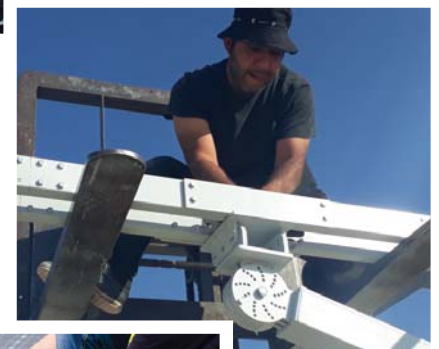


fig.3



fig.4

- fig.1** E24 Team instaling Solar Array for a factory
- fig.2** E24 Commisioning eSolar-Hybrid Plant
- fig.3** eParking under construction
- fig.4** Commisioning an eHome Solution



E24[®]

www.e24solutions.com

