

PORTABLE OFF-GRID POWER

*A BLUEPRINT FOR SPORTS TEAMS AND
ORGANISATIONS AROUND THE WORLD*

CONTENTS

PORTABLE OFF-GRID POWER

*A BLUEPRINT FOR SPORTS TEAMS AND ORGANISATIONS
AROUND THE WORLD*

- 01** *CALLING ALL SPORTS TEAMS*
- 02** *USE OUR CLEAN ENERGY SOLUTION*
- 03** *TAKE YOUR OPERATIONS OFF-GRID*
- 04** *JOIN US TO PROTECT OUR FUTURE AND
POWER TOMORROW*



IT'S TIME TO GO OFF-GRID

Calling all sports teams to tread lightly on the planet and switch to renewable energy sources.

As sports teams we're in a privileged position to travel the world doing what we love but it is no longer acceptable to ignore the impact this has on our planet. To protect our future, we need to tread lightly on the planet.

Emirates Great Britain SailGP Team partnered with global renewable energy company Low Carbon to launch a first-of-its-kind Portable Renewable Energy solution to successfully take the team off-grid at every city they have visited around the world since June 2023.

Low Carbon's goal is to protect the planet for future generations by creating as much renewable energy as possible to fight climate change. With this blueprint, you can take the first steps to integrate renewable energy sources into your own operations.

The world of sports holds a unique and influential platform, capable of inspiring positive change on a global scale. We therefore want to share our knowledge to help the wider industry make use of readily available technology and to join the fight to combat the climate crisis.

Join Emirates Great Britain SailGP Team and Low Carbon in
Protecting Our Future and Powering Tomorrow.

USE OUR CLEAN ENERGY SOLUTION

Emirates Great Britain SailGP Team set a goal to be the most sustainable sports team in the world in order to protect our future. Part of reaching that target involves a switch to renewable energy.

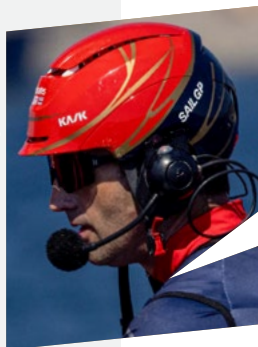
The solution had to be:

- Simple and quick to construct at each venue
- Packable and compact to fit in their team containers
- Efficient and effective enough to generate all the power the team requires

Emirates Great Britain SailGP Team consulted Low Carbon for a solution and Low Carbon delivered.

Low Carbon's bespoke solar and wind installation provides all the energy the team needs and, with the use of additional battery storage, there is enough clean energy remaining to power other sports teams at each SailGP event around the world.

You can do the same.



"As a team we are dedicated to making the biggest positive impact we can on the planet. Working in partnership with Low Carbon on this first-of-its-kind renewable energy installation brings us even closer to our goal of net zero and shows how innovation is driving us to make a difference for our planet."

Ben Ainslie



"Sport has the ability to inspire like nothing else. Low Carbon is solely focused on fighting climate change and we can use our platform as a sustainable company to promote our message of 'powering tomorrow' which means we encourage a shift away from fossil fuels without compromising the ability of future generations to meet their own needs."

Roy Bedlow



THE RESULT

First unveiled in Chicago at the start of Season 4 in June 2023, Low Carbon's Portable Renewable Energy solution powers the team as it travels around the world from North America, Europe, Asia and Australasia.

Made up of **38 solar panels** and **2 wind turbines**, the Emirates Great Britain SailGP team's Portable Renewable Energy solution has:

- Taken the team entirely off grid in eight events so far as well as supplying SailGP with enough renewable energy to power two other teams on site at each venue
- Generated more than 1,376kwh of renewable energy so far (the equivalent of avoiding **400kg** of CO2e, boiling the kettle **6,114 times** or making **30,000 cups of tea!**) and with potential to generate enough energy to power nearly 13,000 fridge-freezers for a whole day
- Been easy to install and pack back into existing storage - each taking under 3 hours



"We have taken our entire operations off grid, we are so successful that we are providing energy to other teams on our circuit. By making our solar solution successful we are proving that innovation is scalable for our entire sport and it can be a change-maker for other sports as well."

Hannah Mills



This is the average energy generated by the installation per event

This is the average energy consumed by the team per event

HOW CAN YOU GO OFF GRID TOO?

Low Carbon's Portable solution can be used to power sporting teams of all kinds, enabling them to travel around the world more sustainably and inspiring others on the journey to net zero.

How can you make this happen?

- Set a goal to reduce your footprint and tread as lightly as possible on the planet
- Form an understanding of your team's power needs
- Identify and select flexible and forward-thinking supply partners and designers
- Design your own bespoke renewable energy system with sufficient capacity to supply your team's energy needs to take them off-grid
- In designing your system, consider key factors such as: the fixing solution, system flexibility to allow for different sports venues, ease and safety of installation and removal, and ensuring the overall solution is compact so it works within the team's available shipping space
- Implement a system for displaying the production and usage data for the team
- Bring your team members and fans on your clean energy journey to inspire a wider change



BESPOKE SOLUTIONS

Emirates Great Britain SailGP Team's Portable Renewable Energy solution is bespoke. It's made up of 38 solar panels, 300m of solar cable and fitted on solar rails with custom feet, adapted to ensure the solar installation can be fitted to the top of different marquee tents at each venue. The team also have two wind-turbines that generate energy around the clock.

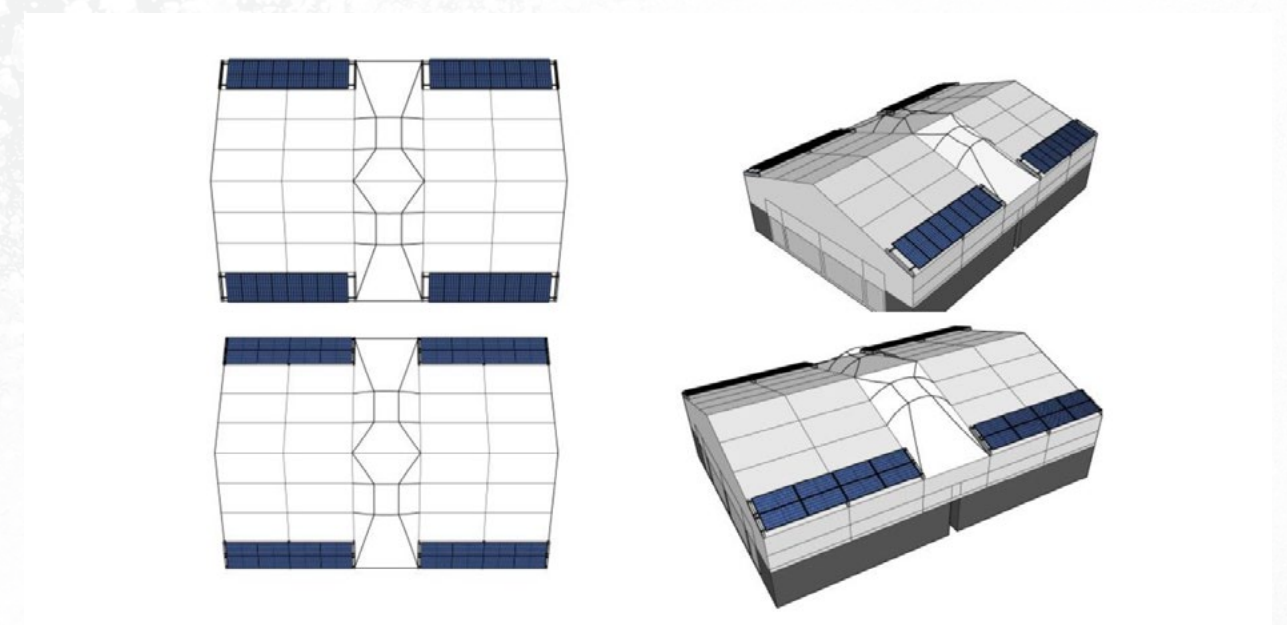
When designing your own solar installation, there are a few system considerations to bear in mind.

- **Number of solar modules you need**
- **Solar rails that work for your team base**
- **Custom feet & fittings**
- **Solar cables**
- **Solar inverters**
- **Digital screens to demonstrate your power generation vs consumption**
- **User friendly language & technology to communicate the impact you're having**

By working with Low Carbon's recommended designers and suppliers, groups can harness the power of clean energy and lead by example in the in the transition to a sustainable future.



SOLAR MODULES	— 38 solar modules (670W monocrystalline) giving 26.8kWp system with the ability to produce an estimated 25MWhs annually — 2m x 1 m x 30mm approx, weighing 20.5kg ea. These stack to a height of 1.2m, plus pallet plus some spacing material so total height 1.4m. Total weight 820kg plus the pallet.
SOLAR RAILS	— 16 x 17ft solar rails (Iron ridge xr1000-204A) . These items are long enough to span the frames of our tents, with some simple reinforcement with angle section steel. We normally lay this down on the floor under the desk, and strap the to the wall. 5.1m length x approx 0.4m x 0.3m. Weight 320kg.
CUSTOM FEET DESIGNED FOR TENT FRAMES	— Custom feet were designed and made for the tent frames. Stored in 2 standard eurocrates (400x300mm) Weight approx 50kg. These were designed and fabricated by the tent manufacturer Baytex, in NZ.
SOLAR CABLES	— Approx 300m of 6mm solar cable, approx 25kg.
SOLAR INVERTER	— Fronius 20KW 3phase Solar inverter. we fitted this onto a backing plate that is covered to form a shipping crate in transit. Approx 1.2m x 0.75m x 0.3m. Weight 40kg.



JOIN US TO PROTECT OUR FUTURE AND POWER TOMORROW

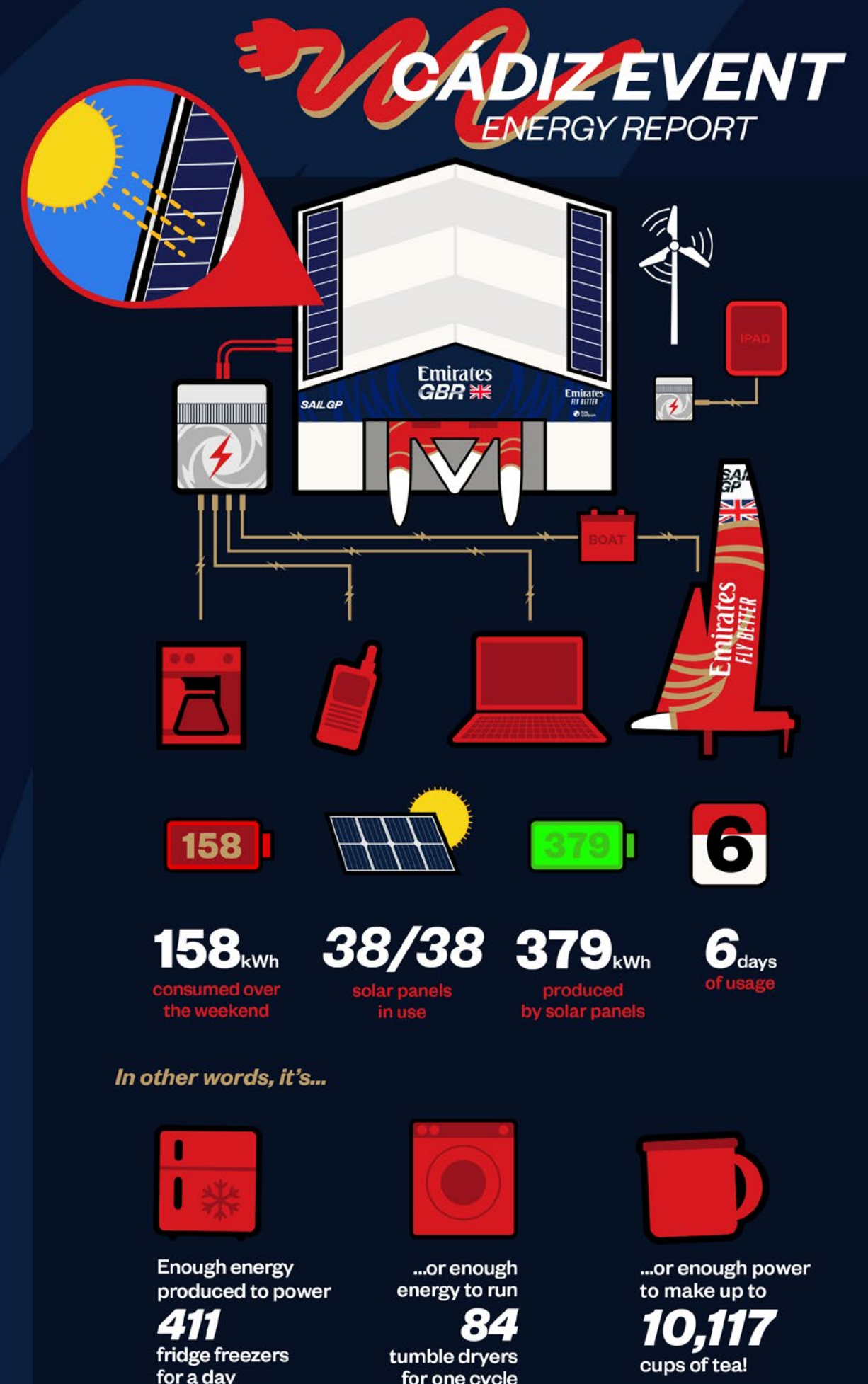
As modern-day influencers, sports teams and athletes play a vital role in driving change.

You can be a trailblazer in your arena and use the power of global sports to set a renewable example that inspires millions.

Help us fight climate change by investing in renewable energy.

Reduce your impact and tell your clean energy story and inspire your fanbase to do the same.

Join Emirates Great Britain SailGP Team and Low Carbon in Protecting Our Future and Powering Tomorrow.



***FOR MORE
INFORMATION
ON BESPOKE
SOLUTIONS
GET IN TOUCH***

LOW CARBON

CONTACT

Email: enquiries@lowcarbon.com

TRINA

Our Solar Panel suppliers

CONTACT: TIM DAY

Email: tim.day@trinasolar.com

***GET IN CONTACT TO START YOUR RENEWABLE
ENERGY TRANSITION.***



