

COMMUNICATION HUB FOR THE WIND ENERGY INDUSTRY

# WindEnergy

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NETWORK



**ENERGY  
TRANSITION  
CHANGE MANAGEMENT**

**ASSET PROTECTION  
HELPFUL TECHNIQUES**

**CABLE INSTALLATION  
VITAL LIFELINES**

**BASQUE COUNTRY  
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Curacao

# EASY AS 1, 2, 3

Wind turbines globally face a variety of challenging conditions; warm winds, cold winds, strong winds, 360° exposure, constant waves, sandstorms, changing temperatures, hail, rain, snow – they have, and will, see it all

These circumstances are the perfect recipe for causing corrosion to creep into crevices, at flange connections, ladders and walkways and to the protective paint coatings applied at the start. All these elements in a downward spiral lead to further corrosion and in turn eventually cause structural failures.

In order to help the wind industry excel in our renewable energy market, we need to provide protection to these assets so that they can last longer, making renewable energy truly sustainable.

## Solutions

Powered by STOPAQ, EasyQote products are doing just that – providing vital protection to the industry with their simple and efficient solutions.

The product is a polymeric coating designed with the concept that a corrosion solution could be applied simply as a sticker rather than painting or spraying. It is 100% plant based and therefore safe for both user and the environment as well as being simple to apply.

## Technology evolution

This latest evolution of technology from STOPAQ comes from a history

of innovation and a track record of success. STOPAQ was the permanent corrosion solution first brought to market in 1983 as a sealing solution, followed by the WrappingBand technology in 1997.

The brand continues to innovate with the EasyQote range of products and a new high temperature WrappingBand product that was successfully completed and patented last year.

## Protection in action – case study 1

Location – Curacao. In amongst the warm, moist winds whipping up sands, constant waves and temperatures upwards of 35°C, the coast of Curacao houses several wind turbines. The climate is a perfect recipe for coating damage and ultimately corrosion. The abrasive winds have had the effect of shot-blasting the coatings and causing major damage.

The main areas of corrosion that require repair are the flange connections between the tower sections. These connections have been so seriously damaged by the environmental conditions that failure to carry out repairs will put into question their structural integrity. It is not unknown for wind turbines to collapse as a result of corrosion in these flanged connections.

## Conventional coatings

Conventional paint coatings have been used before now, but they have not withstood even a third of their expected design life in this hostile environment. Whilst the paint can be reapplied, it isn't the best option for the long term. EasyQote was selected instead and two different products were then applied to the surface prepped areas of the towers.

The Grey EasyQote Self-Cleaning patches were applied circumferentially around the tower flanges giving a one stop solution, halting corrosion in its tracks. EasyQote Basecoat was also applied around the flange connections



North Africa

providing a solution where there were irregularities in the uniformity of the connections. The Basecoat was then painted with WB Topcoat to the colour of the clients' specification.

## Protection in action – case study 2

Location – North Africa. EasyQote is currently being applied to large windfarms across the coast of North Africa. These turbines have been exposed to abrasive winds off the Sahara, resulting in major coating failures.

Much like in Curacao, the main areas of corrosion that require repair are the flange connections between the tower sections. Operators cannot afford to allow structural failures to take place and coating damage at these locations opens up risks for corrosion to cause weaknesses and long-term issues.

## Combination

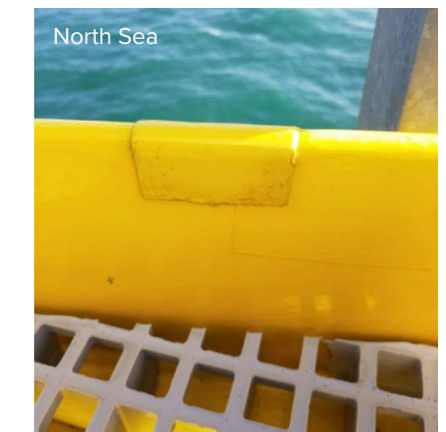
The combination of EasyQote Basecoat and Self-Cleaning patches at the flange connections means corrosion is stopped in its tracks as soon as the products are fitted. These original coating failures could have been minimised at source by having the products stored on site and applied instantly. With the unlimited shelf life of the product, coating repairs can be carried out on day one of the project or after 25 years into the asset life cycle - there is no deterioration of the product.

## Protection in action – case study 3

Location – North Sea. In 2016 EasyQote yellow Self-Cleaning patches were installed offshore in the North Sea on damaged wind turbine foundations. Easy to apply self-cleaning patches were placed over the damaged surface areas and further damage and corrosion was halted.

In this location the environment is varied with hot and cold temperatures and constant UV exposure. The Cleaning Patches are compliant with ISO 11664-4, with no loss of cover over the intervening period.

The picture you can see here was taken in 2022 when the site was revisited. As you can see, the self-cleaning patches are as good as the day they were installed, with no UV degradation.



North Sea

Easy-Qote is establishing itself as a long-term corrosion solution in some of the toughest environments. The range of products have stopped corrosion from the monopiles and foundations up to components in the nacelle.

The unlimited shelf life of these products mean they can be used as and when any coating damage takes place either onshore or offshore. They are readily available in the standard colours and any technician can carry out the coating repairs in minutes, stopping corrosion in its tracks.

EasyQote can offer a cost-effective solution to corrosion that is designed to outlive the life of the asset itself, and that is how we are making renewable energy truly sustainable.

Laura Hall  
Senior Marketing  
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Seal for Life

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Easy-Qote



Renewable Energy Coatings



Protecting the Future