Petra König, Environmental Manager at Copenhagen Malmö Port (CMP), which in October announced a deal with Denmarkheadquartered DFDS to establish a shore power facility at the port for use by ferries, spoke about the best way to provide and manage charging facilities for electric cars.

Port Authority of Centre - North Tyrrhenian Sea (Civitavecchia-Fiumicino-Gaeta) voiced its commitment to shore power, as did the Port of Bergen, which in September announced it was building a shore power facility that will supply three cruise vessels with power simultaneously. It is partnering with Norwegian energy company BKK, which also spoke about the project at the conference, to make this happen.

#### **BIG STEPS FOR SMALL PORTS**

Small ports are taking big steps to tackle emissions and build operational environmental awareness with limited resources, delegates at the conference heard.

The Port Authority of Skyros in Greece's Aegean Sea has invested in electric vehicles and air emissions monitoring. It also runs university and school volunteer programmes as part of its bid to be sustainable.

Planning and committing to environmental initiatives is not an easy task as Kyriakos Antonopoulos, president of the volunteer-run port authority explained. In post since 2005, with no staff and without a salary, Mr Antonopoulos said the "annual budget of Linaria is only  $\[ \le \]$ 150,000" and finances have been constrained by "Greek austerity" while the future of the port is uncertain. Currently owned by 300 local shareholders resident in Skyros, the port may be privatised and incorporated into a larger port group.

### STUDENT VOLUNTEERS

Still, incorporated into the port authority's passenger, commercial and fishing operations are annual sea bed cleanups, regular oil spill exercises, a ship-generated waste management plan and recycling of waste materials, alongside its use of electric vehicles and work with the University of Patros to set up its airborne particles station at Linaria Port.

Skyros' student programme aims to bring participants back to nature and boost mental health. The Skyros Project, set to be

made into a foundation next year, enables students to undertake two-month internships and live in an eco-village.

The project became possible when the port formed a relationship with Greece's University of the Aegean in 2015. Cooperating with universities and volunteers is a feasible way of achieving change for ports with no financial leverage, explained Mr Antonopoulos.

Constantina Skanavis, professor in environmental communication and education at Greece's University of West Attica, has been working with the port since being in post at the University of the Aegean. Before working with the port, she noted that small ports didn't have the funding or infrastructure to achieve what bigger ports could and wanted to get students involved in Skyros' environmental work.

"I was able to convince college students from all over the world to come to this small island and live with us for two months," said Professor Skanavis. "We showed that being in contact with the sea, working outdoors and constructing things from nature could boost life satisfaction. Promoting responsible behaviour was my goal."

#### **KEEPING EMISSIONS LOW**

Jonatan Sandager Hansen, project manager at the Port of Helsingor in Denmark, explained that the port, which focuses on ferries, dry bulk and cruise operations, aims to build a new quay with shore power to help protect nearby communities from air pollution and noise. The port currently has a small amount of shore power, but not enough to power a cruise ship, explained Mr Hansen.

But while it has ambitious plans for shore power, and currently has an electric tug and hybrid forklift, it cannot afford to replace or retrofit equipment on the scale of a larger port, only when current equipment no longer works.

Despite this, it is facilitating the reduction of its carbon footprint, wherever possible. It has invested in wind power, accommodates battery-powered ferries and supports short-sea shipping. The port also uses local contractors to minimise driving distances.

"There is a lot being done to make sure emissions and sound are as low as possible," Mr Hansen said.

## PERS standard for a trio of ports

# Three ports were awarded Ecoports' PERS standard by ESPO during the conference.

Secretary general of ESPO, Isabelle Ryckbost presented Ecoports' PERS certification to Azerbaijan's Port of Baku for the first time, while the ports of Vigo and Barcelona in Spain were recertified.

"I would like to congratulate Port of Barcelona and Port of Vigo for renewing EcoPorts' environmental standard and Port of Baku for obtaining it for the first time," said Ms Ryckbost. Dr Taleh Ziyadov, director general of the Port of Baku, received the port's first PERS certificate.

Vigo's award was accepted by Carlos Botana Lagarón, head of environmental policies at the port authority, while Jordi Vila, strategy manager, was presented with recertification for the Port of Barcelona.

The PERS awards at GreenPort 2010

