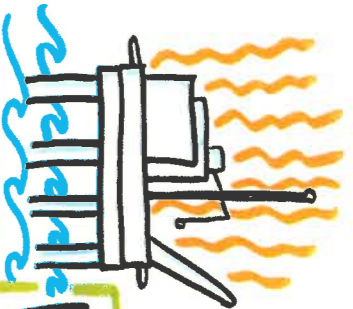


EFFORT -
RECOVERING
WASTED
HEAT
MARTIN MAZZETTI,
SINTEP



EFFORT
project:
developing effective
technology to
REDUCE the amount
of
WASTED HEAT

High fuel costs
CO₂ emissions
Climate
change
Challenges

4 Case Studies
Introduce the
technology
BEFORE
the platform is
built

VALUE FOR THE INDUSTRY

- Increase GI-efficiency
- Expanding to other areas

25% less
fuel costs & CO₂ emissions!

• PETROBRAS FPSO
• Replacing 4th turbine with Bottoming cycle

POWERING
GLOBAL
OPERATORS
PERSPECTIVES
NILDE ADLAND, IONP, IS
GDF SUEZ



a global energy
2nd largest buyer of natural gas in Europe



Big production
in Norway

THE FIRST
PLATFORM
WITH
POWER
FROM
SHORE

Operator
of GSOA
field

200,000
homes
of CO₂
emission
pr. year!
LESS NOISE'S
ON THE PLATFORM

Biggest risk:
the cable is damaged

power delivery from: **it's Reliable!**



Looking at
operations
down
energuse

HOW TO BE MORE
ENERGY EFFECTIVE?

working with the authorities
to reach the goals for 20

TECHNOLOGY
that recovers energy
from pressure



WE WORK ALL
THE WORLD

**HARNESSING THE
POWER OF PRESSURE**

working in water
environment

- water processing
- gas processing on/offshore

GOBOOST™
AMINE GAS
SWEETENING

- Reducing operational costs
- Reducing carbon footprint
- Improving reliability
- Compact/light weight
- Higher efficiency
- Lower costs

• Improving plant uptime

• Reducing operational costs

• Reducing carbon footprint

• Improving reliability

• Compact/light weight

• Higher efficiency

• Lower costs

EFFORT

developing effective
technology to
REDUCE the amount
of
WASTED HEAT

4 Case Studies
Introduce the
technology
BEFORE
the platform is
built

VALUE FOR THE INDUSTRY

- Increase GI-efficiency
- Expanding to other areas

25% less
fuel costs & CO₂ emissions!

ZAP TEC -
NEW SUPER-SMALL
POWER TECH
WILL GAIN NEW
OPPORTUNITIES

MINIATURIZED
POWER
ELECTRONICS!

you can ZAP the power,
and UNZAP your power

Technology
only gets
better & smaller...

The ZapCharger
you can also
make electricity
in your house.
we are
faster &
smaller

INCREASED ENERGY EFFICIENCY OFFSHORE - TECHNOLOGY FOR CHANGE!

THANK YOU!