

MARIE TRAINING PROGRAM FOR IMPROVEMENT IN ENERGY EFFICIENCY (EE) OF EXISTING BUILDINGS

F1 | BEST PRACTICES COLLECTION

Best Practice Name:	Recovery of Heat from Chiller waste heat through a Heat Pump
Code:	MT_TE_MA_03

Best Practice Description:

Type:	<input checked="" type="checkbox"/> Action for improvement in the EE	<input type="checkbox"/> Training experience (*)
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Description:	<i>Waste heat from the chiller cooling system is being recovered through a heat pump and the hot water thus generated is being used for Domestic Hot Water Consumption and Space Heating. This has resulted in a lowering of energy consumed through the burning of fuel of 1,771,796 kWh equivalent to 248 m3 of LPG. The increase in efficiency is of the order of 9.6 times.</i>
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Location:	Hilton Malta	Country:	Malta
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Contact (team):	<i>Ing Joseph Restall Chief Engineer Hilton Malta e-mail – joseph.restall@hilton.com mobile - +35679204080</i>
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Type of building:	<input checked="" type="checkbox"/> Tertiary	<input type="checkbox"/> Residential	<input type="checkbox"/> Mixed
Property:	<input type="checkbox"/> Public	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> Mixed
Management:	<input type="checkbox"/> Public	<input checked="" type="checkbox"/> Private	<input type="checkbox"/> Mixed

Fields of action:	<input type="checkbox"/> Construction	<input checked="" type="checkbox"/> Maintenance	<input type="checkbox"/> Use
	<input type="checkbox"/> Energy generation and distribution		<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> implementation of renewable energies		<i>Which ones?</i>

Please, evaluate if the following processes take place in the Best Practice that you are describing in this form:

	Yes	No
The data collection has been complete and rigorous	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Communication and awareness processes have been developed to disseminate this practice	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Training actions have been provided	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Product and services have been improved	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jobs have been created	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sustainable financial models have been applied	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Agreements or collaboration models have been defined between parties	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Positive impact tested in the following fields (add quantitative data if you have):

ENERGY EFFICIENCY IMPROVEMENT (EE)	<i>The improvement is in the efficiency of generating the hot water necessary for the hotel to operate utilizing an energy efficient heat pump which moreover is using waste heat as a source , thereby operating over it's normal efficiency reaching 963%</i>
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	<i>The improvement is measured over 8 months of operation of the new system compared to the previous year.</i>
FINANCIAL COVERAGE	<i>Funding was through own capital</i>
EMPLOYABILITY POTENTIAL	<i>NA</i>
OTHER	<i>Reduced CO2 generation from 248m3 of LPG ie equivalent to 425 tonnes of CO2 in 8 months</i>
DIFFICULTIES	<i>None – implementation and effectiveness is site specific</i>

Agents involved in this experience:

<input type="checkbox"/>	Legislation agencies
<input type="checkbox"/>	Public promoters
<input type="checkbox"/>	Private promoters
<input type="checkbox"/>	Technical public institutions
<input checked="" type="checkbox"/>	Technicians of the private sphere (professional associations ...)
<input type="checkbox"/>	Builders
<input type="checkbox"/>	Industrial
<input type="checkbox"/>	Facility Managers (property managers, cleaning companies ...)
<input type="checkbox"/>	Energy supply companies
<input type="checkbox"/>	Users/owners (homeowners association, schools ...)
<input type="checkbox"/>	Other:
GAPS	<i>n/a</i>

(*) **RR_BB_FF_NN**

RR Country: **CY** (Cyprus), **FR** (France), **GR** (Greece), **IT** (Italy), **MT** (Malta), **PO** (Portugal), **SL** (Slovenia), **SP** (Spain)

BB Type of building: **RE** (residential), **TE** (tertiary), **MX** (mixed)

FF Field of action: **CO** (construction), **MA** (maintenance), **US** (use), **EN** (energy generation and distribution), **OT** (other)
(in case of affecting more than one field of action choose the most relevant)

NN Number of the practice: **01, 02, 03...**

(*)IN CASE OF A TRAINING EXPERIENCE:

Course name:	
Duration:	NA
Web:	
Director/a:	
Who is it aimed:	NA
Objectives:	NA
Program:	NA
Methodology:	NA

I agree to bring this experience to the database of the MARIE project, which will create a comprehensive training program for improving the energy efficiency of buildings in the area of the Mediterranean.