

## RECP Experiences at Madi

The efficient and environmentally sound use of materials, energy and water - coupled with the minimization of waste and emissions - makes good business sense. Using Resource Efficient and Cleaner Production (RECP) this can be achieved in a holistic and systematic manner. RECP applies preventive management strategies to improve natural resources productivity, minimize generation of waste and emissions, and foster safe and responsible production. As experiences of Madi Ltd. Bosnia and Herzegovina show, benefits are obvious in many enterprises, regardless of their line of business, location or size.

### Achievement at glance

The Resource Efficient and Cleaner Production (RECP) project in Madi will achieve annual savings of EUR 77,500 with investment of EUR 96,207 and payback time of 7 month to 1 year per selected measure. Water productivity has been improved by 65 %. The major contribution to water savings has been made by reuse of treated waste water for cleaning purposes.



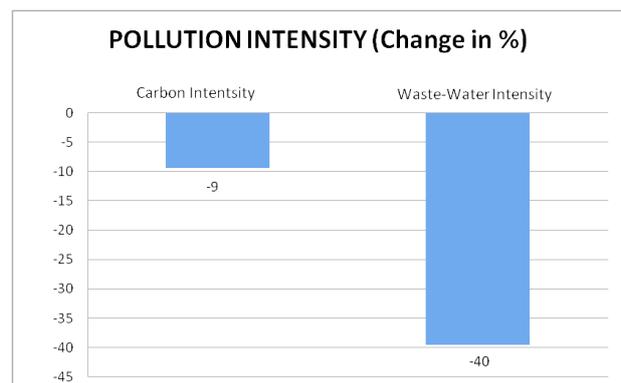
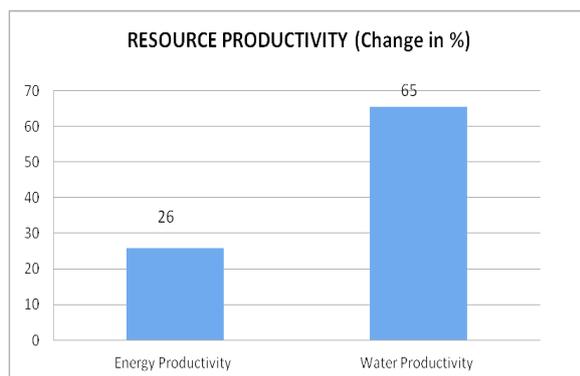
### Overview

The principal activity of the company is poultry slaughter and processing of poultry meat. The Company has an Installed slaughtering capacity of 2,500 birds per hour. The company was founded in 1997. Madi Ltd. Tešanj is certified according to the standards of HACCP, ISO 9001: 2008 and HALAL. Madi has more than 400 employees.

## Benefits

Absolute Indicator	Change (%)	Relative Indicator	Change (%)
Resource Use		Resource Productivity	
Energy Use	-21	Energy Productivity	26
Water Use	-40	Water Productivity	65
Pollution generated		Pollution Intensity	
Air Emissions (global warming, CO2 eq.)	-9	Carbon Intensity	-9
Waste-Water	-40	Waste-Water Intensity	-40

## RECP profile



## Resource Efficient and Cleaner Production (RECP)

**Resource Efficient and Cleaner Production (RECP)** entails the continuous application of preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment.

RECP addresses three sustainability dimensions individually and synergistically:

- *Production efficiency*

> Through improved productive use of natural resources by enterprises

- *Environmental management*

> Through minimization of the impact on nature by enterprises

- *Human development*

> Through reduction of risks to people and communities from enterprises and supporting their development



## Success Areas

RECP measures	Benefits				
	Economic			Resources	Waste flow
	Investment EURO	Savings (EURO/year)	Pay back period	Reductions in energy use, water use and/or materials use (per annum)	Reductions in waste water, air emissions and/or waste generation (per annum)
Installation of a hybrid system for the peak load reduction	50,000	50,000	1 year	Electric energy 279,946,6 kWh	CO <sub>2</sub> 440 t
Preventing exposure of wood to weather conditions by construction of an open steel hall	7,500	11,481	8 months	Wood 382 m <sup>3</sup>	-
Installation of devices for grease removing at the WWTP and construction of pipelines and tanks for re-use of wastewater	20,000	38,726	7 months	Water 21,888 m <sup>3</sup> WWTP chemicals 1 t	Waste water 21,888 m <sup>3</sup> Waste 1t



# RECP Experiences



## Approach taken

The Company participated in the National Cleaner Production Program in Bosnia and Herzegovina as one of the ten selected companies. The RECP assessment was performed by the company team and national experts trained in RECP methodology. The RECP assessment was supervised by international experts. The purpose of assessments made at the beginning of the project was to prepare a material balance, an energy balance and balances of water consumption and wastewater. After consultation with expert teams the company management selected the RECP measures to be included in the action plan for implementation. The measures will contribute to electric energy savings, wood consumption reduction, water and waste water reduction. The company is expanding their production to poultry farming so they will also consider feasibility of biogas production from poultry wastes after construction of new poultry farms.

### Testimony Box

#### National Cleaner Production Program in Bosnia and Herzegovina

The program is designed to foster expertise, service delivery capacity and implementation of RECP practices and policies in the country, building on UNIDO's experience in supporting National Cleaner Production Programmes (NCPPs) and Centres (NCPCs), in collaboration with UNEP, under the global joint RECP Programme. The program that was officially launched in 2015, contributes to improve the resource efficiency and environmental performances of businesses and other organizations in Bosnia and Herzegovina. With the application of a systematic RECP approach, the project aims at providing:

- Training to national experts on UNIDO's RECP methodology
- Assessment services to companies
- Information dissemination and awareness raising

### Contact Details

National Cleaner Production Program  
Podgaj 14, 71000 Sarajevo  
Bosnia and Herzegovina  
[www.ncpp.ba](http://www.ncpp.ba)  
Phone: +387 33 279 100  
fax: +387 33 279 108