

Sử dụng năng lượng mặt trời để giảm sử dụng điện tại Khách sạn Ngọc Gia Trang, tỉnh An Giang

gtz

Problems and Causes:

1-star hotel Ngoc Gia Trang has 40 rooms. Every bathroom has 1 electric water heater



- High cost of electric and gas
- Reduce the loading capacity of local electric networks



- Additional cost/year: 0
- -Net saving/year: 7,388 USD
- -Investment cost: 3,253 USD
- Payback period: 5.3 months



Environmental benefits:

Saving on energy (electric) and protect environment

Organizational benefits:

- -Enhance its imagines on environmental protection
- Increase the profits and welfare

Measures:

Install the heating system using solar energy



Reduce 100% electric cost

Workplace Safety and Health Protection Benefits

 Reduce risk of electric shock for clients

PREMA® - Profitable Environmental Management



Increase the productivity through replacing skilled workers by 1 normal worker in sharpening curving devices at Au Lac Wood Art, Quang Nam province, Viet Nam

gtz

Problems and Causes:

Every beginning morning of the month, 50 skilled curving workers spend working times for sharpening their own devices



Measure

- -Assign full time 1 skilled sharpening worker for all curving devices
- --Buy 1 good sets of sharpening devices

© GTZ/PREMAnet 2008

- -High costs because 50 sets of sharpening device must be set-up
- Skilled workers easily being fingers' cut
- Reduce productivity



- -Increase productivity 2%
- -Decrease sharpening device costs

Economic benefits:

- Additional cost/year: 377 USD
- Net saving/year: 1,392 USD
- Investment cost: 0 USD
- -Payback period: Immediately

Environmental benefits:

Reduce solid waste of sharpening devices

Organizational benefits:

- -More efficiency in using skilled labour
- -Increase productivity and profits

Workplace Safety and Health Protection Benefits

Reduce risk of fingers' cut





Reduce PU emission through buying more appropriate spraying device and improve praying manner at Au Lac Wood Art, Quang Nam province, Viet Nam

gtz

Problems and Causes:

There are just 2 sizes of spraying device for many sizes of products, inappropriate spraying manner makes a lot of redundant PII emission



- High PU cost
- Releasing PU emission and smell effects environment and health



Economic benefits:

- Additional cost/year: 0
- Net saving/year: 361 USD
- Investment cost: 9 USD
- -Payback period: 9 days

Environmental benefits:

Reduce PU emission releasing

Organizational benefits:

- -Easier management the spaying process
- -Workers care about reducing costs and protecting the environment and their health themselves

Measure:

- Buying 1 more size spraying device
- Improve praying manner



-Reduce 50% PU cost -Reduce releasing PU emission

Workplace Safety and Health Protection Benefits

Reduce effect of toxic PU emission to workers' health

PREMA® - Profitable Environmental Managemen



Utilize wood waste to replace coal for drying process in Au Lac Wood Art enterprise, Quang Nam province – Viet Nam

gtz

Problems and Causes:

- -A lot of wood waste from production process. The enterprise always gives for free to the neighbourhood for cooking.
- The enterprise must buy coal for drying wood

-Increase costs for coal

- The emission from coal has sulphur effects environment and worker health



-Reduce 100% coal costs

Economic benefits:

- Additional cost/year: 0
- Net saving/year: 352 USD
- Investment cost: 0
- Payback period: Immediately

Environmental benefits:

Reduce releasing emission from burning coal

Organizational benefits:

Worker more care about saving and utilize redundant waste

Workplace Safety and Health Protection Benefits

Reduce emission with sulphur from coal in drying process



Replace coal by wood waste in drying process

