

In the Name of God



Iranian Fuel Conservation Company

Cost-Benefit Analysis of implementing EnMS based ISO50001 in Iran Oil & Gas Industries



Date: 13/01/2016

Code: IFCO-PS-93-011





Cost-Benefit Analysis of implementing EnMS based ISO50001



Annual Energy Consumption in Oil & Gas Industry in Iran (Mboe)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 39.2 | 21.8 | 42.1 | 12.2 | 3.1 | 118.4 |





Cost-Benefit Analysis of implementing EnMS based ISO50001



Annual Energy Conservation Potential Regard to Implementing EnMS and Adjust Operational Controls in Oil & Gas Industry in Iran (Mboe)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 0.8 | 0.4 | 0.8 | 0.2 | 0.1 | 2.4 |
| 11.7 | 6.5 | 12.6 | 3.7 | 0.9 | 35.5 |





Cost-Benefit Analysis of implementing EnMS based ISO50001



Annual Energy Conservation Potential Regard to Implementing EnMS and Adjust Operational Controls in Oil & Gas Industry in Iran (in two scenarios: 2 & 30% energy saving potential) (Mboe)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 0.8 | 0.4 | 0.8 | 0.2 | 0.1 | 2.4 |
| 11.7 | 6.5 | 12.6 | 3.7 | 0.9 | 35.5 |





Cost-Benefit Analysis of implementing EnMS based ISO50001

Annual Cost Saving Potential Regard to Implementing EnMS and Adjust Operational Controls in Oil & Gas Industry in Iran (in two scenarios: 2 & 30% energy saving potential) (M USD)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 23.5 | 13.1 | 25.2 | 7.3 | 1.9 | 2.4 |
| 352.4 | 196.2 | 378.5 | 110.1 | 28.2 | 35.5 |

Based on 30 USD per BOE





Cost-Benefit Analysis of implementing EnMS based ISO50001



Return of Investment (in two scenarios: 2 & 30% energy saving potential) (Year)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 0.05 | 0.11 | 0.12 | 0.11 | 0.43 | 0.10 |
| 0.00 | 0.01 | 0.01 | 0.01 | 0.03 | 0.01 |

Based on 30 USD per BOE





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Annual GHG Reduction Potential (in two scenarios: 2 & 30% energy saving potential) (Mt CO2-equivalent)

| Oil Refineries | Gas Refineries | Petrochemical Complexes | NG Booster Stations | Crude & Oil products Booster Stations | Total |
|----------------|----------------|-------------------------|---------------------|---------------------------------------|-------|
| 0.3 | 0.2 | 0.4 | 0.1 | 0.0 | 1.0 |
| 5.1 | 2.8 | 5.4 | 1.6 | 0.4 | 15.3 |

