

Professional Services

Process Consulting—Refinery Experience



COMPANY	COUNTRY	CONTENTS OF PROJECT/STUDY TYPE	DETAILS	UNIT	PROJECT START
PTT	Thailand	Modeling	Plant-Wide	Gas Plant	2016
Motiva Port Arthur	USA	Refinery Wide Modeling	Refinery-Wide	Site	2016
Motiva	LA, USA	Refinery Wide Modeling/Reconfiguration	Modeling	Two Refineries	2015
Preem	Sweden	Energy Saving Mods Performance Audit	Energy	CDU/VDU	2015
Saudi Aramco	Saudi Arabia	Energy Saving Modifications	Energy	Gas Sep Plants	2014
Petrobras	Brazil	Site-Wide Refinery Energy Reduction Study	Energy	Site	2013
GS Caltex	Korea	Energy Reduction Study on VRHCR, RFCC, and CDU units	Energy	Units and steam system	2013
KNPC	Kuwait	Site-Wide Energy Reduction Study on 3 Refineries	Energy	Multi Sites	2012
Preem, Lysekil	Sweden	Detailed CDU Heat Exchanger Study	HX Performance	CDU	2012
GS Caltex	Yeosu, S Korea	Energy Reduction and Process Improvement Study	Energy	CDU	2012
Saras	Italy	Energy Reduction and Process Improvement Study	Energy	CDU	2011
Flint Hills	Alaska	Site-Wide Energy Reduction and Process Improvement Study	Energy	Site	2011
Preem, Lysekil (with FW UK)	Sweden	Energy Reduction and Yield Improvement Study	Energy & Yield	CDU/VDU/ Nap Stab	2011
Preem, Lysekil (with FW UK)	Sweden	Energy Reduction and Process Improvement Study	Energy, Gas & H ₂	Site	2010
S-Oil, Ulsan	Korea	Site-Wide Energy Reduction Study	Energy	Site	2009
YPC, Nanjing	China	Site-Wide Energy Reduction Study on Aromatics Plant	Energy	Site	2009
ENI, Sannazaro	Italy	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2009
FW/Client	Vietnam	Energy Reduction Study on Process and Utility Systems	Energy	Site	2008
SK Corp	Korea	Energy Reduction Study	Energy	CDU	2007
Total, Flandres	France	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2006
APS engineering, Sudan	Sudan	Grassroots Refinery Design Study	Energy	CDU	2006
Total, Port Arthur	USA	Energy Performance Benchmarking Study	Energy	FCC	2006
Total, Port Arthur	USA	Site-Wide Utility Energy Improvement Study	Energy	Site	2006
Total, Lindsey Oil - Humberside	UK	Energy Reduction Study	Energy	CDU	2006
Saras	Italy	Energy Reduction Study	Energy	FCC	2006
Saras	Italy	Hot Water Loop Energy Reduction Study	Energy	Utilities	2006
COP, Borger	USA	Energy Reduction Study Scoping & Preliminary Projects Identification	Energy	CDU/HDS	2005
GS Caltex, Yosu	Korea	Energy Reduction Study Scoping & Preliminary Projects Identification	Energy	CDU	2005
CNOOC, Nanhai	China	Grassroots Refinery Site-Wide Energy Reduction Study	Energy and Hydrogen	Site	2005
Saras, Sardinia	Italy	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2005
Total, Immingham	UK	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2005

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Holborn, Hamburg	Germany	Energy Pinch Training and Consulting	Energy	CDU	2005
Total, Multiple	Europe	Energy Performance Benchmarking Study on 5 sites	Energy	FCC	2005
BP, Whiting	USA	Pre-heat Train Monitoring and Decision Support Project	Energy	CDU	2005
Total, Normandy	France	Site-Wide Utility Energy Improvement Study (Steam System Focus)	Energy	Site	2005
Total, Provence	France	Site-Wide Utility Energy Improvement Study (Steam System Focus)	Energy	Site	2005
Total, Grandpuits	France	Site-Wide Utility Energy Improvement Study (Steam System Focus)	Energy	Site	2005
Total, Feyzin	France	Site-Wide Utility Energy Improvement Study (Steam System Focus)	Energy	Site	2005
Total, Vlissingen	Holland	Site-Wide Utility Energy Improvement Study (Steam System Focus)	Energy	Site	2005
GS Caltex, Yosu	Korea	Site-Wide Water and Effluent Reduction Study	Water	Site	2005
Total, Immingham	UK	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2004
GS Caltex, Yosu	Korea	Energy Reduction Study	Energy	CDU	2004
Tamoil, Columbey	Switzerland	Hydrogen Optimization Scoping Study	Hydrogen	Site	2004
Total, Feyzin	France	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2004
Rompotrol, Constanta	Romania	Hydrogen Optimization Scoping Study	Hydrogen	Site	2004
FW, Rabigh	Middle East	Grassroots Refinery Site-Wide Energy Reduction Study	Energy	Site	2004
Total, Antwerp	Belgium	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2004
OMV, Schwechat	Austria	Site-Wide Fuel Gas Optimization Study	Energy	Site	2004
PPMSB, Melaka	Malaysia	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2004
Total, Lindsay	UK	Energy Reduction and Capacity Increase Study	Energy and Capacity	CDU	2004
COP, Borger	USA	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2003
COP, Ponca City	USA	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2003
Saras, Sardinia	Italy	Site-Wide Energy Reduction and Hydrogen Optimization Study	Energy and Hydrogen	Site	2003
COP, Rodeo	USA	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2003
Irving Oil, New Brunswick	Canada	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2002
OMV, Schwechat	Austria	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2002
SINOPEC, Yanshan	China	Site-Wide Water and Effluent Reduction Study	Water	Site	2002
Citgo, Texas	USA	Site-Wide Hydrogen Optimization Study	Hydrogen	Site	2001
Texaco, Pembroke	UK	Hydrogen Capital Cost Reduction Study	Hydrogen	Site	2001
Statoil, Mongstad	Norway	Site Energy and CO ₂ Reduction Study	Energy	Site	2000
Lyondell-Citgo, Houston	USA	Site Energy Reduction Study	Additional Benefits through Capacity Increase	Site	1999
OMV, Schwechat	Austria	Energy and Capital Cost Reduction	Energy	HDS	1999
Sunoco, Marcus Hook	USA	Site Energy Reduction Study	Energy	Site	1998
Sunoco, Point Breeze	USA	Site Energy Reduction Study	Energy	Site	1998
Sunoco, Girard Point	USA	Site Energy Reduction Study	Energy	Site	1998
Sunoco, Tulsa	USA	Site Energy Reduction Study	Energy	Site	1998
Sunoco, Toledo	USA	Cooling Tower Debottlenecking Study	Water	Site	1998
Sasol, Secunda	South Africa	Site Wide Hydrogen Optimization Study	Hydrogen	Site	1998
Lindsey Oil, Humberside	UK	Energy Reduction and Yield Improvement Study	Energy	CDU	1998
Petronas, Melaka	Malaysia	Hydrogen Capital Cost Reduction Study	Hydrogen	Site	1998

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Marathon Ashland, Robinson	USA	Site Energy Reduction Study	Energy	Site	1997
Phillips, Texas	USA	Yield Improvement and Capacity Increase Study	Additional Benefits through Energy Improvement	CDU	1997
Crown , Texas	USA	Energy Reduction Study	Energy	FCC	1997
Engen, Durban	South Africa	Site Energy Reduction Study	Additional Benefits through Capacity/Yield Improvement	Site	1997
Visbreaker	1995	Yield Improvement and Capacity Increase Study	Additional Benefits through Energy Improvement	CDU	1997
Crown, Texas	USA	Energy Reduction Study	Energy	FCC	1997
Engen, Durban	South Africa	Site Energy Reduction Study	Additional Benefits through Capacity/Yield Improvement	Site	1995