sun2flow

# **sun2flow**<sup>™</sup> water pumping solutions

by The meeco Group



**sun2flow**<sup>TM</sup> is the ideal solution to pump water in off-grid areas where lakes, rivers or natural water reserves can easily be found. Its operational principle is to connect photovoltaic modules to a water pumping technology and thus allow for real time and in-situ operation of the pump.

### **Features**

- Exclusively developed with water pumping experts to ensure perfect fit between mobile solar and water pumping technology and best performance
- Integrated PV modules with adjustable tilt angle from 0 to 50° inclination
- Designed for mobile and heavy-duty outdoor use, using galvanized iron sheet and resistant leaf spring suspension
- Stabilizing trailer ballast system to compensate ground conditions or to secure the system under high wind forces

## **Benefits**

- Improving surface water quality via the integrated ventilation process
- Virtually no maintenance thanks to the combined use of long lasting high-end technologies such as polycrystalline solar photovoltaic modules and proven water pumping devices
- Usable on irregular ground surfaces and inclinations
- Several add-on components that significantly increase the spectrum of applications such as street lighting, residential power supply or energy storage

# Advantages of mobile solution

- Manual tracking: Up to 20% extra water production per day
- Utilization of single power supply and pump across multiple fields
- Utilization of the system as power backup and supply

# **Technical Data**

### sun2flow™ Mobile

4500 x 1800 x 1800 mm Dimensions (L x W x H) (variable lenght: up to 8500 mm)

Total weight min. 350 kg - max. 1000 kg

Material Galvanized iron sheet

Single axle with leaf spring Mechanics

suspension

900 x 200 x 400 mm Storage area

#### PV

Up to 2100 Wp per trailer Modular Installed capacity

and extendible to 10 kWp

Module surface min. 9.75 m<sup>2</sup> - max. 30 m<sup>2</sup>

0 to 50° Module inclination

Suntech 200-240 Wp Polycrystal-PV Module line module (or equivalent)

### sun2flow™ Fixed

Dimensions (L x W x H) As per design

ISO 9001:2000 and ISO 14001:2004 Certificates

Material Galvanized iron sheet

Storage area As per module surface

#### PV

Up to 25 kWp to drive deep well Installed capacity

pumps up to 20 HP

Module inclination As per location

Suntech 200-240 Wp Polycrystal-PV Module

line module (or equivalent)





#### Accessories

Pump safety Wires & pegs

Energy storage Backup using Lithium or dry GEL batteries

Pipes PVC & GI pipes and elbows

Lighting LED lighting or equivalent

Cabling and jointing Pump cable and waterproof jointing kit

Others Sleeves, reducers, valves and splitters

# **Applications**

Mobile water pumping







Field irrigation



Emergency

Extended applications



Energy storage



Off-grid



Street lighting



Residential



Night-time power



# **Water Pumps**

Wide selection of pumps: DC & AC solar pumps

• Total dynamic head: From 2 to 3,50 metres

• Flow: from 0.5 m<sup>3</sup>/hr to 150 m<sup>3</sup>/hr (greater than 0.75 MLD)

• Type of pumps: Submersible, surface and sprinkler

### DC Range (Up to 1,440 Wp)

Use For mobile applications

4 inch centrifugal submersible Pump type

pump

Up to 1,440 Wp Nominal power

Up to 19 m<sup>3</sup> / hr Max discharge:



### DC Range (Up to 9,000 Wp)

Use For fixed and mobile applications

4,6,7 & 8 inch centrifugal sub-Pump type

mersible pump

Up to 10,000 Wp Nominal power

Max discharge: Up to 19 m<sup>3</sup> / hr



### AC Range

4,6,7,8 inch surface, submersible Pump type

and sprinkler pumps

Nominal power 0.5 to 30 HP

750 m<sup>3</sup>/day Max discharge:





# **About The meeco Group**

As a leader in clean renewable energy, meeco<sup>TM</sup> has provided clients with services and solutions for over 250 MW across three continents.

We work behind the scenes with project developers, businesses, governments, technology providers, and EPC contractors to structure, finance, and commission highly bankable projects. By providing the optimal set of services and solutions for each project, we generate attractive returns for clients and other stakeholders.

Some of these services and solutions include:

- clear advisory services:
  strategic consulting, project services,
  financial advisory and communications
- oursun<sup>TM</sup> turnkey solutions: grid-connected and off-grid solutions, sun2go<sup>TM</sup> portable solutions and energy storage solutions
- asset management services: on-going site services

The meeco Group delivers these services and solutions via regional offices located worldwide to ensure we address local requirements and community needs.

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