

Milestone D3.1 – Attachment D:

Energy availability v's consumption (solar and grid) and water applied (ML/ha)

		Review period 15 Jan to 6 June 2018		
Weather site data				
Bright sunshine hours				1737
Pump operational threshold		W/m ²		400
Sun hours equal to or above threshold				1027
Recorded pumping data				
Daytime pumping hrs				279
Percent of available solar hours				27.2
Nighttime pumping hrs				119
Total pump run time (hours)				398
Grid supplied energy (kWh)				4614
Recorded pumping data				
Average pump demand (kWh/h)				25.13
Solar supply kWh				5389
Average daytime solar input (kWh/h)				19.32
Average daytime grid input (kWh/h)				5.81
Grid input				
Ratio of operation (kWh)	Day	70%		3229.8
	Night	30%		1384.2
				4614
Total pump energy use (grid +solar) kWh				10003
System utilisation				
Nominal water allocation		ML/ha		4.5
Farm area		Ha		38.5
Total water allocation		ML		173
Irrigation applied		ML		34.85
		ML/ha		0.9
Percent of allocation applied				20