Irrigation Pumping Energy Efficiency Assessment Tool

IPEEAT v2 ©

DISCOVER—YOUR SAVING

Case Study 2: Soft Hose Boom

ACCURATELY MEASURED

Component.	Pump effy	Elevation (m)	Residual head (m)	Sum of head components	$/ML annual pumping cost
Measured	45%	6m	15m	55m	$108
Expected	75%	6m	15m	37m	$44

IPEEAT v2 CALCULATIONS

Irrigation Pumping Energy Efficiency Asessment Tool

IPEEAT©Rev 02

TALLEMENCO Energy Efficiency for Irrigation

ELECTRIC PUMPING

Input raw data into cells highlighted YELLOW

Location: Turf Farm 2, Hawkesbury River, NSW

VARIABLES	Choice/Units	INPUTS
Emitter type	CP/LM/Boom, Gun, Knocker/Rotor, Drip, Flood, Transfer, Marine	CP LM Boom
Motor Type	Surface or Submersible	Surface
If surface motor	Direct coupled or belt drive ##	Direct
If subby, configuration	Bore hole pump: Yes/No ###	no
Filter	yes/no	no
Layflat	yes/no	yes
Residual Pressure*	kPa	150
Static Head **	metres head	6
Electricity tariff***	cents/kWh	30
Water pumped****	ML/yr	100
Actual Elect cost ****	$$/yr	10,800
Actual Pumping cost	$$/ML	108.0
Achievable Electric. cost	$$/yr	$4,968
Achievable Pumping cost	$$/ML	49.7
Potential Savings Elect	$$/yr	$5,832
Potential Savings Elect	%	54%
NPV (whole years) #	10	$60,173

TALLEMENCO Energy Efficiency for Irrigation

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