



River Run Hydro seeks Platanares investment partner for \$600,000 cash and guarantee of a \$2.2 million construction loan for a 40% stake or full capitalization of \$2.65 million for a 51% stake.. The hydro model for Platanares is summarized below.

Parameter	units	Value	
Available Head	feet	360	<p><b>Property:</b> 44 hectare privately owned finca that includes both sides of the Platanares River near Pejiballe, Southwest Costa Rica.</p> <p><b>Access:</b> Good access by 4WD to main part of river. Unimproved to other side; rope access only for part of install.</p> <p><b>Grid:</b> Three-phase grid 2.2 km distant; single-phase grid 300 m away from turbine location</p> <p><b>Mode:</b> Joint venture: Land owner 20%, Investor 40%, RRH 40% with international construction loan.</p> <p><b>Profits:</b> 6 year payback, 17% ROI on a \$6 million capital investment</p> <p><b>Flow Measurement:</b> HOBO pressure gauge installed and monitoring depth since 22 Apr 14</p>
Pipeline Diameter	inches	30	
Flow velocity	feet per second	5	
Penstock Flow	cubic feet per second	25	
Flow Rate	gallons per minute	11010	
Pipeline Length	feet	3000	
Head Loss	feet per 100 feet	0.2	
Total Head loss	feet	6	
Effective head	feet	354	
Turbine efficiency	percentage	85%	
Hydroelectric Potential	kilowatts	596	
Annual operation period	months	8	
Sell rate	\$/ kilowatt hour	\$0.11	
Annual Revenues	dollars	\$377,818	
Capital Cost	dollars	\$2,650,000	
Payback period	years	7.0	
Return on Investment	percentage	14.3%	

### Challenges

- 1) Vertical environment for portion of penstock; rope Access to complete penstock and turbine housing
- 2) Rainy season operation only.

### Advantages

- 1) No land costs
- 2) Private land on both sides of river, with good access
- 3) Fifteen minutes from paved roads, located within thirty minutes of major city

