

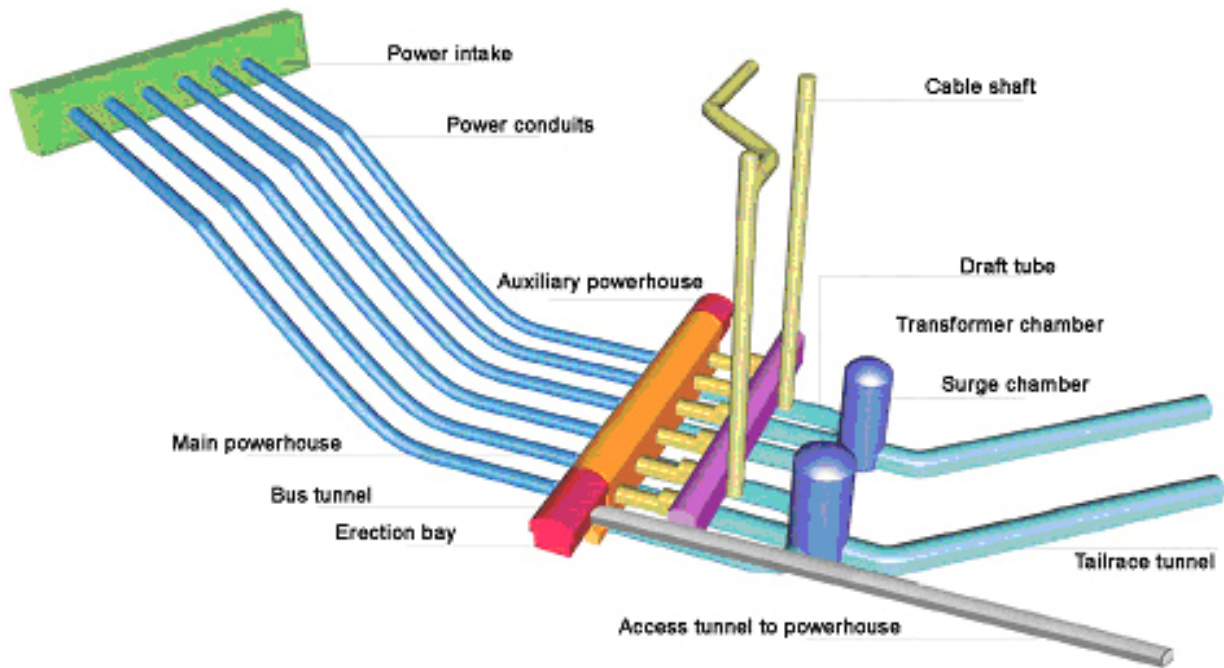
## Jinping



**Bird's view of Jinping-I Hydropower Project**



**Bird's view of Jinping-II Project**



**Underground powerhouse of Jinping- I**



**Underground powerhouse of Jinping- II**

The Jinping River Bend on the Yalong is one of China's three famous river bends. The length of bend is 150 km along the river course, but the minimum distance at its neck points is only 16 km, yet it creates a drop of 310 m. Two projects have been planned - Jinping-I, which has a high dam, and Jinping-II, which uses a long headrace tunnel. The 305 m double-curvature thin arch dam in Jinping-I is the highest in the world among the dams completed, under construction or in the design process. Jinping-II has a large underground complex. Its 16.6 km headrace tunnel is longest one in China; its maximum overburden of 2,525 m surpasses the world-famous Simplon road tunnel (maximum overburden 2,135 m), and is close to a headrace tunnel in France which has the highest overburden (2,619 m). The total installed capacity of Jinping is 8,400 MW, out of which Jinping-I is 3,600 MW and Jinping-II is 4,800 MW.

## Main features

### Jinping-I

<b>Project Location</b>	On the Yalong River, Sichuan Province, P. R. China
<b>Project Purpose</b>	Hydroelectric Power Generation
<b>Years of Construction</b>	2003-2014
<b>Catchment and Reservoir</b>	
Catchment Area	10,2560 km <sup>2</sup>
Mean Annual Runoff	1,220 m <sup>3</sup> /s
Reservoir Area at FSL	82.55 km <sup>2</sup>
Storage at FSL	7,760 million m <sup>3</sup>
Active Storage	4,910 million m <sup>3</sup>
<b>Power plant</b>	
Installed Capacity	3,600 MW
No. and Capacity of Units	6×600 MW
Power Conduits	6 steel embedded in concrete I.D.=9.5 m
Type of Turbine	Francis

### Jinping-II

<b>Project Location</b>	On the Yalong River, Sichuan Province, P. R. China
<b>Project Purpose</b>	Hydroelectric Power Generation
<b>Years of Construction</b>	2003-2016
<b>Catchment and Reservoir</b>	
Catchment Area	10,2663 km <sup>2</sup>
Mean Annual Runoff	1,220 m <sup>3</sup> /s
Storage at FSL	14.28 million m <sup>3</sup>
Active Storage	5.02 million m <sup>3</sup>
<b>Power plant</b>	
Installed Capacity	4,400 MW
No. and Capacity of Units	8×550 MW
Power Conduits	8 I.D.=7.0(V)/6.0(H) m
Type of Turbine	Francis

<b>Main Dam</b>	
Type	Double-curvature Arch Dam
Height	305 m
Crest Length	568.6 m
<b>Escape Works (No./ Discharge Capacity)</b>	
Crest Outlet	4 / 2,993 m <sup>3</sup> /s
Bottom Outlet	5 / 5,465 m <sup>3</sup> /s
Flood	1 / 3,651 m <sup>3</sup> /s
Discharging Tunnel	
<b>Main Construction Volumes</b>	
Concrete	7,424,700 m <sup>3</sup>
Excavation	18,538,900 m <sup>3</sup>
<b>Project Developers</b>	
Owner	Ertan Hydropower Development Company, Ltd.
Designer	CHIDI

<b>Water Retaining Structure</b>	
Type	Sluice dam
Height	37 m
Length	162 m
<b>Discharge Works</b>	Broad Crested Weir
<b>Headrace Tunnel (No./Dia./Length)</b>	4 / 11.0m / 16.593 km
<b>Main Construction Volumes</b>	
Concrete	2,389,300 m <sup>3</sup>
Excavation	13,794,500 m <sup>3</sup>
<b>Project Developers</b>	
Owner	Ertan Hydropower Development Company, Ltd.
Designer	ECIDI