



Hydropower ,Large Dams and Reservoirs in China

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Greece
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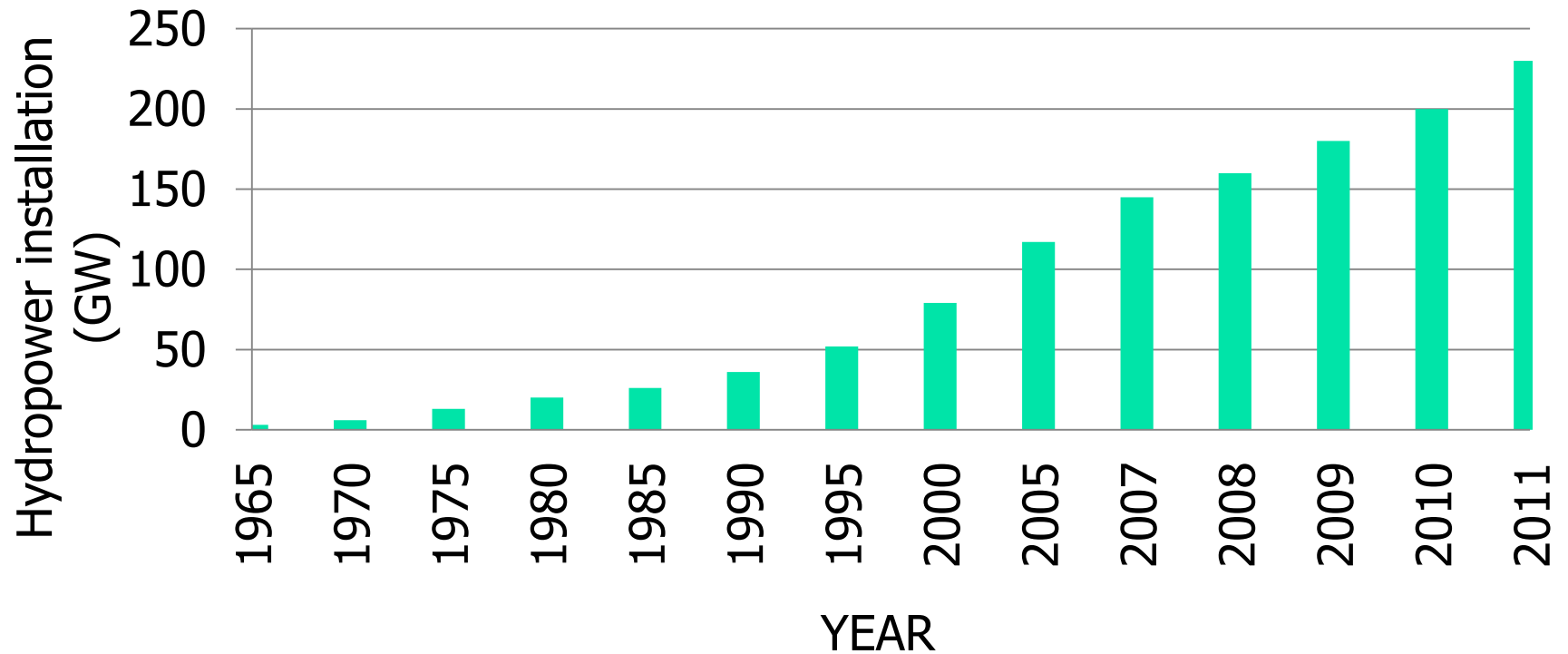
- ◆ Technically developable capacity of 694 GW
- ◆ Annual power generation of 608 TWh
- ◆ 13 Hydropower Bases Planned





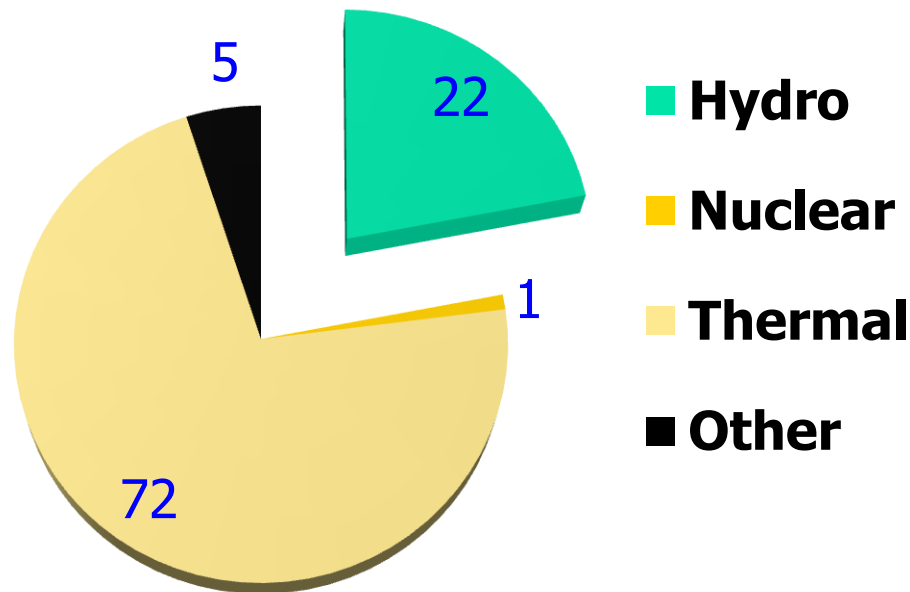
■ Hydropower installation exceed 200GW in 2010

Hydropower installation

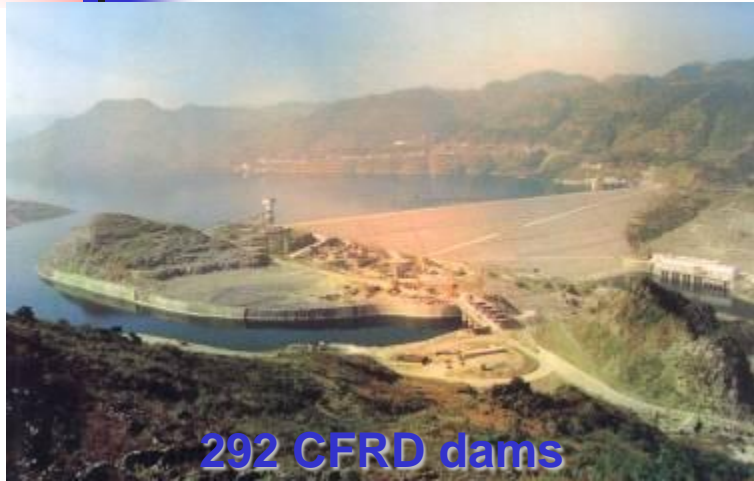


The electricity generation in China(2011)

- Hydro 22% ,Nuclear 1%, Thermal 72%,other 5%



6,280 dams higher than 30m are completed or under construction in China





6,280 dams in China

| Calssification | Height | | | | | To sum |
|---------------------------------------|--------|---------|----------|----------|-------|--------|
| | 30-60m | 60-100m | 100-150m | 150-200m | ≥200m | |
| Gravity dam | 527 | 88 | 19 | 3 | 0 | 637 |
| RCC dam | 38 | 36 | 21 | 3 | 2 | 100 |
| Arch dam | 802 | 120 | 15 | 6 | 7 | 950 |
| RCC arch dam | 9 | 21 | 15 | 1 | 0 | 46 |
| Earth dam | 3387 | 99 | 5 | 0 | 0 | 3491 |
| Rockfill dam | 284 | 44 | 20 | 2 | 2 | 352 |
| Concrete faced <i>rockfill</i> dam | 116 | 112 | 47 | 14 | 3 | 292 |
| Other | 364 | 13 | 1 | 0 | 0 | 378 |
| To sum | 5557 | 535 | 145 | 29 | 14 | 6280 |

The highest arch concrete dams in China

Yalong River

Jinping- I
3,600MW

Jinping- II
4,800MW

Guandi
2,400MW

Ertan
3,300MW

Tongzilin
600MW



Jinping- I Dam - Key features

Height : 305m

Installed power : 3,600 MW

Concrete volume : 5,380,000 m³



Jinping Dam Concrete Progress – Oct ,2012(Downstream View)

Height : 243m

Completed concrete volume : 4,340,000m³

Completed time : 2013



The highest completed RCC dam in China

Project : Guangzhao

Height : 200.5m

Installed power : 1,040 MW

Concrete volume : 2,870,000 m³



Guangzhao dam completed in 2007



The highest completed concrete faced rockfill dam in China

Project : Shuibuya

Height : 233m

Installed Power : 1,840 MW

Rockfill Volume : 16,000,000 m³



Shuibuya dam completed in 2008



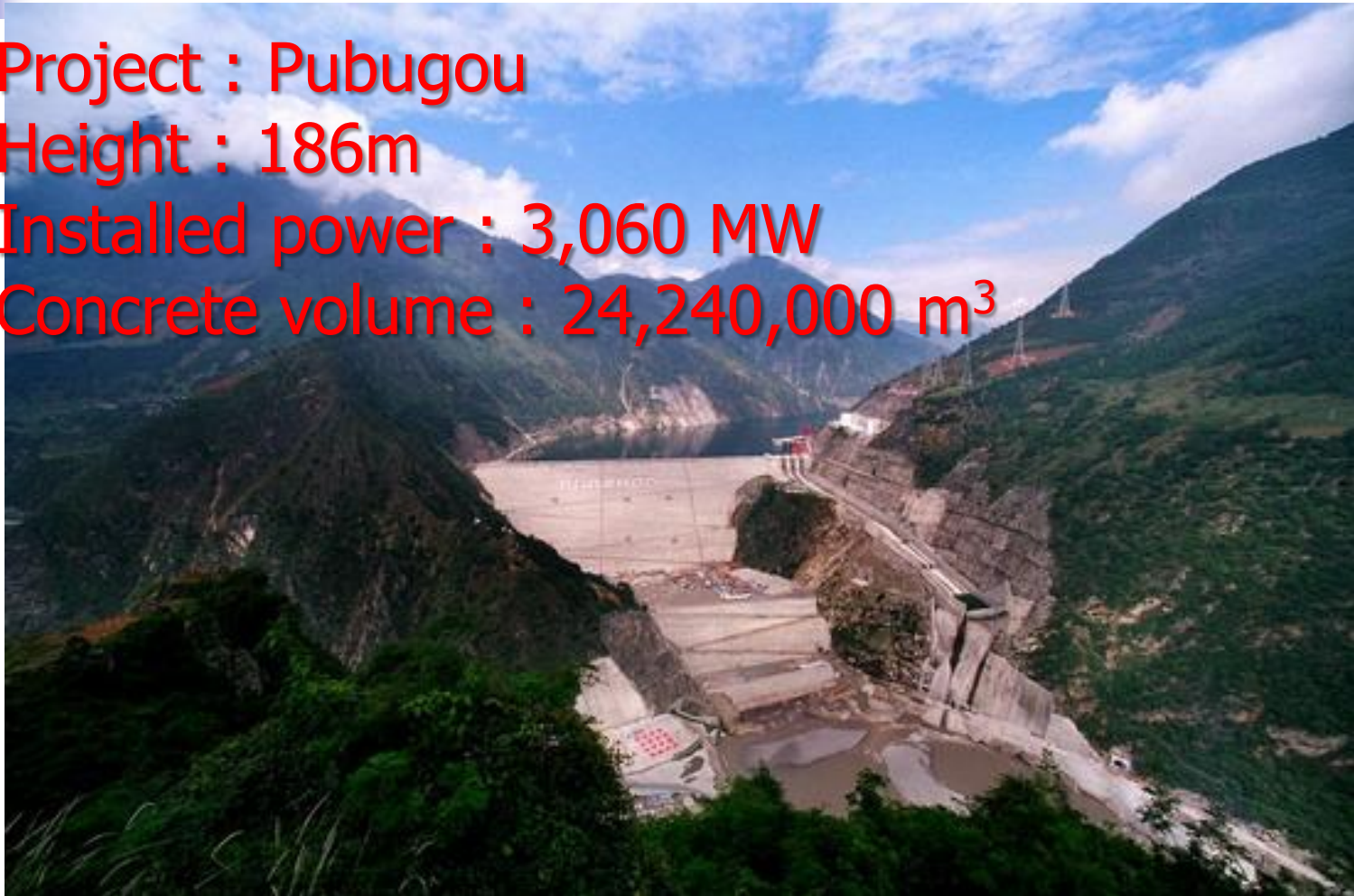
The highest completed rockfill dam with clay core in China

Project : Pubugou

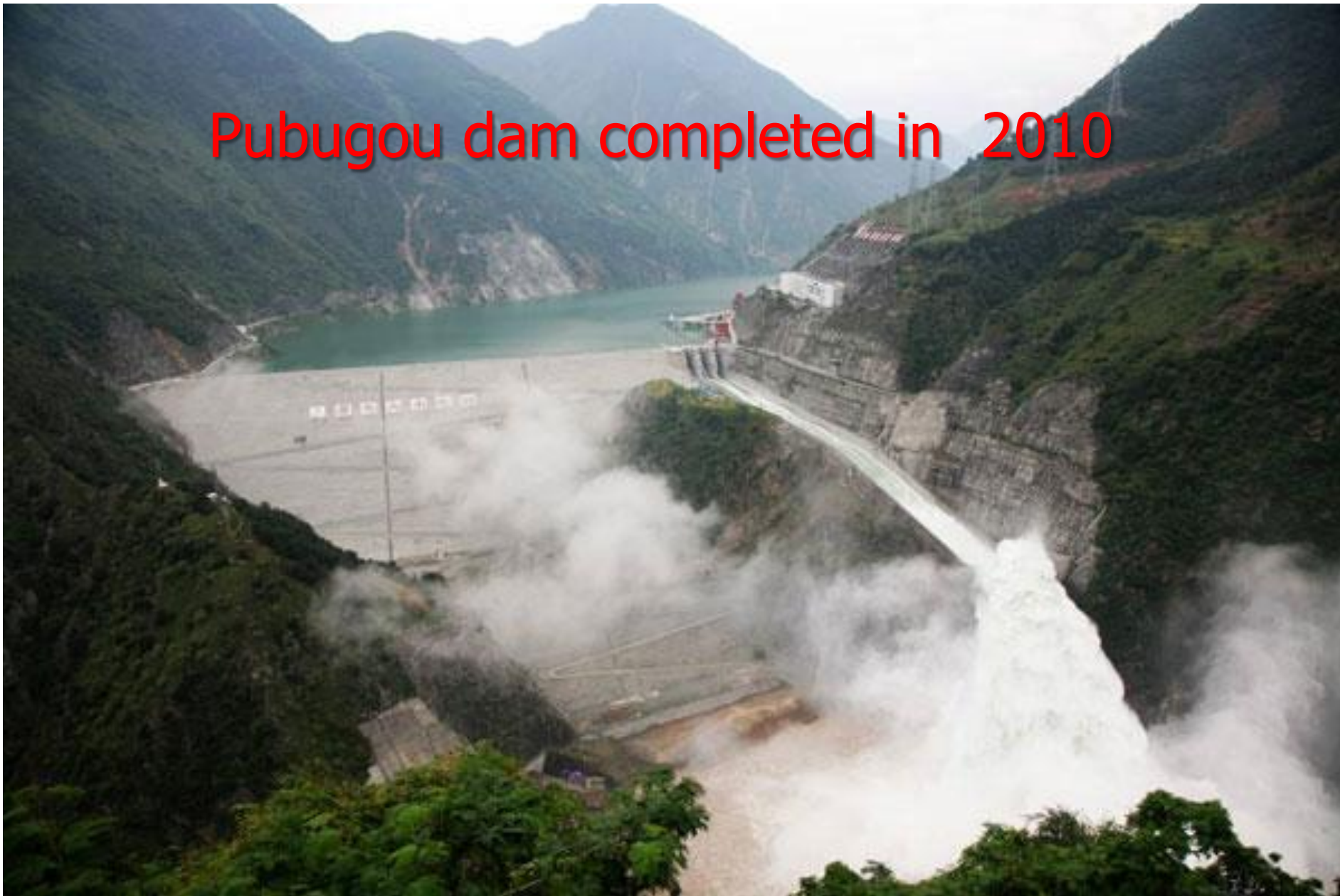
Height : 186m

Installed power : 3,060 MW

Concrete volume : 24,240,000 m³



Pubugou dam completed in 2010



The biggest completed dam in China and in the world

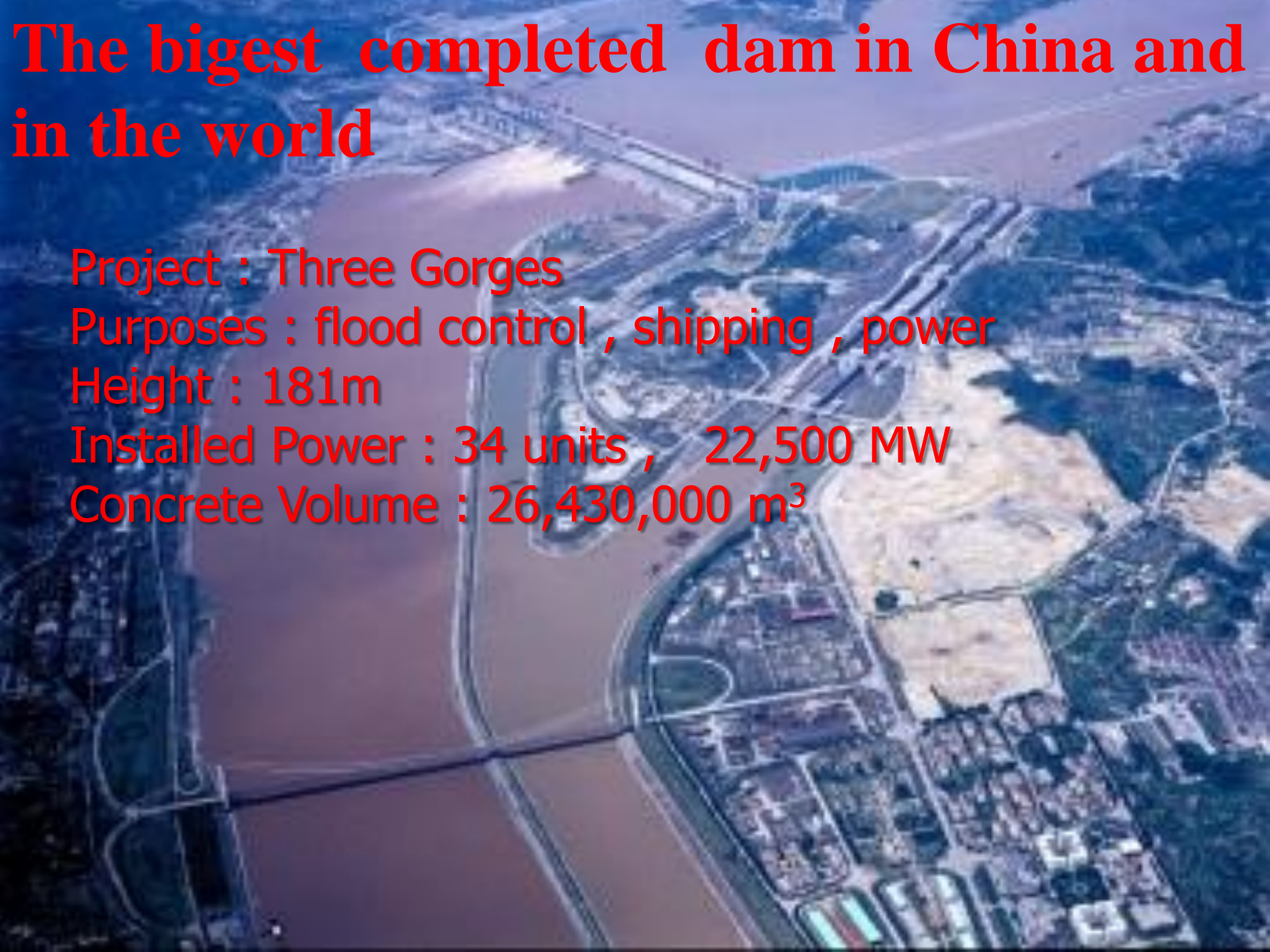
Project : Three Gorges

Purposes : flood control , shipping , power

Height : 181m

Installed Power : 34 units , 22,500 MW

Concrete Volume : 26,430,000 m³



The biggest Ship lock in the world



The Three Gorges dam is experienced by the highest peak of 71,200 m³/s flood in July 25,2012.



Hydropower installation will exceed 350GW in China in 2020, and carry out energy-saving and emission-reduction.



Thank you for your attention !

