



acqua potabile
santé

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Sustainable water supply

**Azienda Acqua Potabile Comunale,
Gordola (Canton of Ticino)**

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Municipal Waterworks Councillor



Vincitrice del Premio

Watt d'Or2010

Riconoscimento assegnato dall'Ufficio federale dell'energia
ai migliori progetti nel campo del risparmio energetico

1990 our challenge

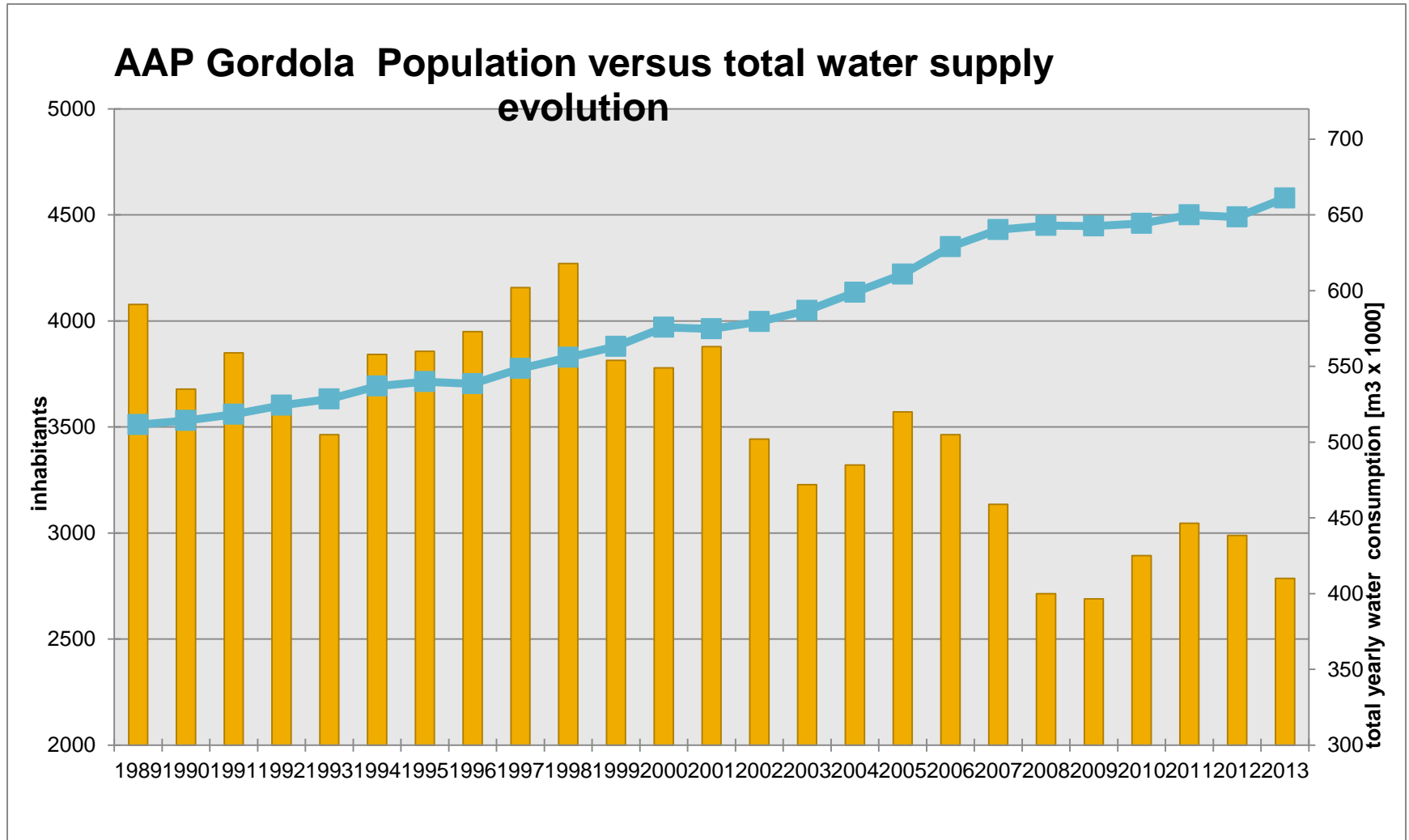
- Hot summer days very high demand
- Insufficient quantity of water produced from springs
- 1993 Large scale expansion of water supply cost 15 mio CHF



Can we reduce water demand?

- ▶ Yes we can ? How?
 - ▶ Waterworks efficiency : **search for leaks**
 - ▶ Consumer efficiency: **demand side management**
- ▶ And we did it !
 - ▶ Reduction of water lost in leaks **500 mc/day**
 - ▶ Peak consumption from **2700 mc/day** down to **1800 mc/day**
 - ▶ Yearly consumption from **100 mc per person** down to **80 mc**
 - ▶ Saved **10-15 milioni CHF**

Sorry ...Just one graph!



Saving water = Saving Energy

- ▶ Wanted to save money
 - ▶ Eliminated leaks , reduced user consumption
- ▶ Saved water = saved energy
 - ▶ Pumping energy 120'000 + 30'000 kWh/y
 - ▶ Heating energy 515'000 kWh/y
 - ▶ Wastewater treatment energy 15'000

...not only energy saved but exploiting a 250 meter slope from springs to reservoir we produce **250'000 kWh/year**





Total saved 625 MWh + produced 250 MWh new green energy for 4500 inhabitants per year related to the US population would mean **14 times Hower Damm** production

