

WATER

ANTOINE WASSERFALLEN president social-IN3.coop

Fresh Water: Lower Resources and Rising Prices

THEMES

- INSTABILITY of resources availability
- VOLATILITY of prices, unit costs
- NEW TECHNOLOGIES for the production of freshwater
- NEW MARKETS and models for new products dissemination

SWITZERLAND

UNIT CONSUMPTION DECREASING / FROM 500 L (0.5 M3) TO 325 L (.325 M3) PER DAY / NETWORKS LOSING 30% / WATER SALES WILL NOT COVER NETWORKS MAINTENANCE (-10% INCOME) / SWISS PRICE = 80 cts TO 4 francs...

SSIGE SOC. SUISSE DE L'IND. DU GAZ & DE L'EAU

1938-90-2011



SHRINKING GLACIERS BRING INSTABILITY OF RESOURCES

INSTABILITY?

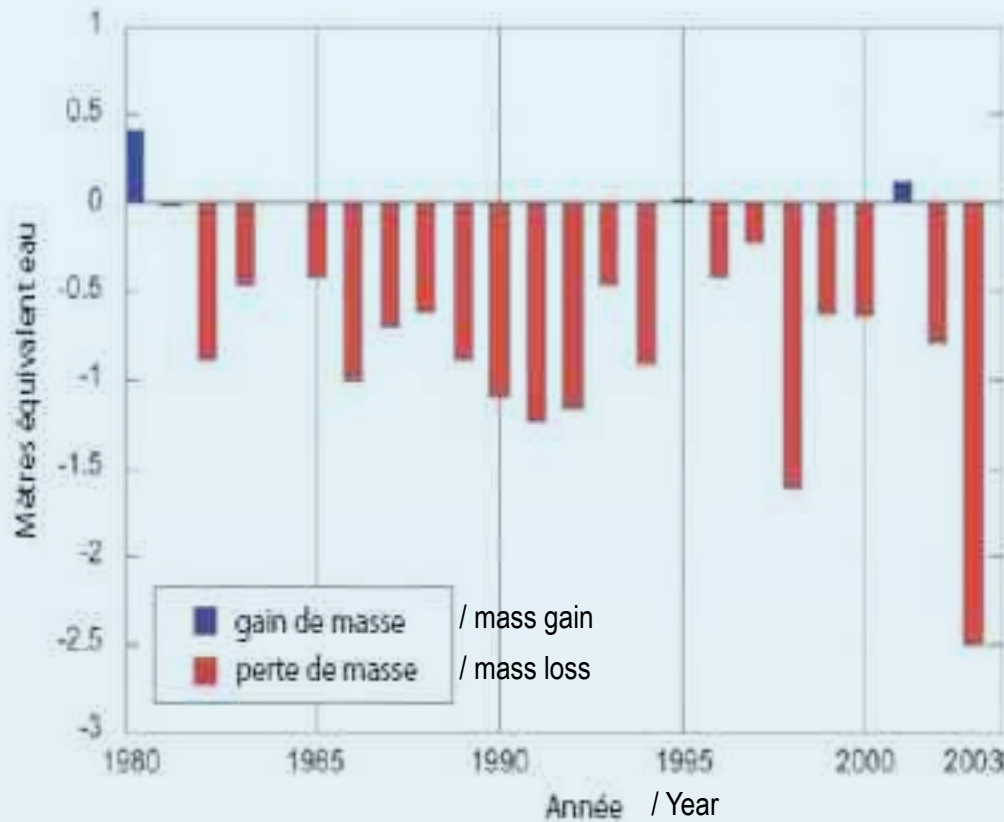


Figure 6: Perte de masse des glaciers alpins depuis 1980. Les moyennes ont été calculées à l'aide des bilans de masse annuels des glaciers suivants: St Sorlin (F), Sarennes (F), Silvretta (CH), Gries (CH), Sonnblickkees (A), Vernagtferner (A), Kesselwandferner (A), Hintereisferner (A), Careser (I).

Source: Regula Frauenfelder, World Glacier Monitoring Service - Zurich

running



OUT OF TIME?

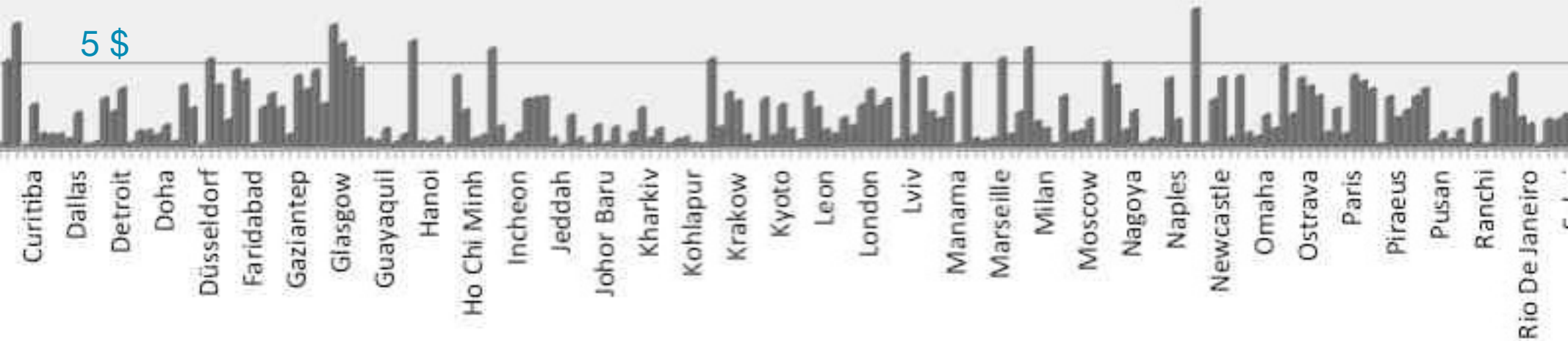
STABILITY

15 \$

10 \$

5 \$

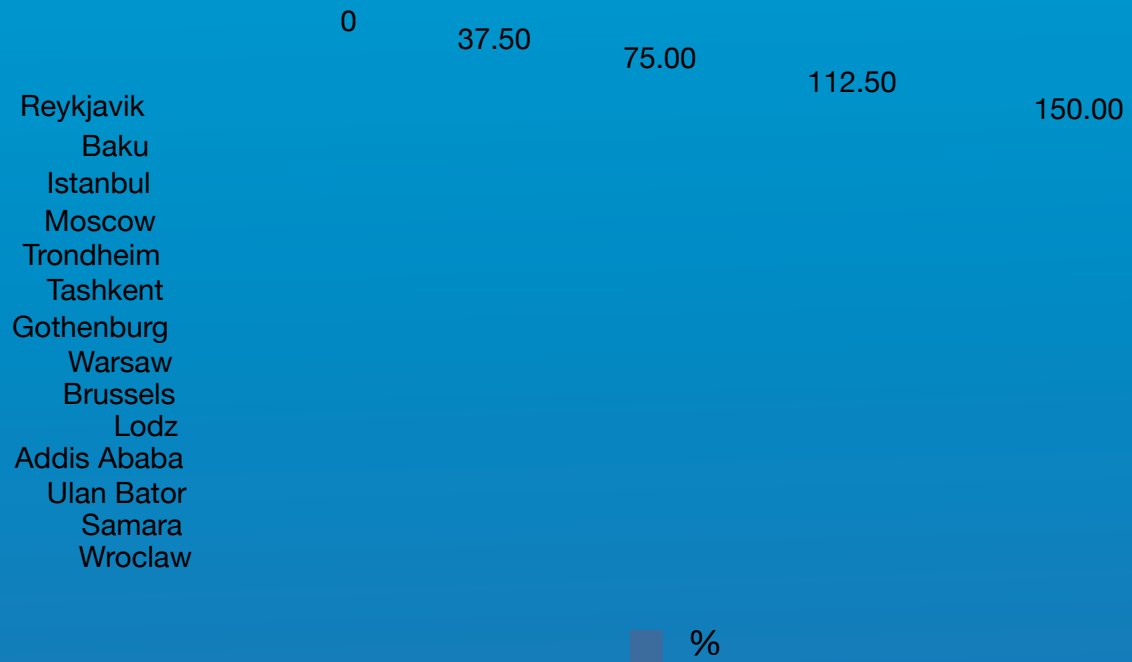
Global Water Intelligence 2011



PRICES WORLDWIDE ARE VERY SIMILAR...

2012

2011



WORLD WATER TOP PRICES CHANGES ARE DRASTIC, 3 TO 2 DIGIT % INCREASES

0

37.50

75.00

112.50

150.00

Reykjavik

WHAT IF?

IF CUMULATED OF % INCREASES HAPPEN?





2020+

hospitality 200 rooms	180 guests 40 employees <u>50 visitors</u> total 360 users	400 kg sludge per day
produced in 4 hours at a pace of 40 liters of drinkable water per hour	between 8 and 16 times this volume of Oxygene from the atmosphere	Methanization 20 liters H ⁺ Hydrogene
drinkable water 160 liters per day	economic value	approx 800 € per day (300 000 €/year)

- some glance at the future
- are you part of thi future?

- we need new innovative projects for the physical production of water
- the technologic vision of XXIst Century can compensate for the needs
- how to foster new projects?
- a call for partners...



