Ulaanbaatar city Government

THE THERMO-TECHNICAL REHABILITATION PROJECT IN ULAANBAATAR

INTEGRATED RESOURCE MANAGEMENT IN ASIAN CITIES, BANGKOK, 02-04 DECEMBER 2013

Ulaanbaatar, 2013

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ULAANBAATAR –City data at a Glance (as of 2013)

Area

- Total Administrative Area : 4700 km2
- Divided in 9 districts /including three remote districts/

Population

- Population: around 1.2 Million (about 45% of total population)
- Population density: 40 persons/hectare

Environment

- Extremely cold climate: lowest temperature in winter -40°C
- Annual average temperature: -2°C
- Annual precipitation: about 250 mm
- Situated at 1300m above the sea level
- Duration of heating season: 8 month

Priority issues in urban development:

- To improve infrastructure to meet the rapid population growth and increase the efficiency of services.
- To improve the *Ger*-areas by provision of basic infrastructure such as water supply, sewerage, heat, road, etc.
- To develop efficient Urban planning and Land management system.
- To develop satellite towns to decrease the concentration in Ulaanbaatar.
- To develop efficient transportation system.

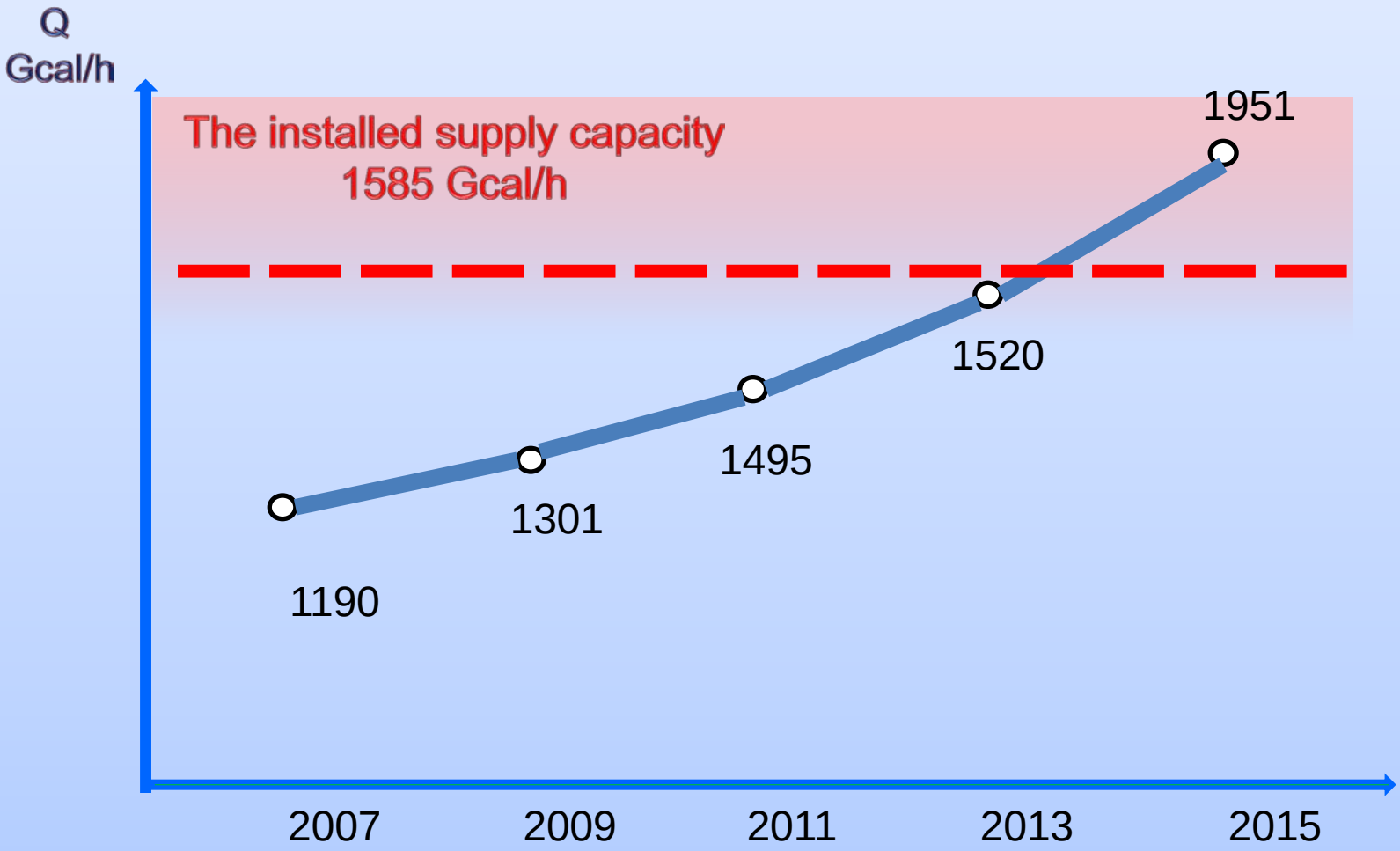
THE POPULATION FORECAST AND HOUSING SITUATION IN ULAANBAATAR

2020	2030
The total population of Mongolia in 2020 **3,16 Million**	The total population of Mongolia in 2030 **3,50 Million**
Of this in Ulaanbaatar region **1,53 Million** /48,5%/	Of this in Ulaanbaatar region **1,76 Million** /50,3%/

- Currently about **40%** of the population of Ulaanbaatar lives in apartment buildings connected to centralized grids.
- By increasing of housing supply it is planned to provide apartments to **58.5%** of the population of Ulaanbaatar in 2020, and to **70.1%** in 2030.

INCREASE OF HEAT ENERGY DEMAND

HEATING SUPPLY CAPACITY, DEMAND-SUPPLY BALANCE /YEAR 2012/



As of 2012 the total heat load of clients connected to the heating supply network is 1518 Gcal/h and taking into account the expected demand for 2014-2015 heating season the overall demand will surpass the installed capacity.

Heating supply strategy (Master plan until 2030)

- The existing heating supply capacity is not sufficient enough to meet the future demand and it is necessary to establish a new heating supply source (capacity expansion, construction of new Power plants).
- Due to the dilapidated facilities including distribution pipes to apartment buildings, a considerable amount of heat is lost during the distribution. Improvement of the existing distribution pipes is necessary.
- **Due to poor insulation the apartment buildings have a huge heat loss. Energy conservation and energy efficiency measures should be promoted.**
- Introduction of renewable energies (e.g. solar heating)