

# THE BUILDING SECTOR IN IRAN SKILLS FOR TOMORROW'S ENERGY EFFICIENT BUILDINGS

## Expert Meeting on Skills Needs and Anticipation

Bangkok, 4-5 December 2017

\





# IRAN'S SIXTH NATIONAL DEVELOPMENT PLAN(2016-2021)

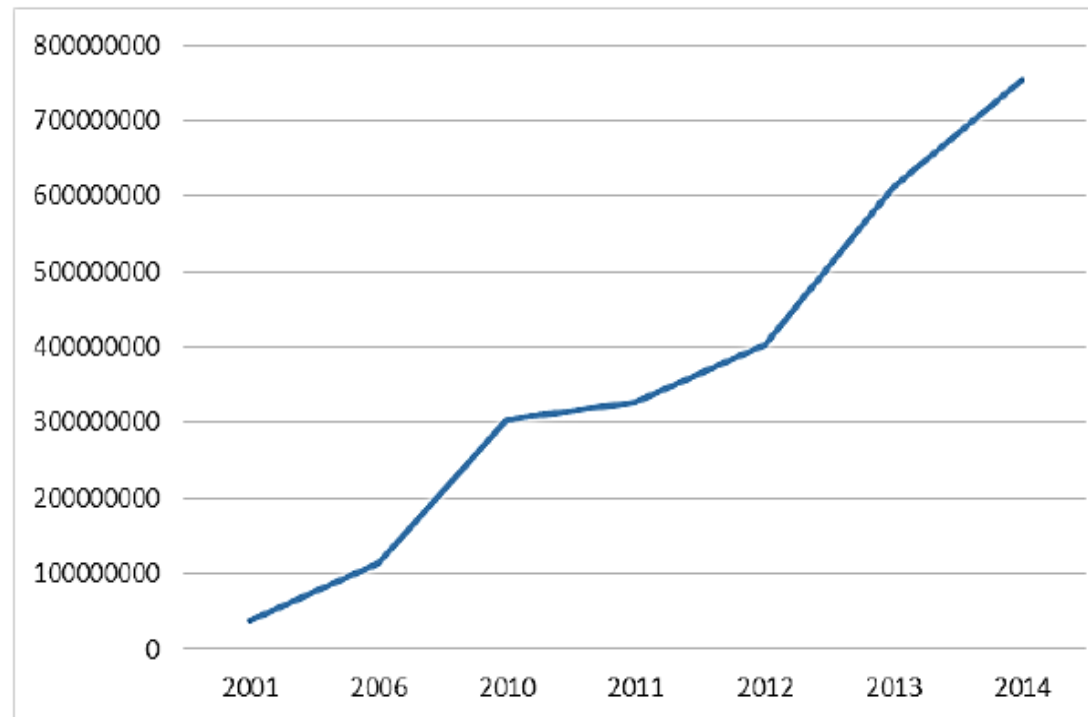
Government has identified promoting a low-carbon economy as one of its priorities in its 6th Five-Year National Development Plan

increasing the efficiency of energy production and use; and diversifying energy sources and increasing the share of renewable energy

# BUILDING AND CONSTRUCTION FACTS IN IRAN

Estimated private sector investment in new buildings in urban areas (million Rials)

Increased investment of private sector in building construction sector



# BUILDING AND CONSTRUCTION FACTS IN IRAN

## Examples of large scale spatial/building development

Maskane Mehr (National social housing plan)

New towns plan (17 new towns)

Parand New town (near Tehran)



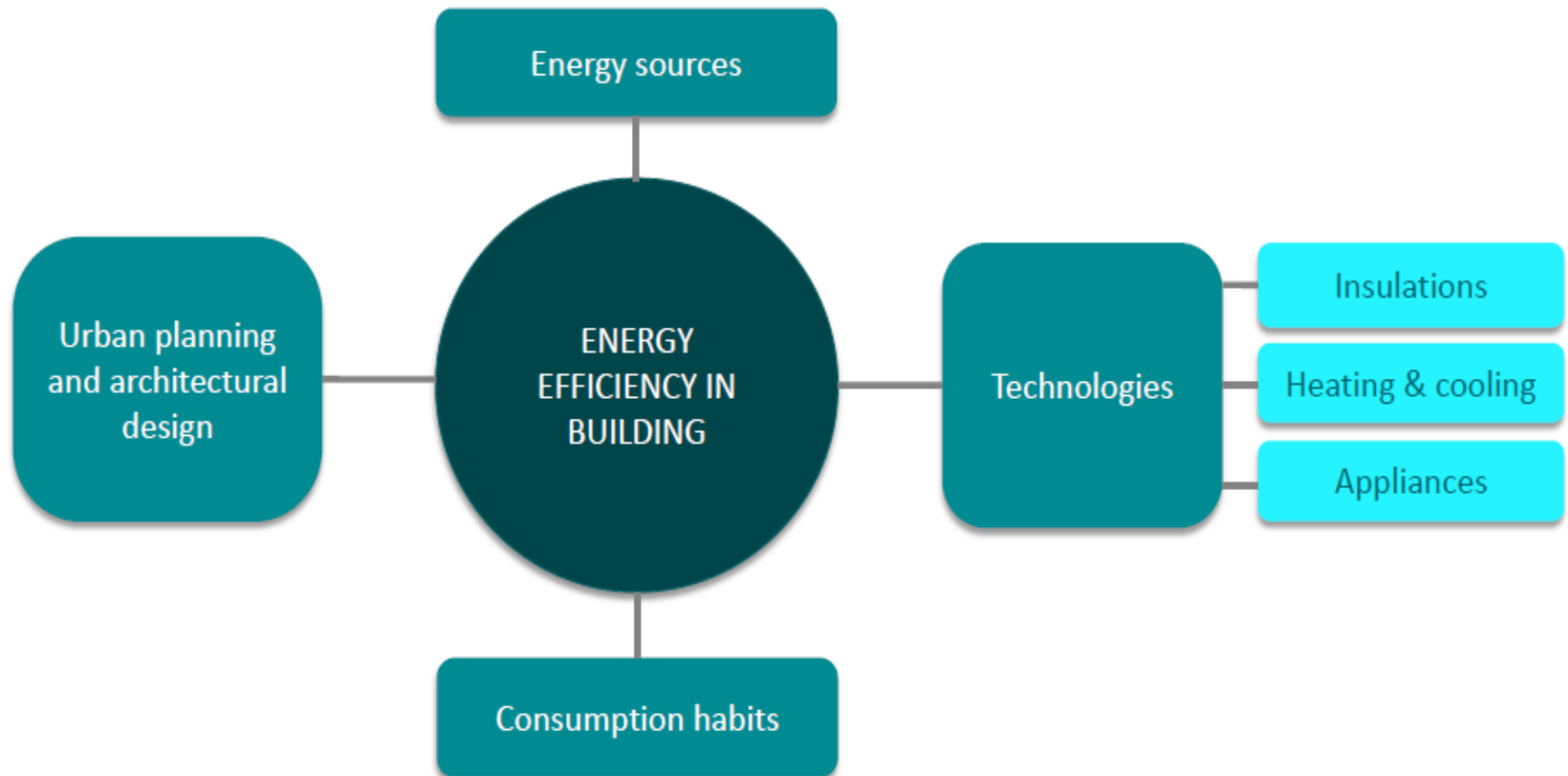
Urban regeneration plans in declined urban areas

Urban regeneration and reconstruction



# ENERGY AND BUILDING SECTOR IN IRAN

## Energy consumption in building sector



# ENERGY AND BUILDING SECTOR IN IRAN

## Urban planning and architectural design

- Limited energy efficiency planning and design measures in urban development
- Limited knowledge and awareness among experts and local authorities
- Limited initiatives and instruments in building scale

**The notion of energy efficiency is almost unknown to the building and construction industry in Iran, but mindsets have started to change!**

## Technologies

### Insulation

- Since the heating system and the building envelope are the main sources of energy waste, major efforts should be made to improve heating systems for existing and new buildings, as well as exterior materials and insulation, particularly for new buildings.
- In addition to poor materials and designs, there is a lack of knowledge and skills and a shortage of energy efficiency experts in the construction industry.



# FUTURE SKILLS IN CONSTRUCTION SECTOR OF IRAN- ENERGY EFFICIENT BUILDINGS



# FUTURE SKILLS IN IRAN ENERGY EFFICIENT BUILDINGS



# COUNTRY'S NEED TO SET UP NEW GOALS IN TVET SYSTEM

## Goals:

- Creating Skilled Workers in Efficient Building Sector
- Increasing the skills of workers in the building sector on energy efficiency and renewable energy!

# MAJOR ROLE PLAYERS TO SUPPORT ENERGY EFFICIENT BUILDINGS DEVELOPMENT IN IRAN

- **Academic Training Programs**
- **Non-Academic Training Programs**
- **International Development Partners(UNDP, UN ENVIRONMENT, UNESCO, UNIDO, and other Agencies and Programs)**
- **Related Government and Private Sectors**

# MAIN BARRIERS AND CHALLENGES

- Lack of Integrated Policies and Enforcement
- Lack of Coordination between Key Stakeholders
- Energy Price and Subsidies
- Poor Social Partnership and Lack of Collaboration between Trading/Industry Unions and TVET System
- Weak Public-Private Partnership
- Shortage of appropriate skills.

# MAIN BARRIERS AND CHALLENGES

No Clear Policy , TVET and  
Integrated Upskilling National Plan  
on

**Green Skills**