



Roadmap: Key facts and figures

1. The New York Building Congress estimates that the city could lose almost 30,000 construction jobs by 2010. According to a New York City construction group, New York City has already lost about 20,000 construction jobs since August of 2008.
2. Persistent poverty in the United States undermines environmental sustainability because low- and very low-income populations are often forced to use available fuel, food, water, and space in less “green” or efficient modes.
3. Urban greenery such as green roofs improves air quality, protects stormwater management systems and reduces combined sewer overflows, reduces energy use and the urban heat island effect by cooling buildings and streets through shade and heat absorption, extends the life of paved surfaces by cooling street asphalt, and provides local, healthy, and affordable sources of produce such as community gardens.
4. Trees and other vegetation improve economic sustainability in urban communities by attracting tourists and investment, increasing local forestry jobs, and increasing property values. Increased urban vegetation has also been correlated with improved community health and reductions in crime.
5. The New York City Office of Environmental Remediation was established in April 2009 to expedite the remediation and development of brownfields that might not be funded under the Brownfield Opportunity Area program. The OER plans to spend \$61.5 million through 2030 in capital construction projects, potentially creating a total of 450 temporary jobs. It plans to spend \$2 million through 2030 in operations, potentially supporting a total of 50 permanent jobs.
6. Buildings account for 75 percent of energy use citywide and the burning of fossil fuels to power buildings accounts for almost 80 percent of the city’s greenhouse gas emissions. At the same time, existing buildings will make up 85 percent of New York City’s building stock in 2030.
7. Much of the economic growth going forward is based not on “new” jobs, but new work. For example, energy efficiency and renewable energy jobs are deeply embedded in many existing construction occupations and often only require training and basic education in environmental practice and technologies.
8. There are over 15 Building Performance Institute-certified home performance contractors in New York City. That number is rising as the New York State Energy Research and Development Authority expands efforts to recruit contractors into its programs by publicizing partial subsidies for employee training, among other benefits. The retrofit area offers great potential for existing renovation and small construction firms to expand their market.

9. A suite of municipal building efficiency projects will be financed with an annual commitment of 10 percent of the city's energy budget—approximately \$80 million in fiscal year 2008. As of April 22, 2008, the Energy Planning Board has launched 14 initiatives. Over 10 years, the initiatives are expected to create about 124,000 jobs in construction, maintenance, and engineering.
10. New York City's government has led other cities in renewable energy, notably releasing a request for proposal for the installation of 2 megawatts of solar panels on municipal rooftops that will double the amount of solar capacity installed in the city. Investment in solar energy would create 42 percent more job years per dollar than a comparable investment in fossil fuels.
11. In New York City, about 7,000 manufacturing firms employ over 100,000 workers, and 30 percent of these workers do not have high school diplomas.
12. New York City has the highest rate of public transportation use of any American city. Two-thirds of mass transit riders nationwide live in New York City or its suburbs. The city is therefore uniquely positioned to create jobs through mass transit.
13. New York City is also particularly well suited to solar photovoltaic development because of the large amount of sunshine and high electricity costs.
14. According to the New York State Department of Labor, several energy-related construction job titles have a "very favorable" occupational outlook in New York City. The DOL anticipates over 1,100 openings for electricians, plumbers, pipefitters, and steamfitters in the next couple of years.
15. Data indicate that construction-related jobs in the energy sector are already in demand or will be soon. The Louis Berger Group, an engineering consulting firm, estimates that over 422,000 direct jobs (in person years) will be created by the set of climate change-related energy initiatives.
16. The State Energy Efficiency Portfolio Standard is also projected to create more than 51,000 jobs (in person years) over the next three years, the majority of which are construction trade jobs—480 construction managers, 1,277 construction laborers, 2,778 electricians, 1,961 plumbers, pipefitters, and steamfitters, 666 operating engineers, and 380 construction trade helpers, annually.
17. A national expansion of the U.S. wind industry, as the Renewable Energy Policy Project estimated, could bring about 150,000 to 230,000 jobs and about \$50 billion to \$77 billion in investments to states and regions that have experienced a loss in manufacturing jobs.
18. The Weatherization Assistance Program, which helps low-income families permanently reduce their energy bills by improving their homes' energy efficiency, received one of the largest budget increases in the American Recovery and Reinvestment Act. The total budget for the WAP program in New York went from \$71.9 million in 2008 to \$394 million in 2009. The increased allocation to New York State will expand the reach of weatherization and potentially create demand for more workers who can install residential efficiency measures.