

MSSC Green Production

OVERVIEW

Under a U.S. Department of Labor grant, the Manufacturing Skill Standards Council (MSSC) has developed a new "Green Production" (**GP**) module. It sets a new high performance national standard for the "green" knowledge and skills of production workers in all sectors of manufacturing. The resulting credential is an industry recognized, nationally portable MSSC Green Production (GP) Certificate. The formal National Launch Event for the Green Production module took place in Dayton, OH on October 18, 2011.

New MSSC CPT Module: Green Production (GP) is a 5th module in the MSSC's well-established Certified Production Technician (**CPT**) national certification system. Just like the other four MSSC Production Modules (Safety; Quality Practices & Measurement; Manufacturing Processes & Production; Maintenance Awareness), it is (a) based on industry-defined, nationally validated national skill standards and (b) includes a comprehensive set of system tools: curriculum, textbook, e-learning, instructor certification training, a national registry, assessment, and credentialing.

An outline of the "Work Standards" within the new "Green Production" assessment is available in the MSSC CPT Candidate and Certificant Handbook available at www.msscusa.org.

Definition: It is essential to recognize that the purpose of GP is to enhance the green related skills of the production workforce *in all manufacturing sectors* in order to help manufacturers improve their environmental performance. Therefore, GP is *not* limited to green products manufacturing. This is made clear in the attached definition of "green production" that MSSC is using for purposes of this credential.

Population: Since GP will apply to all production workers in all NAICS/SIC codes, the eligible population for the GP Certificate is far larger than just for workers in green product sites (e.g., wind, solar equipment producers). According to U.S. Bureau of Labor Statistics data, there are currently about 9 million production jobs in the U.S.

Value Proposition: Green Production will benefit from the following:

- Employers who need higher skilled front-line workers to enhance sustainability, increase energy efficiency, conserve resources and reduce regulatory costs
- Students and workers who want to enhance their skills and earn nationally portable credentials in this area of growing importance
- Educators looking for quality instructional materials related to "green production"





MSSC Definition of "Green Production"

The MSSC has developed a definition of "Green Production," which is the result of research into multiple authoritative sources and consultation with industry experts. That definition follows below:

Short Definition: Green production is defined as workplace activities across all industries within the manufacturing sector that require the use of equipment, technologies, and processes that will improve the environmental performance of manufacturing companies.

Extended Definition: Green production is defined as manufacturing workplace activities – across all industries of manufacturing – that require the use of tools, equipment and technologies, as well as methods, procedures and practices that directly or indirectly have a positive environmental or natural resources conservation impact. These include:

- Conservation (e.g., energy, water, energy-efficient materials, use of recycled materials in products)
- Emissions purification (e.g., waste, air, water, gas, chemicals)
- Renew-ability, recycle-ability, and final disposal of products to maximize lifecycle efficiency of the resources, raw materials, products, and processes involved in manufacturing
- Regulatory compliance, environmental assurance programs, and training

NOTE: This definition of "Green Production" is NOT limited to "green" manufacturing facilities/jobs exclusively associated with the production of "green" goods (e.g., wind turbine blades, solar panels, nuclear plant-related products). It includes all 20 North American Industrial Classification System (NAICS) codes for manufacturing (e.g. food. metal, transportation equipment, machinery, furniture.)

Sources: Bureau of Labor Statistics; the Joint UNEP-ILO-IOE-ITUC Green Jobs Initiative; California "Green Industries and Jobs In California" Special State Government Report; US Legal Definitions; IBM Supply Chain Environmental Strategy; Manufacturing Extension Partnership (MEP) Next Generation Manufacturing Survey; President's Council of Advisors on Science and Technology (PCAST)

