#### THE PRIME MINISTER

# Decision No. 842/QD-TTg of June 1, 2011, Approving the plan on development of a number of hi-tech industries through 2020

Pursuant to the December 25, 2001 Law on Organization of the Government;

Pursuant to the November 13, 2008 High Technology Law;

Pursuant to the Prime Minister's Decision No. 49/2010/QD-TTg of July 19, 2010, promulgating the List of high technologies prioritized for development investment and the List of hi-tech products eligible for development promotion;

At the proposal of the Minister of Industry and Trade,

#### **DECIDES:**

Article 1. Scope of regulation and subjects of application

1. Scope of regulation:

This Decision specifies the objectives and contents of the plan and solutions to develop a number of hi-tech industries and policies to promote and facilitate development of the manufacture of hi-tech industrial products in conformity with the List of high technologies prioritized for development investment and the List of hi-tech products eligible for development promotion promulgated together with the Prime Minister's Decision No. 49/2010/QD-TTg of July 19, 2010.

# 2. Subjects of application:

This Decision applies to projects on development of hi-tech industries, including investment projects to manufacture hi-tech industrial products; projects to develop manufacturers of hi-tech products; projects on human resource training and international cooperation on development of hi-tech industries; projects on scientific and technological research to create high technologies for industrial production or to research, apply, adapt, master and re-create imported technologies in manufacturing hi-tech products in Vietnam.

# **Article 2.** Objectives and contents of the plan

1. Objectives:

a/ General objectives:

To develop a number of hi-tech industries and strive for the target that by 2020 the value of hi-tech products and applied hi-tech products will

account for around 45% of the GDP with a localization rate of around 50% of product value;

To manufacture a number of competitive hi-tech industrial products; to satisfy around 45% of the total demand for hi-tech products essential for domestic production and consumption and concurrently to export around 25% of their output value.

## b/ Specific objectives:

- During 2011-15:
- + To apply high technologies to industries manufacturing hi-tech products so that by 2015 the value of hi-tech industrial production and applied hi-tech products will account for around 35% of the GDP;
- + On the basis of imported high technologies and domestically researched and created high technologies, to develop some 200 businesses to manufacture hi-tech industrial products;
- + To form and develop a number of hi-tech industries in hi-tech sectors: information -communications technology; bio-technology; material technology; and automation technology.
- During 2016-20:
- + To develop the manufacture of hi-tech industrial products and applied hitech products with an industrial production value accounting for around 45% of the GDP, of which the export turnover will account for around 25% of the output value;
- + To develop around 500 businesses' manufacturing hi-tech products;
- + To manufacture competitive hi-tech industrial products and increase types of domestically manufactured products to meet requirements of each period.

#### 2. Contents:

- a/ To make fresh or additional investment in upgrading technologies and equipment of plants manufacturing hi-tech industrial products. To develop the manufacture of hi-tech products in the following technological sectors eligible for development promotion:
- In information-communications technology: Industries to manufacture heavy duty cells and accumulators for information and communications equipment micro-electromechanical systems (MEMS), nanoelectromechanical systems (NEMS) and MEMS- or NEMS-using equipment; high definition displays, etc.
- In bio-technology: To apply bio-technology to processing industries, production bio-fuels and pharmaco-chemical industry; to produce proteins

and recombinant enzymes or use is pharmaceuticals, foods, industrial products and environmental treatment; recombinant AND vaccines and recombinant protein vaccines for humans, cattle, poultry and aquatic animals: and bio-fuels made from algae, substandard agricultural products and waste with biotechnology.

- In new material technology: To research and manufacture nano materials for industrial, agricultural, medical or biological use and environmental purposes; nano composites for some industries; technical plastics with high tensile strength and modulus of elasticity, gears and speed decelerators of technical plastics; stainless alloy steel; heat, wear or corrosion resistant alloys and special alloys for industrial use, power generation, ship building, military gear, etc.
- In automation technology: To research and manufacture measuring systems and equipment, actuators, automatic controllers and monitoring unit for complete equipment systems; open chain industrial robots; parallel robots with three or more degrees of freedom; computerized numerically controlling (CNC) units for machine tools and manufacturing machines; special-use chips for measuring devices, actuators and controllers; sensors and smart actuators; digital medical instruments, such as X-ray, unsound, laser medical instruments, motors, drilling machines for dental care; electricity generators and generation stations powered wind, solar or tidal energy; sterling external combustion engines.

b/ To form and develop hi-tech businesses to manufacture hi-tech industrial products on the basis of receiving and transferring hi-tech research results from domestic scientific and technological research programs or imported hi-tech research results and applying them to the manufacture of a number of essential hi-tech products with high marketability or competitiveness.

c/To develop industries to support development of hi-tech industries under the Prime Minister's Decision No. 12/2011/QD-TTg of February 24, 2011, on policies to develop a number of supporting industries;

d/To train human resources for development of hi-tech industries:

- To train and retrain key leading officials in charge of science and technology so that by 2020 there will be some 500 leading officials capable of organizing the implementation of projects on development of hi-tech industries; to provide refresher courses for improving professional skills of around 10,000 experts and engineers in hi-tech sectors eligible for development promotion;
- To train at domestic and foreign universities experts and engineers in hitech sectors, striving that by 2020 there will be around 20,000 experts and

engineers trained and working under projects on development of hi-tech industries.

#### 3. Solutions

## a/ Developing production:

Investment projects on development and manufacture of hi-tech industrial products (including projects with fresh investment and additional investment) and projects on application of high technologies to manufacture of hi-tech industrial products are entitled to the highest incentives provided in the High Technology Law and the Prime Minister's Decision No. 2457/QD-TTg of December 31, 2010, approving the national program on development of high technologies through 2020.

## b/ Developing hi-tech industrial businesses:

Businesses manufacturing hi-tech industrial products which are established and developed on the basis of application of domestically researched and transferred high technologies or high technologies transferred from overseas into Vietnam will enjoy the incentives provided in the Prime Minister's Decision No. 2457/QD-TTg of December 31, 2010, approving the national program on development of high technologies through 2020.

### c/ Developing supporting industries:

- To elaborate and submit to the Prime Minister for approval in 2012 a master plan on development of industries to support hi-tech industries, which will serve as a basis for guiding investment and market and product development;
- Projects to develop manufacture of industrial products in support of development of hi-tech industries will enjoy the incentives and preferential policies provided in the Prime Minister's Decision No. 12/2011/QD-TTg of February 24, 2011, on policies to develop a number of supporting industries.

## d/ Training human resources:

Projects on training human resources for development of hi-tech industries will enjoy the incentives provided in the Prime Minister's Decision No. 2457/QD-TTg of December 31, 2010, approving the national program on development of high technologies through 2020.

# Article 3. Organization of implementation

# 1. The Ministry of Industry and Trade shall:

a/Assume the prime responsibility for, and coordinate with the Ministry of Science and Technology and related ministries and sectors and provincial-level People's Committees in, organizing the implementation of the plan on

development of a number of hi-tech industries through 2020, and annually report the implementation to the Prime Minister;

b/ Set up a council for evaluation of projects on development of hi-tech industries, which will be composed of a Deputy Minister of Industry and Trade as its chairman and representatives of the Ministries of Science and Technology, Planning and Investment, Finance, information and Communications, Agriculture and Rural Development, Education and Training, Natural Resources and Environment, and Health; the Bank for Development of Vietnams related agencies as its members, to evaluated projects on development of hi-tech indulges, then submit them to the Prime Minister for consideration and decision.

2. Ministers, heads of ministerial-level agencies and government-attached agencies, chairpersons of provincial-level People's Committees, and heads of related agencies shall, within the ambit of their function and tasks, guide and inspect the implementation of this Decision.

#### **Article 4.** Effect

This Decision takes effect on the date of its signing.

Any problems arising in the course of implementation of, or any opened amendments or supplementations to this Decision should be promptly reported by ministries, ministerial-level agencies and provincial-level People's Committees to the Ministry of Industry and Trade for sum-up and reporting to the Prime Minister for consideration and decision.

## **Article 5.** Implementation responsibility

Ministers, heads of ministerial-level agencies and government-attached agencies, chairpersons of provincial-level People's Committees, and heads of related agencies and units shall implement this Decision.-

For the Prime Minister
Deputy Prime Minister
HOANG TRUNG HAI