

Development strategy mechanics: The spur of Science and Technology

Final report 10-year implementation strategy Metalworking sector development indicators show there is almost no gain, so recently the Prime Minister has Directive requires the ministries, branches and localities to remove difficulties and promote implementation of the strategy development of Vietnam mechanics. To accomplish this task, science and technology is seen as an important boost to leverage engineering industry development.

Not completing objectives set out in the Strategy

Engineering is the industry platform, have a role and a very important position in the cause of industrialization - modernization of the country. Strategy implementation developed Vietnam's mechanical engineering industry till 2010 and vision to 2020, in recent years, despite many difficulties, the industry has made great efforts, efforts to make the transition initial improvements in some sectors, such as manufacturing hydro mechanical equipment, fabrication of oil rigs, power equipment, manufacturing and supply of equipment for the cement projects, shipbuilding, construction works complete equipment and so on. some research agencies - design and manufacture of mechanical enterprises have gradually innovation, capacity building consultancy, design, manufacturing equipment and technology, participate in package some of the national key projects. Industrial production value in 2013 mechanical engineering reach around 700 trillion, accounting for about 20% of the total industrial production value of the whole industry; 2013 export value of over \$ 13 billion, nearly six times the value of exports in 2006. The results of the mechanical engineering industry has contributed positively to economic development - social and pushed the industrialization and modernization of the country.

In addition to these results, the industry in our country there are some limitations and weaknesses: the deployment mechanism and policy development engineering industry is limited and inconsistent; role management, policy proposed development mechanism mechanics of bodies of state management has not been promoted. The mechanical state enterprises slow to reform, the private enterprises small, little interest in investing in the mechanical engineering industry. The investment in the mechanical engineering industry is small and dispersed nature, in all businesses closed; lack of coordination, the division of labor between companies in the industry, not actively participate in cooperation and international integration; specialization in the production of low-quality products resulting in limited, high production costs, low competitiveness, the role and initiative of the Association has not been promoted.

In addition to the subjective reasons mentioned above, there are objective reasons, such as industrial infrastructure structure is irrational, the industrial infrastructure conditions stable enough for development of rapid and sustainable engineering. The manufacturing sector of basic materials such as metallurgy, chemicals, plastics not ensure proactive inputs for mechanical engineering. Besides, the industry supports a very slow mechanical development, research capacity - limited design. The implementation of the policy of the Government on the principal / contractor appointment of key mechanical products, use of materials and goods produced in the country and manage the EPC package has not seriously and thoroughly, lack of

supervise and urge the relevant authorities, the lack of specific sanctions etc. in 2013, the industry was only meet about 34.5% of the national demand for mechanics, not complete objectives set out Strategy.



Vietnam fully qualified general contractor with the localization rate of success was 30%

Need to boost science and technology

This was Prime Minister emphasized in Directive No. 16 / CT-TTg dated 18/06/2004 of removing difficulties and promote implementation of the strategy developed Vietnam's mechanical engineering industry. The Prime Minister instructed the Ministry of science and technology lead and coordinate with relevant ministries and agencies to promote investment in research and technological development in the field of mechanical engineering; prioritize the allocation of funds for science and technology costs to support technology transfer, bought the rights to the design, purchase the software, hire foreign experts, training human resources in service of investment projects production of key mechanical products and industrial support.

It should be emphasized that, previously, realized the importance of mechanical engineering for the industrial development of the country, the Ministry of Science and Technology had Scientific Research Program Mechanic KC.05 / 06- 10 is a program of scientific and technological state-level key. In the process of implementation in 2006 - 2010, the program has brought about significant results ... Many research topics developed mechanical engineering technology has been accepted and applied in practice. Therefore, in the period 2011 - 2020, industry Mechanic Vietnam is determined to continue to modernize, while taking science and technology as the focus

After 5 years of implementation, many scientific missions and technology has been selected Chairman of the Board, proposals included in the agenda, such as: research, design and manufacture of equipment for 600MW thermal power plant; 20MW hydropower station; cement plant 1 million tons / year; 100 thousand tons of oil tanker ...

Most of the research products and projects in the program is a new product with technical features, styling and are able to compete with similar products from other countries in the region such as salvaged dirt machine , cutting weeds, aquatic weeds; CNC production of reinforced concrete large size; systems and equipment for oil production, oil and spices; Crawler cranes of 100 tons; system of automatic welding equipment with large diameter pipe in the state did not turn; cutting machine hard materials using high pressure water jet CNC control; 3D coordinate measuring machine; press cutting CNC control materials in footwear ...

In the period 2011 - 2020, mechanical engineering is defined role is particularly important in the process of industrialization - modernization of the country. To assert that role, mechanical industry Vietnam should continue to research and application of science and technology for development to ensure rapid and sustainable.

Focusing on developing human resources and technological sciences high level of knowledge of modern mechanical industry Vietnam celebrated by students, graduate students, technicians to study abroad in a uniform . Supporting enterprise training funds for investment projects producing new products. Strengthening the research potential development (R & D) for the mechanical engineering enterprises. Stepping up the socialization of investment in production and scientific research in the field of mechanical engineering machines; facilitate the scientific and technological opportunity occupations funding for evaluation information, help, improvement initiatives, the invention of farmers, workers; encourage enterprises chaired production projects. Accelerate the process of "accumulation of capital" for enterprises Vietnam mechanical manufacturing; incorporate, efficient production facilities, educational institutions and research facilities in the implementation of the tasks of scientific and technological mechanical engineering industry.

However, many experts, to mechanical engineering development, the State needs protection market conditions and deadlines, and contractors designated projects or joint ventures for domestic enterprises reception and can master the technology, design, fabrication. Vietnam fully qualified general contractor with the localization rate of 30% successful if supported in terms of market policy through the appointment of contractors. This not only creates jobs for workers, which contributes to gradually master the technology, design mastery.

Minh Chau

Related Posts

[The new strategy for Vietnam Mechanics](#)

[Mechanical development of construction machinery industry Vietnam: For planning and mechanisms](#)

[Mechanical construction sector in TPP: Opportunities and Challenges](#)

