

# Public Private Partnerships For TVET in Indonesia

A case study for the Dakchyata: TVET  
Practical Partnership project

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## 1. Summary

Key Features	
<b>Scale</b>	Huge. There are approximately 13,500 secondary vocational schools with around 4.6 million students
<b>Main Policy Drives</b>	To ready a large pool of unskilled labour that currently cannot support highly skilled jobs
<b>Strength of link to growth and industrial strategy</b>	Ministers have made several references to the Master Plan for the Acceleration and Expansion of Economic Development but TVET and skills do not occupy a formal role in the plan
<b>Level of Centralisation</b>	Most responsibilities for education and labour are at regional and local administrative levels, but the Ministry of National Education retains regulatory competence
<b>Level of public trust</b>	There is little cooperation between schools and companies as there is a deeply rooted mistrust between the two sectors
<b>Quality of monitoring and evaluation</b>	Evaluation of learners' achievement, of institutions and of educational programmes is conducted regularly by independent bodies
<b>Areas where PPP applied</b>	PPP application is ad hoc and actually quite rare outside of large and foreign company singular initiatives
<b>Primary source of public funds</b>	The financing of education is the shared responsibility of the government, local government and community, however all organised funding comes from government.
<b>Effectiveness</b>	There is a mismatch between the skills of workers and the skills needed by industry

## 2. Social Economic landscape and key challenges

- Indonesia is the fourth largest country in the world in terms of population. 58% of the population lives on the Island of Java, but the country is made up of more than 17,500 islands of which more than 6000 are inhabited. Indonesia has a population of approximately 250 million people, with a workforce population of around 125 million with around 118 million of those registered as employed.<sup>1</sup>
- Indonesia consists of 33 provinces with all in all roughly 500 regencies. With the law on decentralisation from 1999, a decentralisation process was started which moved much of the responsibilities for education and labour affairs to regional and local administrative levels. In education, however, the Ministry of National Education retained regulatory competence.
- There are approximately 13,500 secondary vocational schools (26% public), 130 polytechnics (21% public), 950 Academies (all private), 16 public university-level institutions with TVET teacher education programmes. According to Directorate of Technical and Vocational Education there are 4.6 million vocational students.

<sup>1</sup> Indonesian coordinating Ministry for Economic Affairs Jan 2017

- The Indonesian education system is expanding rapidly. However, one of the biggest problems has been a high drop-out rate at all levels of the school system, as well as low transition rates between the levels. One of the reasons for this situation is most likely the problematic economic situation of a high share of the population in poverty.<sup>2</sup>
- Although there is an increasing demand for highly skilled jobs due to globalisation, there is also a large pool of unskilled labour that currently cannot support those jobs.<sup>3</sup> This affects Indonesia's capacity to compete regionally and globally.<sup>4</sup>
- Indonesia's TVET system is made up of two parts, namely: the vocational education system (Sistem Pendidikan Kejuruan) which is a part of the National Education System (Sistem Pendidikan Nasional) governed by the Education Act (Law No. 20/2003); and the national training system for work (Sistem Pelatihan Kerja Nasional - Sislakernas<sup>[2]</sup>), governed by the Manpower Act (Law No. 13/2003).

The Directorate of Technical and Vocational Education (2016) stated its challenges can be encapsulated as:

- Globalization,
- Harmonization;
- Economic Structural Change;
- Changing of Job Characteristics;
- Demographical Condition;
- Education Facilities;
- Technology Development;
- Local Advantage;
- Number and Qualification of Teachers;
- Changing of Job Market Characteristic;
- Allocation of Budget.

There is a sectoral divide in the industry demand for TVET graduates: service sector firms appear keener to take in graduates of the vocational track than manufacturing employers. While the ratio of new hires from general to vocational stream is roughly 5 to 1 for manufacturing, it is barely 1.2 to 1 in services.

In general, TVET graduates find it hard to find jobs due to the lack of relevance of SMK education in relation to the needs of the labour market. A major factor is that teaching tends to be "academic", and most of the schools lack equipment for practical learning.<sup>5</sup>

### 3. Policy environment, current TVET structure and PPPs

Indonesia is currently undergoing a transition phase as it develops to become a knowledge-based economy focused on increased competitiveness, growth and employment performance. Although there is an increasing demand for highly skilled jobs due to globalisation, there is also a large pool of unskilled labour that cannot support highly skilled jobs.<sup>6</sup> The government plans to build more vocational schools to cater to the growing labour market for skilled workers, particularly in the

<sup>2</sup> World TVET Database – 2013 - Unesco-Unevoc

<sup>3</sup> College of Education Victoria University, Melbourne, Australia 2014

<sup>4</sup> The 21<sup>st</sup> Century at Work: Forces shaping the future - Karoly & Panis 2004

<sup>5</sup> UNESCO-UNEVOC International Centre 2013

<sup>6</sup> College of Education Victoria University, Melbourne, Australia 2014

agriculture, fisheries and animal husbandry industries, and calls for the private sector to support this drive.<sup>7</sup>

### 3.1 Legislation and Planning

- Starting in 2007, the Indonesian Education Ministry has defined a comprehensive set of education standards comprising curriculum, competence, administration, financing, equipment, teaching staff, assessment standards, etc.
- In 2005, a teacher law was enacted (Law No. 14/2005) which sets minimum formal qualifications for teaching staff and which requires teachers and lectures to acquire a teaching certificate.
- The Master Plan for the Acceleration and Expansion of Economic Development in Indonesia (MP3EI), lays out the need for 113 million skilled workers by 2030 in the following sectors: Agriculture; Industry and manufacturing; Shipbuilding; Textiles; Food and beverage; Steel; Mining; Transportation equipment/automotive; Services; Information and communication technology (ICT).

### 3.2 Formal TVET system

Technical and vocational education consists of 47 programmes in the following fields: technology and engineering; health; arts; craft and tourism; information and communication technologies; agro-business and agro-technology; and business management.

Essentially, the training system has the following features<sup>8</sup>:

- training programmes are developed based on SKKNI, international, or special standards, and they have to be located in the national qualification framework KKNI;
- training takes place at the workplace or at a training centre;
- training may be organised as an apprenticeship;
- for implementing training, the required equipment and competent staff must be available;
- government-run and private training centres need an accreditation by the competent authority
- the successful participant of a training is entitled to receive a training certificate, and after successfully passing a competence test, to receive a competence certificate issued by the national agency for professional certification (BNSP);
- the central government and the local authorities contribute to the financing of training.

The curricula of the study programmes are based on National Competence Standards for Work (Standar Kompetensi Kerja Nasional Indonesia - SKKNI), which are developed with the contribution of industry and enacted by the Ministry of Manpower and Transmigration. The standards are used to guide the compulsory curricula and final exams.

### 3.3 TVET strategy and PPP

In response to a review by UNESCO (2013), and along with the global rapid movement of the VET system, the Strategic Plan 2020 in VET was modified to indicate a guaranteed commitment from the National Council of Vocational Education and Training (NCVT) for industry to have a major voice on the development of competency standards in vocational education. The strategic plan also enhances

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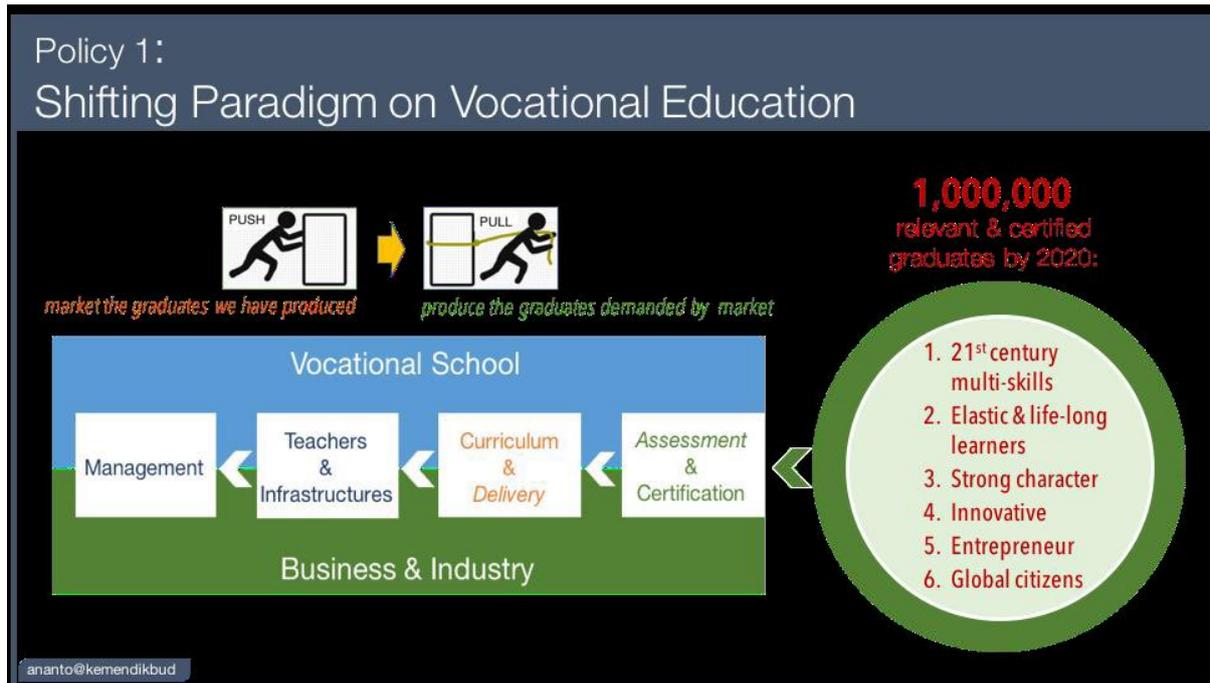
<sup>7</sup> Dr. Ir. Hisar Sirait, M.A., Kwik Kian Gie Business School

<sup>8</sup> Ministry of Education and Culture

the 'dual system' programme from government and makes the programme more relevant to industry through the use of competency standards determined by industry.

Indonesian government has policy initiatives at national level for underpinning multilateral partnership which, 'refers to a three-way interaction among government, employer organisations and worker representatives in formulating labour, social, or economic policy' including partnerships between VET institutions and industry<sup>9</sup>.

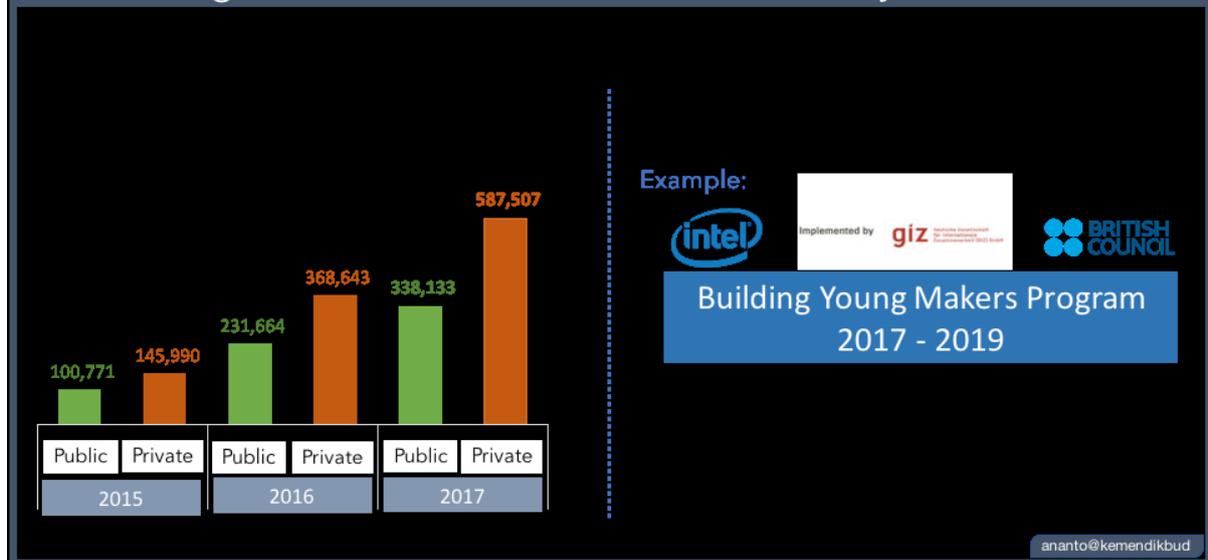
The Directorate of Technical and Vocational Education also outlined the following related policies in 2017



<sup>9</sup> Education in Malaysia: Developments and Challenges, Paryono 2011

## Policy 3:

# Promoting PPP to Increase Access & Quality



### 3.4 Non-formal and informal TVET systems<sup>10</sup>

Public non-formal vocational training providers (known as BLKs) under the responsibility of district governments, provide programmes for poor individuals who dropped out of primary or secondary school.

There are four types of training offered by BLK:

- Institutional training (job training programmes which aim to increase the skills of job seekers);
- Non-institutional training (training programmes for people in remote areas organised through Mobile Training Units);
- Apprenticeship programmes; and
- Demand-based trainings (trainings based on the demand of industries).

Larger centres provide industrial and service skills training, while smaller ones offer training in different technologies and skills for self-employment. National standards are not a requirement for this development.

## 4. PPP Frameworks

### 4.1 Apprenticeship System

The national training system stipulates the implementation of apprenticeships, which is organised in a "dual" form in cooperation with companies and training centres. The 2020 Plan offers a renewal of the development of a "dual system of vocational education and training which was originally implemented under the Ministry of Education and Culture but was unable to be fully developed owing to the Asian economic crisis and the political turmoil related to the fall of the New Order regime. An apprenticeship is based on a contract between the employer, the apprentice, and the local labour administration and normally has a duration of 6 to 9 months.

<sup>10</sup> World Bank 2010, Indonesia Skills report, Washington

## 4.2 The Future of PPPs<sup>11</sup>

UK Trade and Investment reports that, education and training opportunities in Indonesia have been identified across the following industry verticals: engineering, in particular automotive and oil and gas training; financial and professional training; fisheries; hospitality and tourism. Therefore potential opportunities in Indonesia include the development of regional and national TVET programmes including supporting institutional refurbishment, “train-the-trainer” programmes and curriculum design.

## 4.3 Foreign Investment

Currently, Indonesia’s vocational or non-formal education sector is open to foreign investment of up to 49%. Foreign investors are required to set up a PMA (corporate passport) and obtain a license for the field in which they plan to offer vocational training. Investors are being encouraged to the field should seek out partners with an extended network in the field of training or with consultants who already have a grounding in providing training on a non-permanent basis.

## 4.4 Recent advances for the future

An MoU on the Development of Labour Competence was signed in April 2016 between the Ministry of Manpower and the Indonesian Chamber of Commerce. The purpose of the MoU is to produce a knowledgeable, skilful and a good working attitude human resources which is suitable for the needs of industry. Subsequently, an MoU was signed between 49 companies with 219 Vocational High Schools in the East Java Province.

## Cultivating Public-Private Partnerships

According to Iradhatie Wurinanda, Koran SINDO, Bogor Agricultural University and Suparman of Forum Edukasi:

“There is strong demand for PPPs in vocational education in the areas of teacher/lecturer skills trainings, ICT trainings and the provision of educational facilities. In particular private companies could invite these teachers and lecturers to learn and train in their factories or undergo relevant ICT training. The private sector could also consider assisting SMKs and tertiary vocational institutions through the donation or loan of equipment such as computer hardware and software, internet connections facilities and screen projectors.”

## 4.5 Incentivising the Private Sector<sup>12</sup>

- Resource contributions from the private sector towards vocational education could also lighten the Government’s financial responsibility.
- The private sector could contribute through the donation of financial resources, student scholarships, and equipment and machinery.
- The private sector could lend their staff to SMKs and tertiary vocational institutions as part-time teachers, and also provide internships for vocational education students and teachers.
- Financial incentives such as tax exemptions could be offered to the private sector for expenses or resources and incurred for educational purposes.

# 5. Funding

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<sup>11</sup> Global Business Guide Indonesia - 2016

<sup>12</sup> Vocational education perspective on curriculum 2013 and its role in Indonesia economic development - Research Gate Conference Paper - Sulaeman Deni Ramdani 2014.

In accordance with the Law on National Education of 2003 the financing of education is the shared responsibility of the government, local government and community, however all organised funding comes from government.

The Ministry of National Education administers formal TVET, and has increased its investments and made TVET expansion a priority. Education expenditure excluding the salary of teachers is allocated at a minimum of 20% of the National Budget and a minimum of 20% of the Regional Budget. Salaries of teachers appointed by government are funded from the National Budget. Allocation of funds to educational institutions takes the form of a grant.

## 6. Implementation

### 6.1 Indonesia's National Apprenticeship Network (INAN)

As the continuation and commitment of APINDO in promoting apprenticeship in Indonesia, Indonesia National Apprenticeship Network (INAN) strengthens apprenticeship initiatives in the working industry through the leadership of champions of companies and will eventually synergize with other apprenticeship forums.

#### **The role of INAN:**

1. To raise awareness and understanding of apprenticeship in Indonesia
2. To facilitate knowledge sharing of apprenticeship's experiences and practices
3. To contribute to the improvement of the apprenticeship regulatory framework in reducing the gap between knowledge generated in the educational system and the skills demanded by employers.

INAN works in cooperation with the Global Apprenticeship Network (GAN) to promote good practices in apprenticeship with the aim to achieve international benchmark in Indonesia.

### 6.2 Work Competence Standards and PPP

The Indonesian Work Competence Standards (Standar Kompetensi Kerja Nasional Indonesia - SKKNI) are developed under the National Professional Certification Agency (Badan Nasional Sertifikasi Profesi - BNSP) by workgroups with participation of representatives of professional associations and/or companies to assure their relevance for the world of work. The standards then are issued by Nakertrans.

### 6.3 Curriculum and PPP

The National Agency for Educational Standards (Badan Standar Nasional Pendidikan - BSNP) issues detailed curriculum guidelines and also develops nationally unified students' final examinations. The schools, however, develop their own curricula based on the curriculum guidelines and in negotiation with local stakeholders like companies and other parties interested in education. Curricula need approval from the regional education administration<sup>13</sup>.

### 6.4 Quality Assurance

According to the Law on the System of Education of 2003, evaluation of educational institutions is undertaken in order to monitor and control the quality of education. Evaluation of learners' achievement, of institutions and of educational programmes is conducted regularly by independent

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<sup>13</sup> Vocational education perspective on curriculum 2013 and its role in Indonesia economic development M. Agphin Ramadhan and Sulaeman Deni Ramdani, Vocational Education and Technology Department, Postgraduate Yogyakarta State University

bodies. The National Board of School Accreditation (BAN) is responsible for conducting accreditation of education programmes.

#### Partnership Purposes in Skill Competence Assessment Implementation (UKK) Pilot

The Skill Competence Assessment Implementation (UKK), for vocational schools, has developed a strong correlation with stakeholders' needs especially in Business and Industry Chamber field. This is driven by the Competence Assessment Strategy (4M-S) which works on the following procedures:

Vocational Schools (SMK) synergistically work with Business and Industry Chamber to: (a) structure the materials used in skill competence assessment; (b) select and decide assessors ; (c) develop the right methods (methods); and (d) provide tools, facilities or machines according to the skill programme which is being assessed (machines); conduct skill competence assessment (UKK) according to the agreed time and schedule.

## 7. Lessons Learned

There is little cooperation between schools and companies as there is a deeply rooted mistrust between the two sectors, gathered from the literature used to furnish this case study. The Education Ministry's Directorate for TVET does not actively support cooperation between schools and companies, instead promoting the concept of the "School Factory" to build up manufacturing environments in the school.

There is a mismatch between the skills of workers and the skills needed by the industry, which is caused by several reasons including:

- Unsuitable curriculum of TVET institutes with the skill demands of the industry;
- Obsolete training equipment;
- The low quality of teachers;
- Inadequate funding and the high cost of building and maintaining;
- Uneven distribution of TVET institution across Indonesia (around 60% located on Java and Sumatra Island).<sup>14</sup>

The UNESCO report of 2013 suggested the following:

- A sustainable solution for industry-school engagement is still required;
- There needs to be stimulation for a demand driven approach;
- Stimulation can come from international sources, but they must be embedded within long term;
- A specific leadership role is required for linking TVET to industry needs;
- Past solutions have not necessarily been sustainable and have been driven by NGOs.

#### **Priorities for firm training**

Firms need to play a stronger role in both short term on the job skill upgrading and longer term skill maintenance and strengthening for competitiveness and productivity. Two policies discussed in the report include: new innovative ways of financing firm training to allow firms to also focus on skill updating; firms and/or the government should provide more incentives for employees to pursue training on their own. The report suggested that these could include: improvement of career opportunities offered by firms; reinsertion in the firm and certification of new skills acquired; and training vouchers and education savings accounts.

#### **World Bank experience**

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<sup>14</sup> Data based on The Ministry of Industry (February 2017)

The key lessons conveyed by the World Bank funded Skills Development Project were that the inclusion of the standard operating procedures and funding mechanisms contributed to both management decentralization, and the delivery of training at provincial level. This was emphasized by the willingness of the private sector to take responsibility in the training of their employees. Whilst some resistance from small firms exist towards the concept of cost sharing, most enterprises are willing to accept this model and contribute to training costs.

**Good practices of apprenticeship Indonesia (Asosiasi Pengusaha Indonesia (APINDO))**

A number of good practices were observed during the field survey in Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi) and Balikpapan City, including:

<b>Recruitment</b>	Thorough screening and testing ensured good success rate
<b>Contractual issues</b>	All companies adhered to or exceeded the Ministry of Manpower’s standards
<b>Monitoring and Evaluation – Internal</b>	Systematic and thorough internal assessment processes with measures to mentor and correct potential issues arising
<b>Training</b>	The training programs offered rate from good to outstanding.  The training programs observed were all of a better standard than what is currently offered in public and private training institutions
<b>Post training</b>	High employment rate by companies after completed apprenticeships Informal assistance to apprentices seeking employment in elsewhere
<b>Trade Unions’ role</b>	Good understanding of the apprenticeship program and its objectives
<b>Legislation, rules and regulations</b>	Simple, flexible and serving the purpose
<b>FKJP</b>	Good cooperation in terms of facilitation and communications in areas where FKJP is active

## Annex

### Case studies

- The **Polytechnic Manufacture ASTRA** Indonesia offers in-company training (In-CT) provision. The delegate observed that good technical mentors with sound pedagogical skills enhance the outcomes of In-CT. This was driven by a partnership with GIZ in order to support a closer cooperation between business associations with the government to support 'Dual System' and vocational education and training.
- In 2016 an MoU was signed between The Ministry of Manpower and The Indonesian Chamber of Commerce on the Development of Labour Competence. **The Enhancing of Labour Competence** agreement is carried out through apprenticeships at companies. By 2014 2660 companies had joined this programme.
- **PT ATMI**, has 600 employees in four divisions producing high quality products - Tool and mould construction, plastics processing, metal furniture production, special-purpose engine construction - for both Indonesian and international markets. The business premises are located in the centre of the campus of the polytechnic institute ATMI Surakarta, the owner of the successful firm. Students of the institute share space with the employees and contribute to the work under the supervision of experienced colleagues. The components produced by the students at the training workshop are normally inputs for a final product of the firm. This equipment, among others, was provided by the German Development Corporation.
- Since 2003 the **Vocational Training School for Hospitality, Food Processing and Agriculture in Pacet**, has been convincing firms to cooperate with the school. Initially managers and firm owners critically examined the curriculum, suggesting modifications to increase its relevance. In 2005 the School received money for new buildings from the government and now resembles a real hotel with ten rooms available for paying guests. Management, cleaning services, laundry, food and beverage, and front-office and guest reception are all in the hands of the students. In horticulture and food processing the students produce goods to be sold on the free market.
- A **Technical Education Center** was established and enlarged for prospective polymechanics, mechatronics and constructors in **Cikarang, the industrial region of Jakarta** by SITECO in 2008. In 2015, this and other selected Indonesian Polytechnics, (from APII, an Indonesian Association of Politekniks and Industry Members in the field of VET) together with relevant representative industry members, decided to build a **TVET platform**. Through that platform, the Polytechnics and the industry jointly define and design the educational services the industry urgently needs.
- **Polman Technical College in Bandung** introduces trainees as quickly as possible to the reality of industrial production. In the workshops, students work on products for the Indonesian market, generating additional income for the institute. A joint project between German Lufapak GmbH and GIZ has paved the way for Polman to produce lift gates based on German standards. Starting with cost calculation, supply of materials, work preparation, production and marketing, lecturers and students have been involved throughout the entire process to incorporate this into the curriculum of the college.

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