



Taklimat Berkenaan Permintaan & Penawaran Guna Tenaga Negara

MOHAMAD ISMAIL ABU BAKAR
Director
Industry Talent Management Division, MIDA

OVERVIEW

- About MIDA
- Establishment of Industry Talent Management Division
- Investment Agenda & Performance
- Potential Employment Created Based on Approved Investments by Industry in 2015
- Investment Ecosystem Approach
- Feedback From The Industries
- Industry 4.0
- Way Forward



Who Are We?



Advisory Services

The principal Malaysian Government agency responsible for the promotion of investments and coordination of industrial development and selected services sectors in the country

1st point of contact for investors who intend to set up projects in the manufacturing and services sectors in Malaysia

Malaysian Investment Development Authority, Established in 1967 under Act of Parliament, 1965

Functions of MIDA • Foreign Direct Investment • Domestic Investment • Manufacturing & Selected Services Assist companies in the implementation & operation of their projects Facilitate exchange & coordination among institutions engage in or connected with industrial development

- Manufacturing Licenses
- Tax Incentives
- Expatriate Posts
- Duty Exemption
- Principal Hub & selected services

Planning for industrial development Recommend policies & strategies on industrial promotion and development

Formulation of strategies, programmes and initiatives for international economic cooperation



12 State offices

Kota Bharu

Johor Bahru

Kuala

Terengganu

Kuantan

Kota Kinabalu

Kuching

Alor Setar

Penang .

Ipoh

Selangor

Seremban

Melaka

- Los Angeles Houston
- Boston
- San Jose
- Chicago
- London
- Stockholm Munich
- Frankfurt
- Milan
- **Paris**
- Dubai

- Osaka New York Beijing Guangzhou
 - Shanghai

Tokyo

- Seoul
- Mumbai Singapore
- Taiwan
- Sydney

Headquarter KL Sentral, **Kuala Lumpur**

Address:

MIDA Sentral No. 5 Jalan Stesen Sentral 5

KL Sentral 50470 Kuala Lumpur

Tel: 03 – 2267 3633 Fax: 03 - 2274 7970 www.mida.gov.my



KL Sentral

- 28 minutes (KLIA KL Sentral) via KLIA Express Train
- Malaysia's largest transit hub, is Kuala Lumpur's integrated rail transportation centre.



MITI & Agencies























MIDA as a One Stop Centre

Based in MIDA









Labour ⁻ Department



Telekom Malaysia Berhad



Based outside MIDA



















New Source of Competitiveness -Skilled Human Capital - Fulfilling Industry Needs

To address and service investors' human capital needs subject to mandate and authority given to MIDA

To collate relevant database on graduates to serve the needs of potential investors

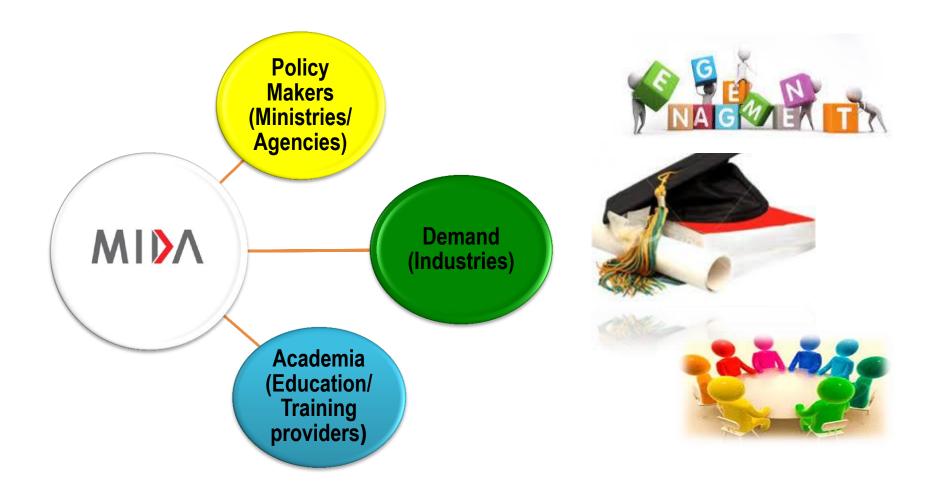
To initiate a
Structured
MIDA-AcademiaIndustry
collaboration to
address
investors'
human capital
needs

To collate a comprehensive database on talent development programmes; and

To collaborate with stakeholders in identifying sectors requiring skilled manpower.



ENGAGEMENT WITH STAKEHOLDERS

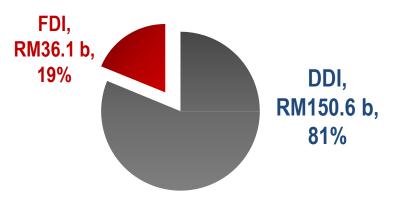




Total Approved Investment in the Economy in 2015



RM 186.7 billion Approved Investment



Approved Investments in the Manufacturing Sector – 2015

Year	Employment	Total Investment	Projects		
2015	66,490	RM 74.7 B	680		

Approved Investments in the Services** Sector – 2015

Year	Employment	Total Investment	Projects		
2015	17,856	RM 18.8 B	2,984		

^{**}Services projects under MIDA's purview approved status/incentives (Global Establishments, Support Services, Hotel & Tourism, Education Services)

Source: MIDA

180,240
Employment Opportunities

62.2% (112,194) were in
Services Sector

"Malaysia attracted a total of RM 193 billion worth of investments in the manufacturing, services and primary sectors"





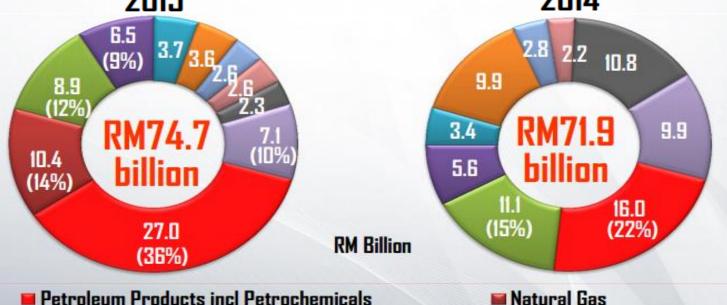




MALAYSIA REPORT 2015

Approved Investments in the Manufacturing Sector -By Industry

The bulk of investments came from Petroleum Products, Natural Gas, E&E, Transport Equipment and Non-Metallic Mineral Products 2014 2015

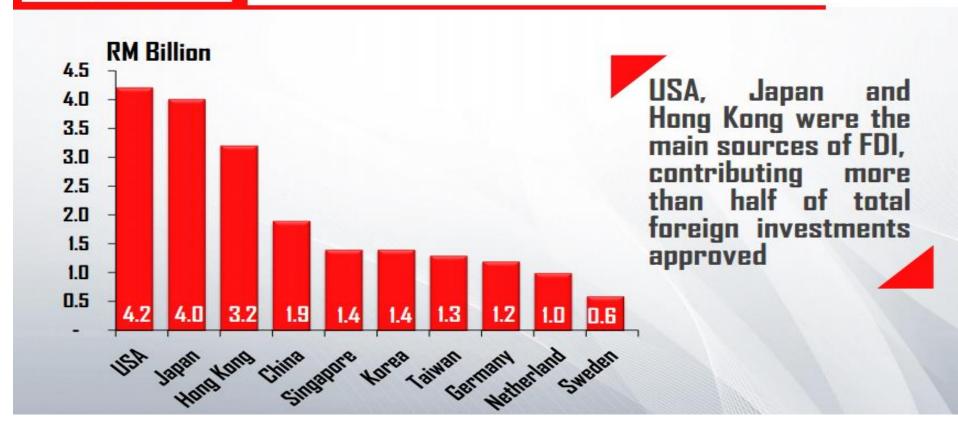


- Petroleum Products incl Petrochemicals
- **ESE**
- Non-Metallic Mineral Products
- Food Manufacturing
- Chemical & Chemical Products

- Transport Equipment
- Basic Metal Products
- Fabricated Metal Products
- **■** Others

MALAYSIA INVESTMENT PERFORMANCE REPORT 2015

Approved Investments in the Manufacturing Sector Sources of FDI

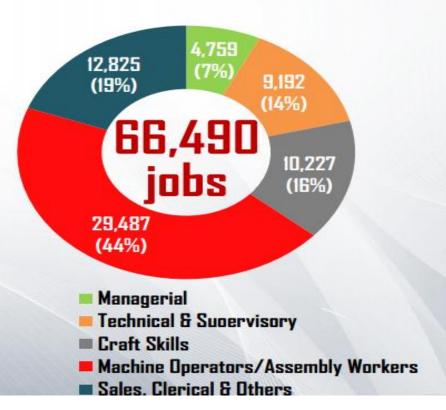


Source: MIDA

MALAYSIA INVESTMENT PERFORMANCE REPORT 2015

Approved Investments in the Manufacturing Sector -By Category of Employment

37% skilled/ high-skilled job opportunities created from projects approved in 2015





Potential Employment Created Based on Approved Investments by Industry in 2015

	TEC					
Industry	E&E Engineers	Mechanical Engineers	Chemical Engineers	Others	Science Qualifications	Total
Electronics & Electrical	1,020	970	531	554	475	3,550
Petroleum Products (incl Petrochemicals)	319	304	166	173	149	1,111
Machinery Manufacturing	287	273	149	156	134	998
Fabricated Metal Products	167	158	87	90	78	580
Basic Metal Products	162	154	84	88	76	564
Chemicals & Chemical Products	122	116	64	66	57	425
Transport Equipment	92	87	48	50	43	320
Plastic Products	78	74	41	42	36	271
Non-Metallic Mineral Products	77	73	40	42	36	267
Food Manufacturing	76	73	40	41	36	266
Scientific & Measuring Equipment	70	66	36	38	32	242
Rubber Products	53	51	28	29	25	186
Wood & Wood Products	52	50	27	28	24	182
Natural Gas	9	75				84
Paper,Printing & Publishing	13	12	7	7	6	45
Furniture & Fixtures	12	11	6	7	6	42
Miscellaneous	11	11	6	6	5	40
Beverages & Tobacco	5	4	2	2	2	16
Textiles & Textile Products	1	1	0	0	0	2
Leather & Leather	0	0	0 0		1	1
Total	2,626	2,563	1,362	1,420	1,222	9,192

	CRAFTS SKILLS										
Industry	Plant Mainte- nance	Tools & Die Makers	Machinist	IT Personnel	Quality Controller	Electrician/ Chargeman	Welders	Others	Sub- total	Machine Operators	Total Skilled Workers
Electronics & Electrical	472	119	320	182	549	284	226	2,162	4,313	12,428	16,741
Rubber Products	119	30	80	46	138	71	57	543	1,082	3,119	4,201
Plastic Products	78	20	53	30	91	47	37	358	715	2,060	2,775
Fabricated Metal Products	77	20	52	30	90	46	37	354	707	2,036	2,743
Machinery Manufacturing	53	13	36	21	62	32	26	244	487	1,402	1,889
Basic Metal Products	53	13	36	20	62	32	25	243	485	1,396	1,881
Transport Equipment	44	11	30	17	51	26	21	200	400	1,152	1,552
Food Manufacturing	39	10	27	15	46	24	19	180	359	1,034	1,393
Wood & Wood Products	37	9	25	14	43	22	18	168	334	964	1,298
Non-Metallic Mineral Products	36	9	24	14	42	22	17	165	330	950	1,280
Chemicals & Chemical Products	23	6	16	9	27	14	11	107	214	615	829
Scientific & Measuring Equipment	21	5	14	8	25	13	10	98	195	563	758
Miscellaneous	21	5	14	8	24	12	10	94	187	540	727
Paper, Printing & Publishing	17	4	11	7	20	10	8	78	155	446	601
Furniture & Fixtures	13	3	9	5	16	8	6	61	123	353	476
Petroleum Products (incl Petrochemicals)	10	3	7	4	12	6	5	47	94	270	364
Beverages & Tobacco	3	1	2	1	4	2	2	14	29	83	112
Textiles & Textile Products	2	0	1	1	2	1	1	8	15	44	59
Natural Gas										21	21
Leather & Leather	0	0	0	0	0	0	0	2	4	10	14
Total	1,120	282	758	431	1,301	672	536	5,126	10,227	29,486	39,714



Eleventh Malaysia Plan (2016-2020)





Three (3) catalytic subsectors namely Chemical, E&E and M&E industries; and two (2) subsectors of high potential growth namely Aerospace and Medical Devices have been identified in the 11th MP to drive the growth of the manufacturing sector.



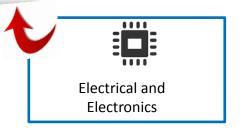
3 catalytic subsectors

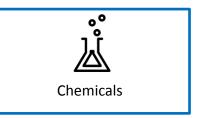
IC Design Engineer

RF Engineer

Wafer Fabrication Process Engineer

Embedded System Engineer







2 High Growth Sectors





SEMICONDUCTOR ECOSYSTEM

Growth Focus

High Density





Mfg (core components, device)



Sales, Distribution Service







SILTERRA

≫FAB

Cinfineon

MIMOS

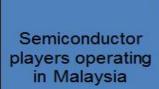


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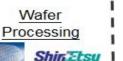


















AMD 7















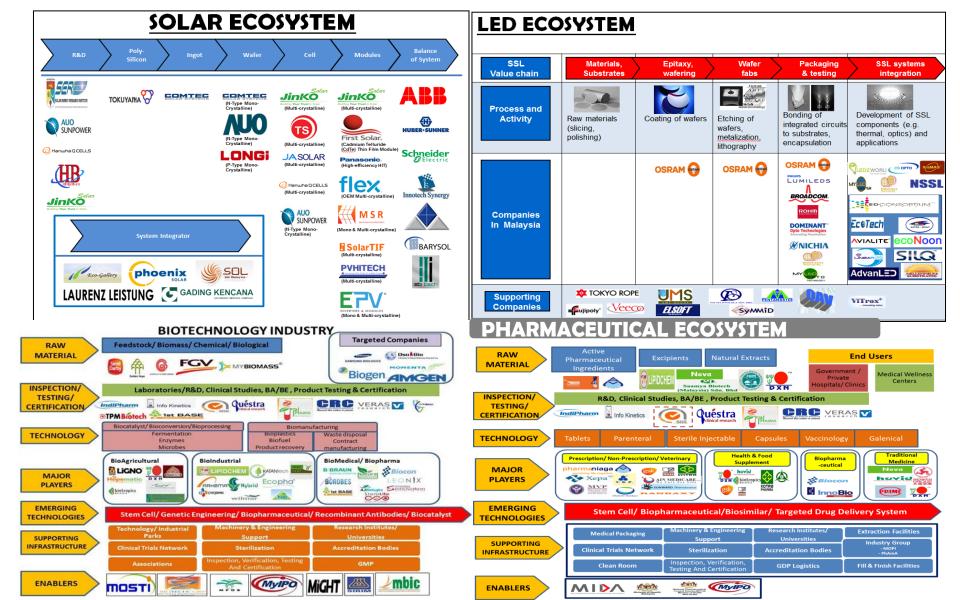


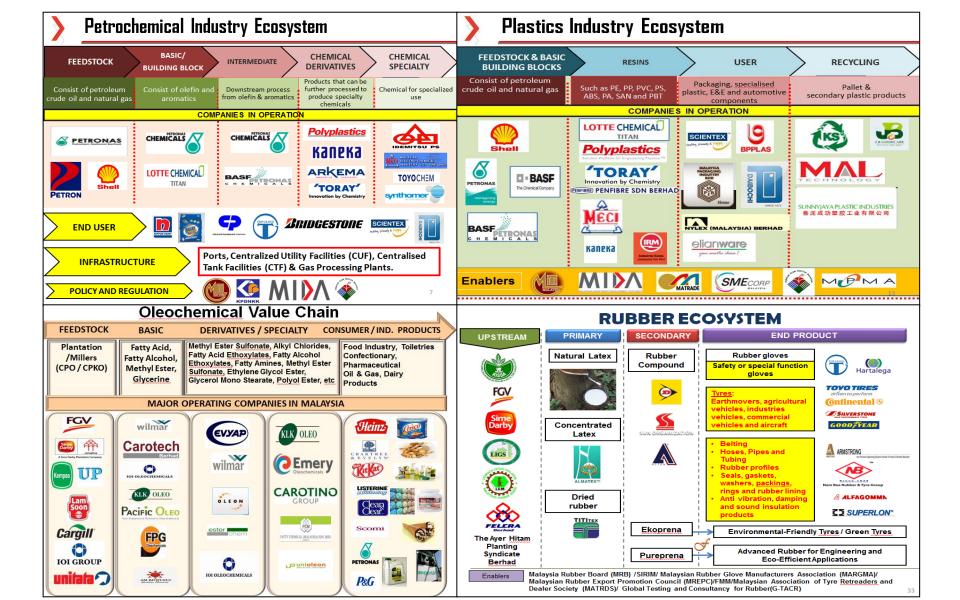














CHALLENGES/ ISSUES FROM THE INDUSTRIES



Limited industry collaboration – mismatch of

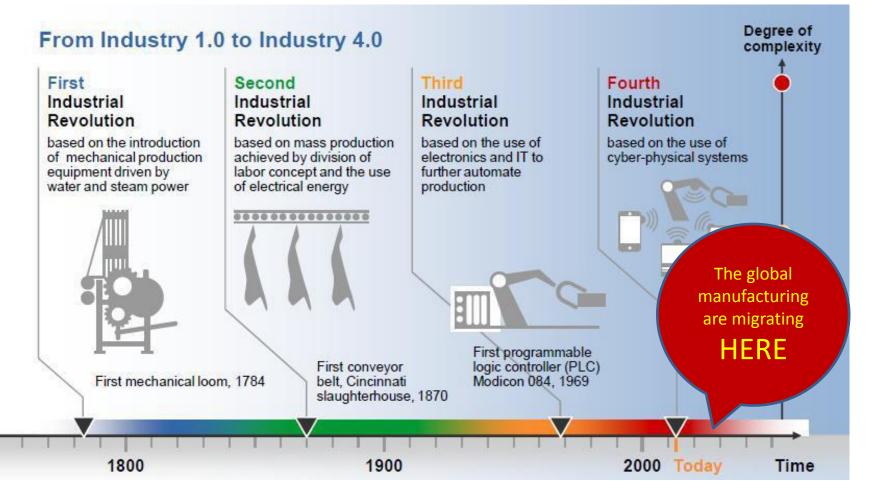
curriculum

Short of Critical Talent

Machinery & Equipment for training (Hardware/Software) - not up to date and require repair & maintenance



INDUSTRY 4.0



SKILLS NEEDED IN INDUSTRY 4.0

- Major part of Industry 4.0 is HANDS ON SKILLS.
- The employee need to MULTITASK and need to be a content expert in their areas.
- Need to be able to handle different field Eg.
 Electrical technician need to know about augmented reality, IT system protocol and configuration.
- TVET is the right platform to complement the academic education.
- TVET not only a stand alone training but will be a top up on academic.



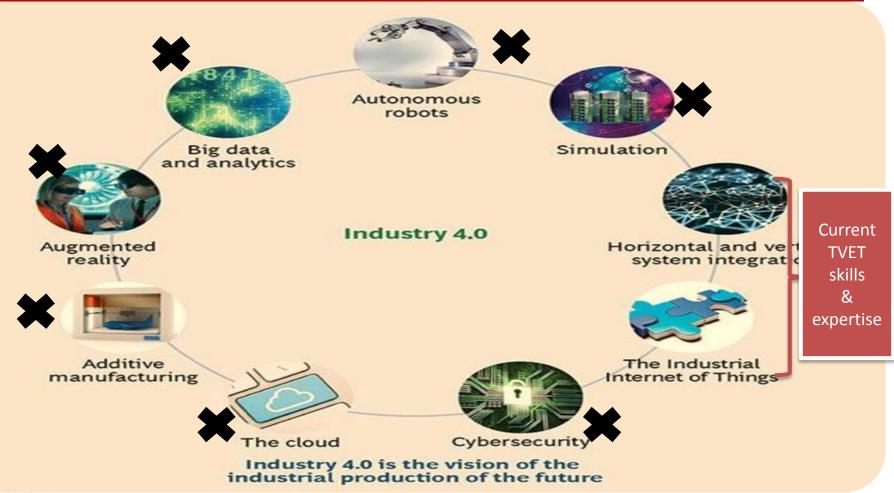
IN INDUSTRY 4.0, I.T. SYSTEM **WILL CONVERGE** WITH FACTORY OPERATING SYSTEM.

CONVERGENCE OF ALL SYSTEM

The Industry 4.0 Environment



9 BUILDING BLOCKS OF INDUSTRIES



MOVING FORWARD

- Referring to the diagram on the previous page, the expertise only focusing in 2 areas.
- There are 7 other building block need to be given the right attention.
- Only with adequate and strong supply of skill workers, the Malaysian Manufacturing will enable we to be competitive.





- 1. Participation in Industry Skills Committee (ISC)
- 2. Strengthen Industry Academia Collaboration (IAC)
- 3. Leverage on Career Fair Organised by MIDA



PARTICIPATION IN INDUSTRY SKILLS COMMITTEE (ISC)





THRUST VI: Re-engineering Economic Growth for Greater Prosperity **Strategy Paper 19: Energising Manufacturing Sector**





Re-engineering economic growth for greater prosperity

Point 19.30 Three Catalytic subsectors namely chemicals, E&E, and M&E as well as two subsectors with high potential growth namely aerospace and medical devices will drive the manufacturing sector growth.



Point 19.36: Leveraging ISC to | strengthen, develop and roll out I relevant syllabus | and new specific to emerging industry I requirements through I identification of and areas profiling of human capital

Exhibit 19-7 The Eleventh Plan Manufacturing Framework



Three catalytic subsectors will stimulate growth and development of 11 related subsectors

Strategy B3

Stimulating innovation-

led growth



Electrical and





Machinery and

Strategy B1: Moving towards complex

and diverse products Incentivise pioneers

in catalytic

promote

subsectors to

development of

frontier products

Strategy B2: through automation

Enhancing productivity

Promote automation

to reduce reliance on unskilled foreign workers

training for local

development

- Enhancing collaboration between SMEs an
- Develop workforce skills and capabilities in producing frontier products

- Leveraging intermediaries to increase R&D and innovation activities
- Enhance industry-led Promoting IP registration, sharing workforce skills and protection
 - Adopting Life Cycle Assessment
 - Increasing environmental compliance

 Increasing access to financing

Strategy B4:

Strenathenina arowth

enablers

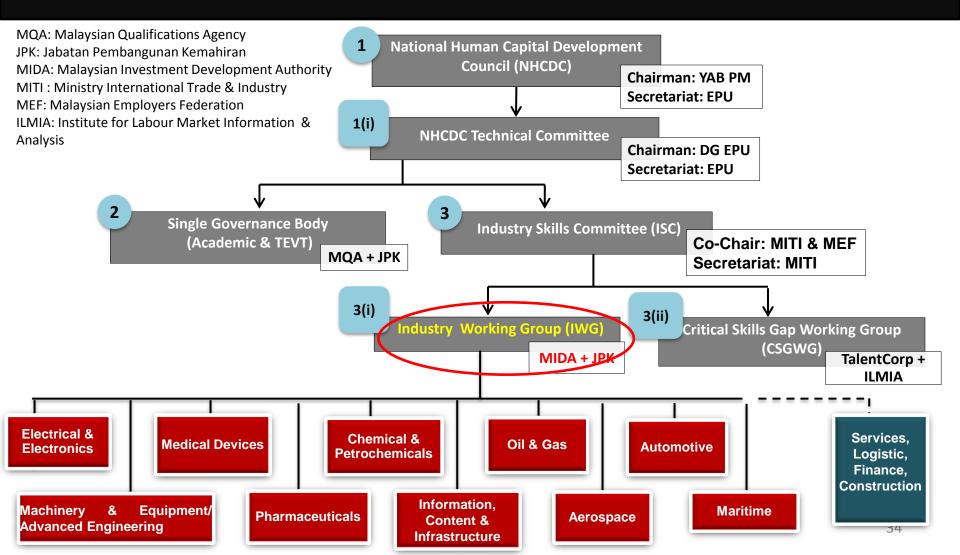
- Introducing targeted and performancebased incentives with exit policy
- Enhancing logistics and infrastructure support
- Strengthening Industrial Estate management

- Strategy B5: Ramping up internationalisation
- Intensifying export promotion via National Export Council
- Increasing compliance to standards
- Leveraging AEC and FTAs
- Leveraging industry associations for greater market access

33

Source: Economic Planning Unit and Ministry of International Trade and Industry

OVERALL GOVERNANCE STRUCTURE



INDUSTRY SKILLS COMMITTEE (ISC) TERMS OF REFERENCE (TOR)





Consult industry on talent/skills requirements

Assess the human resource requirements to meet the needs of industry so as to narrow the gap between skills supply and demand

Work with training providers (educational/training institutions and Technical Education & Vocational Training [TEVT]) and accreditation providers (such as MQA and JPK) to develop training programmes that meet the demands of industry

Recommend to the National Human Capital Development Council (NHCDC) on policies, strategies and action plan for the development of a skilled and competent human resource for industry



STRENGTHEN INDUSTRY ACADEMIA COLLABORATION (IAC)





Industry-Academia Collaboration (IAC)

Mida will identify priority technology clusters and lead companies. It will look to motivate industry participation by allowing them to select their level of participation in interventions, catering to different hiring strategies and addressing their specific talent needs.

"The IAC will complement other initiatives in ensuring existing and

future investors that Malaysia has the requisite talent for investments in high technology, knowledge-based industries." - Datuk Azman Mahmud, CEO (chief executive officer), Mida



to continue to thrive and move up the value chain, it requires a greater number of talent with new skill sets." - Dr Hari Narayanan, managing director, Motorola Solutions Malaysia



INDUSTRY

GOVERNMENT **TalentCorp**



TalentCorp will work together with companies and universities to develop and co-finance suitable collaborations to meet the talent needs of the respective clusters.

meaningful marriage between employers and academia towards giving birth to industry ready graduates, with TalentCorp facilitating the E&E sector to act as a community to collaborate with universities specialising in the industry's key technology clusters." - Johan Mahmood Merican, CEO, TalentCorp

The IAC creates



"When all parts of the puzzle work together, the outcome is positive - Malaysia will have the best-skilled talent in the best jobs." - Associate Professor Dr Arham Abdullah, director of industry relations division, MoE

PRIORITY INDUSTRIES:

Technology Cluster



ELECTRICAL & ELECTRONICS



Integrated Circuit Design	Intel Altera	USM UM UPM
Embedded System	Altera NI Motorola	UTM UM UNIMAP UITM
Wireless Communication (Radio Frequency)	Motorola Keysight Avago	UTM UM UMP
Wafer Fabrication	Silterra Infineon	USM UNIMAP UTEM
Opto/LED	Osram Lumileds	USM UM UNIMAP
Solar	First Solar Sunpower	USM UKM UNIMAP
Advanced Manufacturing	AMD B Braun	USM UNIMAP UTHM

Company

Universities





"Most of our

R&D engineers are

local graduates. For

exposure they receive

at university." - Datuk

Dr Mohd Sofi Osman,

managing director, Altera Corporation

SILTERRA SUNPOWER

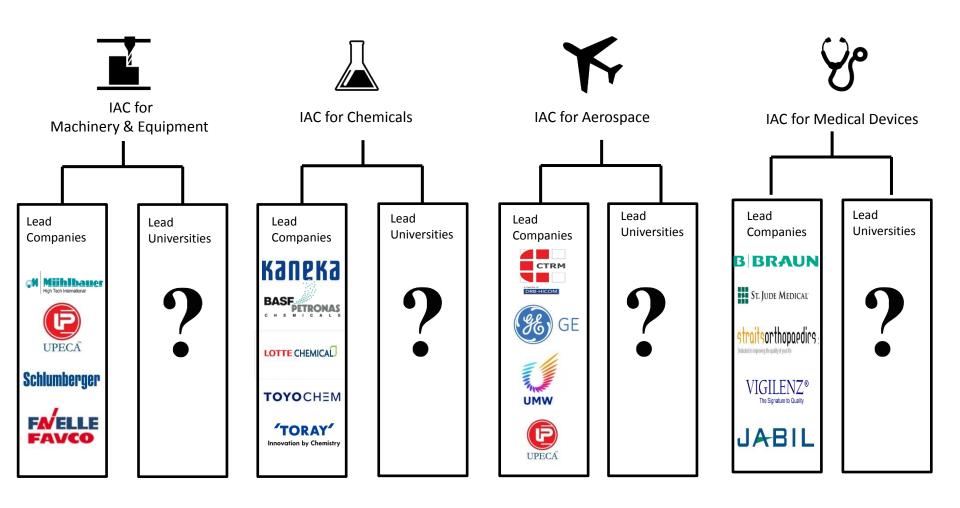
FOR



ACADEMIA



Industry-Academia Collaboration (IAC)





LEVERAGE ON CAREER FAIR ORGANISED BY MIDA





Pameran Kerjaya & Temuduga Terbuka, MITI Open Day 2016

60 buah syarikat 5,000 peluang pekerjaan 5,000 pencari kerja























Information & Dialogue Session



Example of Talent Assistance by MIDA





Finisar[®]







Industrial Talk

Syllabus Design,

Structured Internship

Bridging Skills / Knowledge Gap Between Academia & Industry



 To provide MIDA with quick/specific information such as programs offered & number of graduates for each programs



 To support our effort in promoting Industry Academia Collaboration such as internship, curriculum, short courses, etc.





THANK YOU

