Dissecting the ETP Annual Report: Part 5
The EPPs do not seem to be creating high-income jobs

Capital intensity is very low in the ETP so far. An increasing level of capital investment per employee (CIPE) is an essential part of economic development. Higher CIPE usually translates into higher salaries due to the higher skills and productivity associated with working with more efficient machines and technology. Therefore, the ETP is expected to have high CIPE.

PEMANDU is not doing much better than BAU. On the surface, the RM571,000 CIPE of the ETP projects last year is above the average RM554,000 achieved by the Malaysian Industrial Development Authority (MIDA) in the last five years of business-as-usual (BAU). However, the ETP total includes the MRT and RAPID mega-projects. Stripping these out, the CIPE of the remaining ETP projects is a mere RM305,000 - well below what MIDA has been achieving.

Electrical & Electronics (E&E) EPPs seem low-end. PEMANDU may say the headline comparisons are unfair as the ETP includes projects that may not be as capital intensive as the manufacturing projects under MIDA's purview. But then, even in the E&E sector, we find that the ETP projects brought in a mere RM429,000 CIPE last year. MIDA delivered more than that in four out of the previous five years, the 2009 crisis year excluded.

The ETP will not transform the lives of ordinary Malaysians. Notice that PEMANDU's communiqués focus on investment numbers and projects. There is hardly any mention of the types of jobs created. That could be because most of the jobs are low-skilled. The bottom 36% of ETP jobs will pay just RM1,122 per month in today's terms. And as we show in today's focus paper, the low capital intensity of the ETP projects underlines the lack of real transformation.

- The ETP is not doing better than business-as-usual (BAU, as PEMANDU puts it) in attracting high-value investments.
- Excluding the MRT and RAPID mega-projects, capital intensity per employee in the ETP projects is a mere RM305,000.
- MIDA achieved a much better RM554,000 average capital intensity in the last five years!
- Rising capital intensity per employee is an essential part of economic development. In this regard, the ETP is certainly far from transformative.

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Previously, in our dissection of the 2011 Annual Report of the ETP …

1. Part 1 (The '**D**'ata in our DEEDS framework) highlighted how PEMANDU very adroitly masks the fact that *real* national income growth last year was below its target;
2. Part 2 ('**E**'xecution) unearthed the shocking case of PEMANDU lying and taking "100%" credit in its Annual Report for a RM1.9 billion wafer fab plant that was never built;
3. Part 3 ('**E**'nterprise) uncovered the startling gap between *committed* and *actual* investments. The RM12.9 billion of *actual* investments is a mere 7% of the RM179 billion committed investments that PEMANDU prefers to emphasise;
4. Part 4 ('**D**'iversity) revealed that PEMANDU's 'recalibration' of the ETP figures is better described as a massive collapse. The incremental GNI (Gross National Income) and job creation numbers were slashed by 45% and nearly 20% respectively. Were some EPPs selected based on grossly exaggerated forecasts?

Socio-economic impact - the ETP is for the elites

This week, in our series critiquing PEMANDU[1] and the Economic Transformation Program (ETP[2]) 2011 Annual Report[3], we tackle the **S**ocio-economic impact of the ETP. We had earlier highlighted that[4]:

1. *The ETP will take us further away from sustainable high-income status.* Workers' share of national income under the ETP will be just 21% compared to 28% currently[5]. The share that goes to corporations will be 74%, much higher than the current 67%;

2. *The ETP will perpetuate income inequality.* Of the small 21% share of ETP national income going to workers, the top 15% of wage earners will take 40% of all wages. The bottom 36% will have to make do with just 12% of total wages;

3. *A significant number of ETP jobs pay poorly.* The average wage of the bottom 36% of ETP jobs is just RM1,122 per month in today's terms.

[1] The acronym that the Performance Management and Delivery Unit within the prime minister's department is better known by. PEMANDU is the government agency that created and is now steering the ETP.

[2] The ETP in its Roadmap called for 131 Entry Point Projects (EPPs) within 12 National Key Economic Areas (NKEAs), which will pour RM1.4 trillion worth of investment into the economy and create 3.3 million new jobs by 2020. These targets have not been changed, the recent massive 'recalibrations' notwithstanding.

[3] The report was released on 2 Apr 2012. It can be downloaded at http://etp.pemandu.gov.my/annualreport/

[4] Details in A Critique of the ETP Part 6: Socio-economic impact - *The ETP will make the rich even richer.* Available at www.refsa.org

[5] PEMANDU subsequently pointed out that our calculation had not included employers' share of Employees Provident Fund (EPF) payments. That is true. However, we had also based our calculation on gross wages, before taxes. Adding employers' EPF contributions and subtracting income taxes would bring us back to a similar conclusion.

Figure 1: The ETP will make the already low workers' share of national income even lower

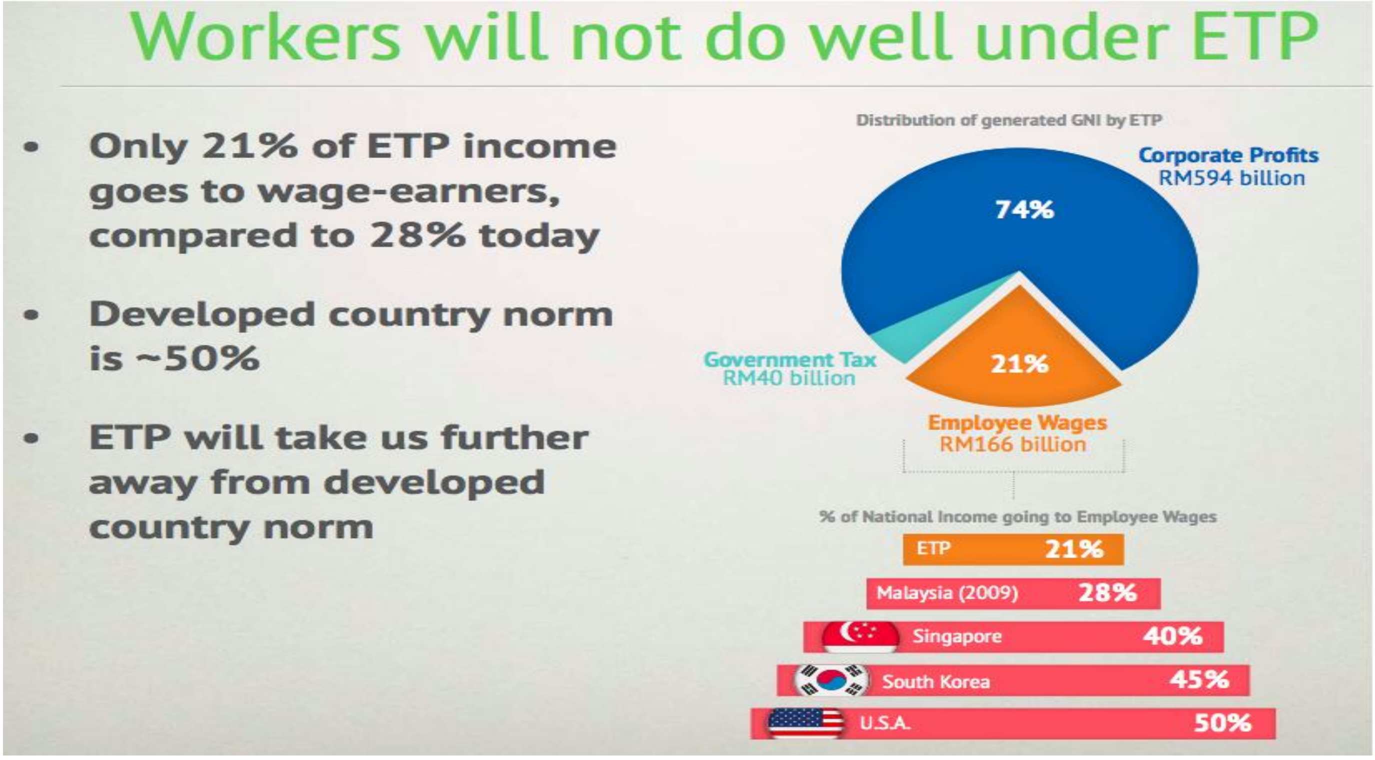
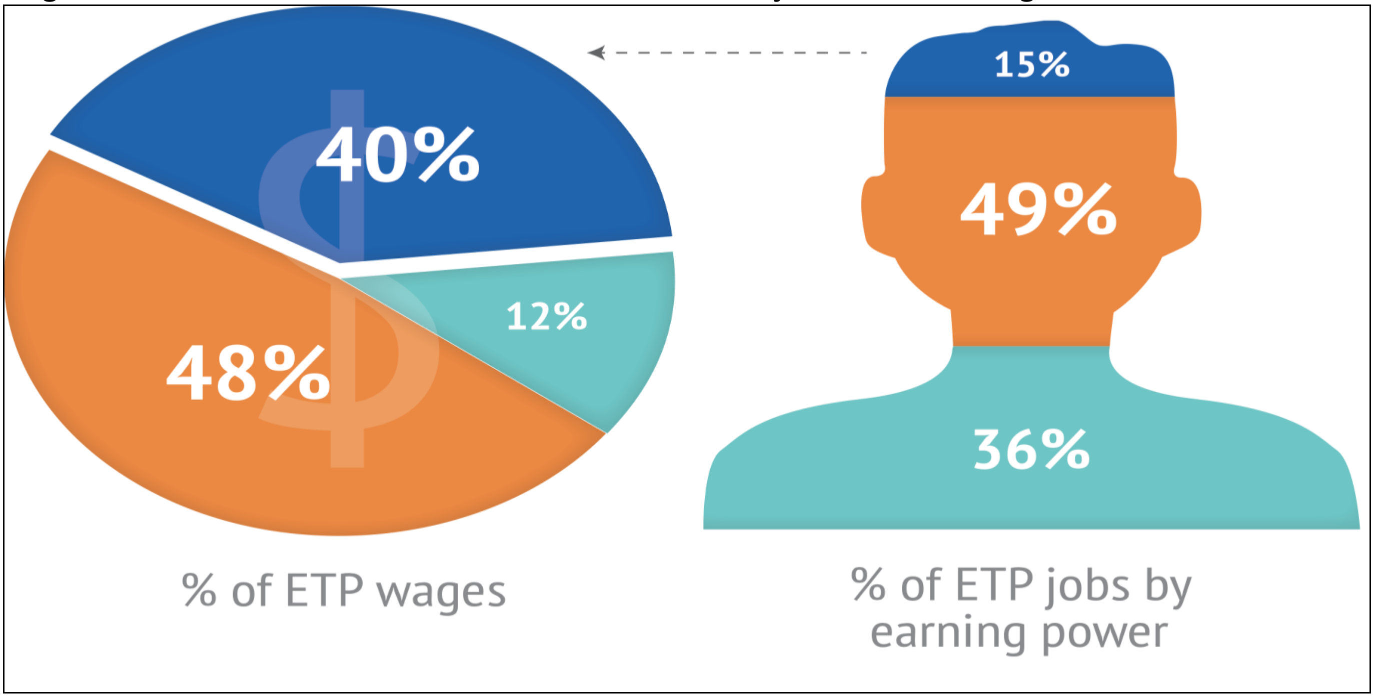


Figure 2: The ETP perpetuates income inequality. The top 15% of workers will take 40% of all ETP wages. The bottom 36% of workers have to make do with just 12% of the wages



Sources for Figures 1 and 2: As cited in A Critique of the ETP Part 6: Socio-economic Impact - the ETP will make the rich even richer. Available at www.refsa.org

Dissecting the ETP Annual Report - Part 5

The infographics above were based on the ETP Roadmap Report published in October 2010. Now, less than 18 months into this Roadmap that is supposed to take us to high-income nation status, PEMANDU slashed the job creation numbers by nearly 20%[6] in the ETP Annual Report but has not told us which jobs were lost and how this will affect the distribution of income under the ETP.

Capital intensity is a measure of economic development

In the absence of information from PEMANDU, we use capital intensity as an indicator of the types of jobs that the ETP created in 2011. An increasing level of capital investment per employee (CIPE) is part and parcel of the economic development process. Developed economies have a higher level of CIPE compared to less developed countries[7].

Higher CIPE usually translates into higher salaries due to the higher levels of skills and productivity associated with working with more efficient machines and technology. For example, multinational enterprises in Japan tend to employ a higher amount of capital per worker and this is associated with higher productivity and wages[8]. MIDA, the Malaysian Industrial Development Authority, has this to say in its 2011 report:

> *The CIPE ratio of manufacturing projects has registered an increasing trend ... This reflects the general trend towards more capital-intensive, high value-added and high technology projects.*[9]

Given the ETP's promise of transformation, we would expect the capital investment per employee of its projects to be significantly higher than those of MIDA-approved projects which had been driving business-as-usual (BAU, as PEMANDU puts it) growth before PEMANDU came along.

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[6] Details in Part 4 - *45% of GNI and 20% of jobs disappeared in 'recalibration'*. Available at www.refsa.org

[7] Table 1, 'The Determinants of Capital Intensity in Manufacturing: The Role of Factor Endowments and Factor Market Imperfections'. Hasan, Rana, Devashish Mitra & Asha Sundaram, 2010 Working Paper, Downloaded from http://faculty.maxwell.syr.edu/dmitra/HMS%20Final%20for%20Submission.pdf on 4 July 2012.

[8] Globalization, Productivity and Firm Exit. Tomohiko, Inui, Richard Kneller, Matsuura Toshiyuki & Danny McGowan, Research Institute of Economy, Trade and Industry (REITI) Discussion Papers Series 09048, 2009. Downloaded from http://www.rieti.go.jp/jp/publications/dp/09e048.pdf on 4 July 2012.

[9] Quote from page 22. The report is at www.mida.gov.my/env3/uploads/PerformanceReport/2011/Report.pdf

Overall investment per job in the ETP is abysmal

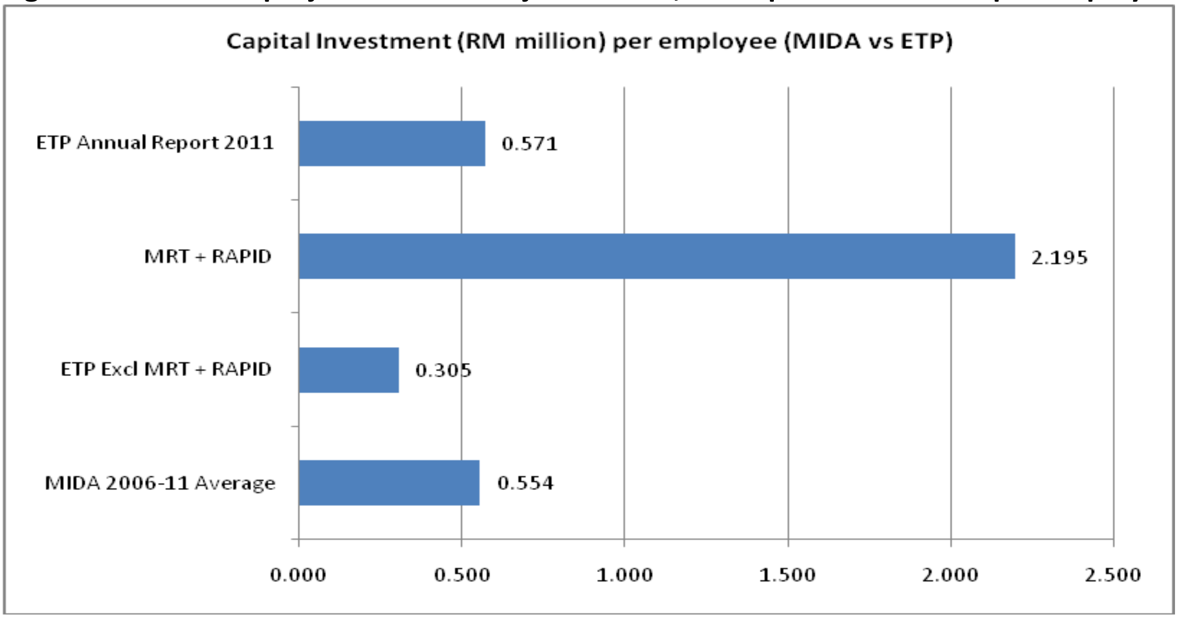
The CIPE ratio is not the only measure of the kinds of jobs which will be created as a result of certain levels of capital investment. But it is an important measure, and on this metric, the latest data from the 2011 ETP Annual Report shows a dismayingly low level of capital intensity.

As shown in the chart below, the RM571,000 CIPE of the ETP projects is only slightly above the RM554,000 average achieved by MIDA in the last five years between 2006 to 2011[10]. The amount of CIPE in the ETP does not seem to promise transformation or high-income jobs beyond what MIDA has achieved.

The headline numbers actually flatter the ETP, because the ETP total is boosted by mega-projects. Just two mega-projects – the MRT and the RAPID project – comprised more than 50% of the total committed investment of the ETP as at the end of 2011.

Stripping these two mega-projects out[11], the capital investment per employee of the remaining EPPs is a minuscule RM305,000 - which is about ½ the RM554,000 CIPE that MIDA-approved projects averaged from 2006 to 2011!

Figure 3: Most ETP projects are small - just RM305,000 capital investment per employee



Sources: MIDA Investment Reports, 2006 to 2011; ETP Annual Report 2011; Ong Kian Ming

[10] In fact, it falls well within the range of RM485,000 and RM621,000 achieved by MIDA in the period.

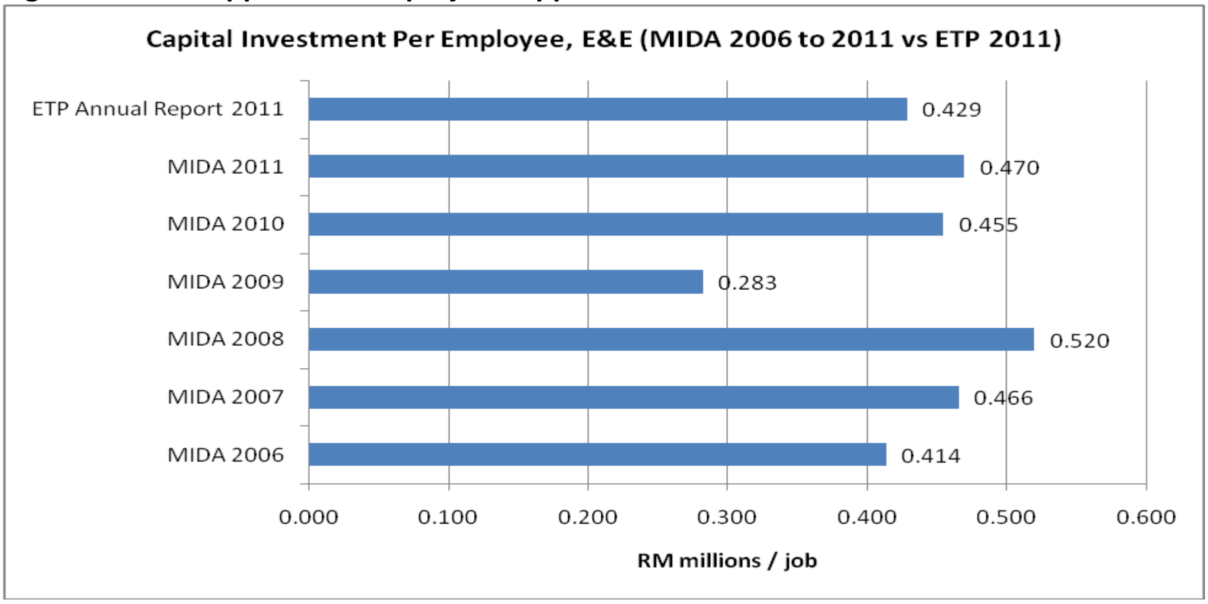
[11] These two mega projects provide a CIPE of RM2.195 million which is 7 times larger than the mere RM0.305 million for the other EPPs combined. The MRT has a RM36.6 billion investment value and is supposed to generate 20,000 jobs by 2020 while the corresponding numbers for RAPID are RM60 billion and 24,000 jobs.

The Electrical & Electronic EPPs seem low-end

Of course, PEMANDU may say that we are unfairly comparing rambutans to durians, as the nature of the ETP is such that it includes many projects that may not be capital intensive in the same way as the manufacturing projects that are under MIDA's purview.

Let us then focus on the Electronics and Electrical (E&E) sector. As shown below, ETP projects under the E&E NKEA (National Key Economic Area) brought in a mere RM429,000 capital investment per employee in 2011. This pales in comparison to MIDA's achievements. Excluding the 2009 crisis year, MIDA achieved a CIPE range of RM414,000-RM520,000 in the past five years. In fact, except for 2009, MIDA outstripped the ETP's RM429,000 in four out of the past five years.

Figure 4: MIDA-approved E&E projects appear more value-added than the ETP's



Source: MIDA Investment Reports, 2006 to 2011; ETP Annual Report 2011, Ong Kian Ming. The list of E&E ETP projects is set out in Appendix 1.

Anecdotal evidence supports the view that some Entry Point Projects (EPPs) are far from transformative. For example, industry sources tell us that the LFoundry EPP[12] planned to relocate old equipment from its plant in Germany to produce 200mm wafers in Malaysia. State-of-the-art wafer fabs such as in Singapore are already producing more technologically advanced 300mm wafers.

[12] The E&E NKEA Director indicated that LFoundry has pulled out of this EPP (http://etpblog.pemandu.gov.my/posts/2012/04/17/keeping-it-real-the-etp-as-a-microcosm-of-life/ - Retrieved July 2012), but this is not reflected in the ETP's latest progress update (http://etp.pemandu.gov.my/upload/Progress_Updates-Status.pdf - Retrieved 4 July 2012)

The ETP will not transform the lives of ordinary Malaysians

The very low capital investment per employee is one important indicator of the fatal flaw of the ETP - that it will not transform the lives of the vast majority of Malaysians.

Notice that PEMANDU's communiqués focus on investment numbers and projects. There is hardly any mention of the soft infrastructure necessary to take us to sustainable high-income status[13]. For example, what skills and job-types will be required in the 3.3 million jobs that the ETP promises to create? Accountants? Lawyers? Electrical engineers? Chemical engineers? Tour guides? Plumbers? Plantation workers? Doctors? Nurses? Technicians?

Information on the types of jobs that the ETP will create is crucial to other divisions of the government as well as ordinary Malaysians. For example, surely the Ministry of Education and Ministry of Labour would need to tailor their education and human resource policies to dovetail with the ETP. Malaysian youths and adults planning their own education and careers will also find such information very useful.

PEMANDU's silence on this matter could be because most of the jobs that the ETP promises to create are low-skilled. That the ETP consists of EPPs that are generally not transformative is not surprising as:

1. Many of these EPPs are 'recycled' projects using past or existing business models which are far from being game changers;
2. These projects were selected in a lab environment where truly innovative ideas are unable to flourish[14].

Instead of being transformative, the ETP is, at best, just a very slick repackaging of old ideas. These 'recycled' projects cannot be expected to result in transformative change or high-income jobs.

[13] We acknowledge there are Strategic Reform Initiatives (SRIs) that deal with human capital development as outlined at http://etp.pemandu.gov.my/Human_Capital_Development-@-Overview.aspx but these are only a small part of the initiatives that have been announced thus far.

[14] As covered in Parts 3(i) to 3 (iii) in our Critique of the ETP series. 3(i) - *PEMANDU strengthens the know-who cancer*, 3(ii) - *The hothouse labs probably killed innovation* and 3(iii) *Doubtful EPPs, doubtful achievements and due diligence* are all available at www.refsa.org

What should PEMANDU do?

PEMANDU has shifted goal posts, set low targets and misrepresented data in order to present a rosy picture of how well the economy is doing. This is a disservice to all Malaysians, especially to the poorest and least educated who have been deluded into believing the government can drive the economy.

Part 6 next week concludes with our recommendations.

Appendix 1: EPPs under the E&E NKEA in the ETP Annual Report 2011

Entry Point Project (EPP)	**Amount of Investment (RM million)**	**Number of Jobs Created**	**CIPE (RM million per job)**
LFoundry Semiconductor Water Fab	1900	6,500	0.292
Solar Cell Manufacturing	2200	4,069	0.541
Philips LED Manufacturing Facility	600	300	2.000
LED/SSL Certification Centre	12	150	0.080
Semiconductor Manufacturing Facility	480	350	1.371
Pensonic Manufacturing Hub and International Distribution Centre	250	850	0.294
MyLED LED and SSL Manufacturing	175	900	0.194
Strategic Share Acquisition in DSEM Sdn Bhd	Not available	300	Not available
Test & Measurement Set Up Machinery & Equipment Shared Service Facility	212	164	1.293
TOTAL	5829	13,583	**0.429**

DEEDS was conceived earlier this year when we published a series assessing PEMANDU and the ETP on the goals, plans and targets stated in the ETP Roadmap document. In keeping with the spirit of the alphabet soup of NKEAs, NKRAs, SRIs, EPPs, and GNI surrounding the entire GTP, we evaluated PEMANDU and the ETP on its DEEDS - Data transparency, Execution, Enterprise, Diversity and Socio-Economic Impact. The 8 Focus Papers in this Critique of the ETP Series, together with related infographics and a powerpoint presentation can be found at www.refsa.org.

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