

IPET NEWS. *May 2018*

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Hi Member

Ref

Your IPET Newsletter is below.

Civilution Forum

The purpose of the movement is to form a body that speaks with one voice on common issues relating to all engineering related matters. Representatives from various Voluntary Associations have attended a number of meetings to date.

A name for this organisation has been finalised and now is the

South African Forum for Engineering (SAFE).

A Memorandum of Understanding has been drafted and requires approval by all the participating VA's before being signed.

A further progress meeting will take place in the coming quarter.

The Court Case Against ECSA – Update.

No News on progress received yet. Court date still to be finalised.

ECSA Annual Fees and Discounts for Our Members.

This year's ECSA fee is R3867.27 and for our members R 3275.11

The discount is then R592.16.

So it pays to belong to IPET.

ECSA's invoice may only show the final figure and not the first figure and the discount.

ECSA invoices can be expected to be sent in April.

(IPET invoices were sent in April. If you have not yet paid IPET please do so soon).

Different fees and discounts apply to ECSA candidates.

ECSA has requested a list of all paid up member and members who have been deleted due to non-payment, resignations and death etc. These lists then may affect the discount ECSA grants to members.

Lists as at the beginning of March 2018 have been sent to ECSA.

Please see our Website for a list of members in good standing. It is updated from time to time.

(If not up to date (see date shown) then allow our webmaster a few weeks grace as he is overseas at this time).

www.ipet.co.za

Snippets.

The following mini articles, notices and news follow the trend of interesting scientific, engineering developments and general interest items that we come across. Read and enjoy!

Please feel free to contribute by sending your articles to share with our members!

Ed

Snippets.

Structural Transformation in South Africa

A new no-holds-barred study of South Africa, titled Structural Transformation in South Africa, has shown that, over the past two decades, the country has deindustrialised prematurely and failed to materially transform its economic structure to one that encourages inclusive growth and development.

The study calls for a broad coalition for reindustrialisation underpinned by productive investment and widening economic participation.

The study produced by the Industrial Think Tank hosted by the University of Johannesburg was written with the support of the Department of Trade and Industry (DTI).

In a brutal critique the authors highlight that manufacturing's contribution to gross domestic product (GDP) has declined from 21% in 1994 to only 13.3% in 2016. In addition, much of the growth in services has been in low-value traditional sectors.

The authors attribute this poor performance to compromises reached between a narrow coalition of elites, which, “buttressed by higher government salaries and social grants for important constituents, has undermined investment and reinforced rather than changed the existing structure of economic power.”

Besides building a coalition for reindustrialisation, the study suggests the following solutions for reversing the deindustrialisation:

- The consolidation of fragmented government structures, particularly in the economic policy domain.
- Regional industrial integration, which takes account of the need for other Southern Africa countries to export more to South Africa for South Africa to grow its own exports into the region.
- Incentivising and investing in capabilities to take advantage of the Fourth Industrial Revolution.
- Dealing with concentration in the economy through competition policy and legislation.
- And a reorientation of macroeconomic policy to ensure it is supportive of industrialisation.

Trade and Industry Minister Dr Rob Davis, who accepted the report, has acknowledged that the findings, which are critical of government industrial policy interventions in the metals, machinery and equipment, automotive, and agriculture and agro processing sector, “make for hard reading”.

However, Davies said that there is no room to be defensive if we are to make the necessary changes.

ED; Hope springs eternal!

DTI invites public to comment on proposed amendments to BBBEE codes

The Department of Trade and Industry (DTI) is inviting the public to participate in a public commentary process on a proposed amendment to the Broad-Based Black Economic Empowerment (BBBEE) Codes of Good Practice on or before May 29.

The proposed amendments aim to promote innovative ways to increase the participation of black South Africans and particularly black youths in the economy.

Key to these amendments are the Youth Employment Service (YES) that was launched last month and the introduction of a ring-fenced point indicator on the skills development scorecard for a 2.5% spend target on bursaries for black students that are attending higher educational institutions.

The YES initiative was one of the initiatives presented in President Ramaphosa's 2018 State of the Nation Address, which aims to improve the grim employment outlook for young work seekers by offering paid work experience and, therefore, inclusion in the economy.

The DTI is encouraging the public to give input and comments. Inputs and comments should be submitted to Jacques Manus **at**

U.S. largest wind farm is under construction in Oklahoma

The 2-GW wind farm, called the “Wind Catcher”, is expected to provide electricity to 1.1 million utility customers in the region.

The Oklahoma Panhandle will soon host the largest single-site wind farm in the US and the second largest in the world (after Gansu Wind Farm Project in China). When completed in 2020, the so-called “Wind Catcher” project will supply 2,000 MW of electricity to 1.1 million energy customers in Arkansas, Louisiana, Texas and Oklahoma. The wind farm will be equipped with 800 GE 2.5 megawatt turbines, when a typical U.S. wind farm may have between 50 and 100 turbines..

However, the Wind Catcher Energy Connection project is still subject to approval by utility commissions in Arkansas, Louisiana, Texas and Oklahoma, as well as the Federal Energy Regulatory Commission.

Tesla’s battery in South Australia made \$1 million in profit in just a few days .

It was last December when Tesla’s 100MW Powerpack battery went online in South Australia. Connected to a wind farm, the world’s biggest lithium-ion battery is three times more powerful than the next biggest battery and can respond to demand peaks almost instantly, ramping from 0 to 100MW in 140 milliseconds. But apart from these spectacular facts, the Tesla battery, formally known as the Hornsdale Power Reserve, has also started proving its financial worth. Over the period of 18-19 January, it seems that it may have earned its owners, Neoen, around \$1 million AUD (\$800,000 USD) from the wholesale market. Currently, 70MW/39MWh of the battery’s capacity is contracted by the South Australian government to be used when needed, while Neoen, the Hornsdale operator, has control over the remaining 30MW/90MWh, which they can choose to trade on the wholesale market.

Source: [Renew Economy](#)

Australia’s Biggest Battery

Step aside Elon Musk, Australia has a new battery. British billionaire businessman Sanjeev Gupta has built the world’s largest battery in South Australia. The 120MW/140MWh behemoth was designed in order to support a new solar farm. This dwarfs Musk’s 100MW/129MWh battery. Not to be outdone, Musk switched over to rolling out solar panels to over 50,000 homes in Australia.

Solar energy dominated global investment in 2017.

The world did not stop to allow South Africa to get off. While ‘sunny SA’ spent more than two years delaying the introduction of new renewable- energy plants, including 12 solar photovoltaic (PV) projects and a concentrated solar power (CSP) plant, the rest of the world continued investing.

The world installed a record 98 gigawatts of new solar capacity, far more than the net additions of any other technology -- renewable, fossil fuel or nuclear.

Solar power also attracted far more investment, at \$160.8 billion, up 18 per cent, than any other technology. It made up 57 per cent of last year’s total for all renewables (excluding large hydro) of \$279.8 billion, and it towered above new investment in coal and gas generation capacity, estimated at \$103 billion.

A driving power behind last year’s surge in solar was China, where an unprecedented boom saw some 53 gigawatts added -- more than half the global total -- and \$86.5 billion invested, up 58 per cent.

The Global Trends in Renewable Energy Investment 2018 report, released by UN Environment, Frankfurt School - UNEP Collaborating Centre, and Bloomberg New Energy Finance, finds that falling costs for solar electricity,

and to some extent wind power, is continuing to drive deployment. Last year was the eighth in a row in which global investment in renewables exceeded \$200 billion -- and since 2004, the world has invested \$2.9 trillion in these green energy sources.

Overall, China was by far the world's largest investing country in renewables, at a record \$126.6 billion, up 31 per cent on 2016.

To download the report: <https://drive.google.com/file/d/1SmhaI-WAcEMqR8R9oL5Fxn0cZ0kfY8Z/view>

Source; UN Environment & Others.

Eskom: Coal coal stock levels.

The prevailing situation at seven stations Arnot, Tutuka, Majuba, Hendrina, Camden, Kriel and Komati power stations, is that coal stock levels are below the required target of 20 days as stipulated in the Grid Code.

Ed; Winter approaches and the sun shines and the wind blows!?

Institute of Race Relations Report.

In a generally upbeat IRR report on its latest research into race relations, Headlined "Reasons for Hope", the report released recently highlights how over 90% of South Africans of all races say they need each other, and that three quarters of Black respondents say they have never personally experienced racism.

A disturbing belief among 61% of Black respondents is that "SA is now a country for black Africans and whites must take second place." The increasingly potent BEE and Employment Equity legislation shows its clear lawmakers feel justified in playing to this undemocratic view.

Moody's SA Rating & Business Confidence. Good News!

Moody's confirmed South Africa's BBB rating and upgraded its outlook from negative to stable. The highly anticipated decision averted a credit downgrade to sub-investment grade, which would have put considerable pressure on the country's high debt burden.

In February, manufacturing output expanded for the fifth consecutive month, and growth in retail sales accelerated in part due to a stronger currency. The manufacturing PMI remained positive in March, expanding for the second straight month following a string of uninterrupted contractions since August 2017.

Business Confidence in South Africa increased to 45 Index Points in the first quarter of 2018 from 34 Index Points in the fourth quarter of 2017. Business Confidence in South Africa averaged 44.64 Index Points from 1975 until 2018, reaching an all-time high of 91 Index Points in the third quarter of 1980 and a record low of 10.20 Index Points in the third quarter of 1985.

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