

THE FULL VALUE OF THE 12-L TAX ALLOWANCE

By Karel Steyn, President of the Southern African Association for Energy Efficiency (SAEE)

Minister Pravin Gordhan, Minister of Finance, gave notice that section 12L of the Income Tax Act, 1962 (Act No. 58 of 1962), which allows for a deduction in respect of energy efficiency savings, came into operation on 1 November 2013. This allows for tax deductions calculated at 45 cents per kilowatt hour or kilowatt hour equivalent of energy efficiency savings. The value of the incentive was regularly mentioned as a concern during the recent country-wide workshops organised by SANEDI.

The benefit for making use of the 12-L tax incentive is not simply the 45c/kWh offered through the Regulations. The lifespan of the energy efficiency measure implemented and the total costs with subsequent benefits, need to be considered, to get to a realistic understanding of what the real value of this innovative new tax incentive would mean for commercial and industrial tax payers in South Africa!

The Basic 12-L provision:

[The following section has been taken (with minor changes), from an article written by Gustav Radloff].

The absolute value is dependent on the quantum of energy saved. The tax payer can claim a deduction of 45c for each kWh (or kWh equivalent for energy sources other than electricity), of energy saved. No concurrent benefits, e.g. funding from multiple government sources, is allowed. The 12-L regulations provide for other exclusions, e.g. a person may not receive the allowance for renewable energy, co-generation (other than energy generated from waste-heat recovery), and a captive power plant with an output increase less than 35% of total input.

The tax rate for companies in South Africa (with a few exceptions), is currently pegged at 28%. Using the 45c/kWh allowance in an example:-

- Assume an equivalent diesel fuel saving of 1 000 000 kWh per year.
- Assume the average cost per kWh is R 1.21/kWh to the end-use customer.
Note:
The unit cost of 1 litre of diesel fuel containing 11 kWh[1] is then calculated to be R 1.214 per kWh, when considering a wholesale price of R 13.35 at SA reef level – 02 April 2014[2] (Note that prices may vary between fuel retailers). This example ignores the management and handling costs of diesel.
- The value of the saving would be 1 000 000 x R 1.21 = R 1 210 000 per year.
- All else being equal, this saving will positively impact on the bottom-line of the business and will increase profit for the year, by R 1 210 000.
Note:
A company may need to pay off the loan, including interest on the capital investment as well as the costs associated with M&V, using these savings. Therefore, the direct savings may not necessarily be accrued as pure profit. It also takes time to realise the full benefit of the capital investment, which would be for the life of the energy efficient technology implemented, e.g. 20 years. The benefit will also need to be off-set against the rising cost of energy and potentially a future carbon tax. However, the assumption for the purposes of this example is that no repayments on capital and interest are required and the rising cost of energy is ignored.
- The business will pay 28% tax on the additional profit: $0.28 \times R\ 1\ 210\ 000 = R\ 338\ 800$.
- By applying 12L, the business or tax-paying entity may get a deduction of 45c/kWh.
 $R0.45 \times 1\ 000\ 000\ kWh = R\ 450\ 000$.
- The Taxable income is then reduced, as follows: $R\ 1\ 210\ 000 - R\ 450\ 000 = R\ 760\ 000$.
- Tax now payable is only $0.28 \times R\ 760\ 000 = R\ 212\ 800$.
- The difference between R 338 800 and R 212 800, consequently yields a net benefit of R 126 000 (or 12.6c/kWh), after tax.

Therefore, a simplified way of looking at 12L is that it provides for an additional before-tax benefit of 17.5c/kWh and an after-tax benefit of 12.6c/kWh for each kWh saved over the project's lifetime against which the total projects cost (M&V included), needs to be deducted.

Other Considerations

The following are some of the benefits which should be considered as part of a 12-L project evaluation. It should be understood that these benefits have been available to companies, even before section 12L was promulgated, and may technically not be defined as additional benefits.

- **Deduction of Capital Expense from Taxable Income:**

A 'person' (as defined in the Act) may reduce their taxable income through their normal tax return process, by deducting the capital expense of the equipment required to achieve the energy efficiency savings. This includes (but is not limited to), the cost of all the relevant equipment provided, delivered, installed and commissioned. It would also cover the cost of any M&V equipment required. If the funds are borrowed, the interest paid would also be tax deductible.

Note:

These expenses may however be claimed for tax purposes, in relation to the following;

- *according to section 12C, new manufacturing assets can be recovered over 4 years, (40%, 20%, 20%, 20%); and*
- *that used manufacturing assets be recovered over 5 years, i.e. 20% x 5 years; and*
- *all other assets can be recovered over the life time of the asset – Section 11(e).*

- **Recovery of services/consulting costs:**

The normal tax return process allows for the expenses for services or consulting provided, to be deducted from the taxable income under section 11(a) of the Income Tax Act. These may include (and again, are not necessarily limited to), the fees charged by the M&V body, any consulting fees related to the energy efficiency equipment, the installation or commissioning thereof, which would include the fees charged by an energy services company, (ESCO).

- **Additional profits to the company:**

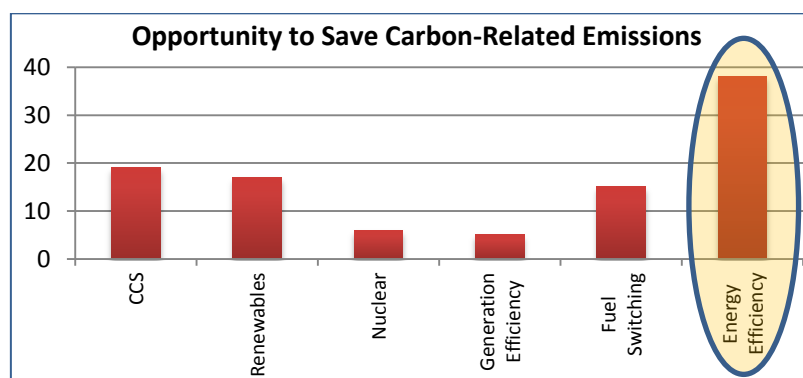
The facility or process in which the energy efficiency measure is installed will become more efficient and in the process increase its profits. These profits would be taxable income, which will be taxed at 28%. However, the balance not taken as tax will still be for the benefit of the company, as mentioned above. It may however be necessary to off-set these profits against repaying capital and interest.

- **Increasing cost of energy:**

Energy will definitely be more expensive in future. The cost of the energy source in the example above (diesel fuel), is largely unpredictable and has recorded new peaks lately. Therefore, although difficult to quantify, achieved energy savings will bring about substantially higher overall savings year-on-year, going forward.

- **Climate Change benefit:**

Energy efficiency projects offer the most potential to reduce greenhouse gas emissions. The following graph was issued by the International Energy Agency (IEA), and would probably also reflect the status for most individual energy users:



Source: IEA Report on Climate Change Impacts

National Treasury and DoE confirmed that the emissions saved through the implementation of the energy efficiency measures, will be owned by the company involved. The company would

therefore be allowed to sell these carbon credits into an overseas carbon market (carbon credits buyer), without it being viewed as a concurrent benefit. The market value of carbon emission reductions (CERs) and verified emissions reductions (VERs) have drastically reduced over the past few years and under the current EU ETS, only credits from least developed countries (LDCs) are considered post-2012, which may exclude South Africa. Most within this environment are however confident that the carbon market and price will increase as the economies of the developed world recover.

However, notwithstanding the current price and status of these credits, the value may be substantially higher, depending on the company involved, the need for sustainable reporting, reputational and other purposes.

It should be noted that not saving energy we will ultimately have a negative impact on companies, when the proposed Carbon Tax is implemented, (planned for 2016). Although the Carbon Tax is seen as the “stick”, the 12-L tax incentive should be viewed as an early “carrot”, when evaluating it from the perspective of implementing energy efficiency projects.

- **Less quantifiable benefits:**

Implementing energy efficiency also brings about many other benefits which may be deemed less quantifiable and therefore of less importance. However, these benefits usually do contribute positively and at least some of these, may be included:

- **Competitive advantage:**
A company may use the emissions offset or higher efficiency levels at which it operates, to market itself to a distinct group requiring compliance to environmental or ‘green’ standards, emission or energy use limits, etc.
- **Operating in niche markets:**
A company may find it easier to operate in niche markets which have a major focus on the environmental impacts of the companies they deal with. Niche markets usually provide opportunities for larger returns, due to a lower sensitivity to pricing levels.
- **Development towards ISO certification:**
A company should find it easier to get ISO 50001 (Energy Management) certified, when they participate in this field, which may in turn open additional export markets which could be highly profitable (especially with the current performance of the Rand).

What does this all mean in practice?

It would be best to consider all the benefits, when evaluating the possible use of the 12L tax incentive. As a practical example consider the following as a summary of this article:

Place a monetary value to all benefits and consider the overall result.

1. Each kWh (or equivalent) saved: say 1 000 000 kWh @ 12.6 c/kWh

<i>[portion allowed as tax deduction]</i>	R 126 000 (example above)
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2. After tax profit balance due to the energy efficiency project: **R 871 200** (example above)

Note:

- *This value would be the difference between the profit amount and the tax to be paid amount, due to the implementation of the energy efficiency project. The R 871 200 is calculated by subtracting the 28% tax from the additional profit (R 1 210 000 – R 338 800).*
- *The NPBIT (Net Profit Before Interest and Tax), will remain the same, although the NPAT (Net Profit After Tax), will increase as a result of reduced taxable income. NPBIT may however not reflect the entire additional profit as a result of possible capital costs, interest and increase in energy costs.*
- *This value will increase in future, due to the continual rising cost of energy, which is not considered in this example.*
- *No, or limited capital costs may be required for some projects, e.g. where energy savings are achieved due to behavioural changes.*

3. (Possible) Climate change benefit: **R 72 000**

Note:

- The value (R 120 000) has been derived from the carbon tax applicable if the above mentioned project was not implemented and with no emission savings generated and the amount being part of the 60% mentioned below – the emission savings would therefore not have happened and the carbon tax would have to be applied to such. In this example $1\,000\,000\text{ kWh} \times 1\text{ kg/kWh [3]} = 1\,000\,000\text{ kg carbon (or 1\,000 ton)}$. The possible carbon tax: $R120/\text{ton} \times 1\,000\text{ ton} = R120\,000$.
- A 40% discount would be allowed on the energy use with a Carbon Tax due on the balance (60%). Therefore $R120\,000 \times 0.60 = R\,72\,000$
- The Carbon Tax value will increase by 10% per annum but for this example, only one year has been considered.

Total Value for this example: R 126 000 + R 871 200 + R 72 000 = R 1 069 200

4. Then consider against the R 1 069 200:
- The additional benefits not quantified but mentioned above, and,
 - Subtracting all the related expenses from the total.

Note on expenses:

Although the project capital and operating expenses may have to be paid from loans with interest attached, this may be ignored to an extent as the interest, capital and operating expenses can also partially be deducted from tax.

Comparison to the Eskom SOP

Although the Eskom IDM Standard Offer Programme (SOP) has been put on hold, direct comparisons to this programme are often made, with the perception that the Eskom SOP is more beneficial. This therefore needs to be put into perspective as well. Depending on the technology involved, the Eskom payments varied between 42c/kWh, 55c/kWh or R 1.20/kWh, with the 42c/kWh being the usual incentive for most ordinary energy efficient technologies. It should be considered that, depending on the nature of the Eskom incentive, taxation would also apply, at 28%, together with all costs which can be deducted from taxable income. However, if the income of the incentive is of a capital nature (which could be the case, as it is post investment income received), the income may be tax exempt. The nature of the income would however need to be assessed on a case-by-case basis.

If this consideration is included, and it is found that the Eskom incentive is liable for paying tax, then the section 12L incentive may have the same or possibly even a slightly higher value than that available through the Eskom SOP Programme. This is due to the section 12L being 45c/kWh against the normal Eskom SOP being 42c/kWh, (albeit technology dependent).

The following can also be seen as impediments on the Eskom offer in comparison to the section 12L:

- The technologies used on the SOP model have to be approved by Eskom and were limited to a few technologies;
- The Eskom SOP only incentivises electricity savings whereas section 12L is applicable to all energy carriers;
- The Eskom SOP only rewards kWh's (electricity) saved between 06h00 and 22h00 on a weekday, whereas section 12L rewards all energy savings made in the assessment period irrespective of when the savings occurred.

Conclusion

Care should be taken not to evaluate the 45c/kWh allowance in isolation, without considering the overall tax implications. Neither should it be evaluated against the cost to be incurred, without due consideration of the multiple benefits related to implementing energy efficiency projects.

It is clear that the real additional value of the section 12L allowance is the additional tax deduction. Other benefits, including tax benefits already available, should however also be considered, when evaluating a project for possible implementation. However, it is important that the benefits are not evaluated independently of other measures, such as the overall value to the business, the future value of the project itself and the energy carrier involved. An additional important feature of the section 12L tax allowance is that the Regulation will be in force until 1 January 2020, reducing the uncertainty risk associated with many other energy efficiency programmes and incentives.

The section 12L allowance will probably be too low to motivate for implementing an energy efficiency project where funding is a challenge. It will however sway those projects which were borderline investments or provide for the proverbial “cherry on the cake” where projects were already decided on for implementation. National Treasury indicated, during the national workshops on section 12L, that increasing the allowance would be considered if a convincing case for such can be provided.

Notwithstanding the mentioned, the section 12L allowance, first of its kind in the world, could be deemed a ‘win-win-win’ for South Africa. Companies can become more efficient and profitable, thus government will be able to take more tax on profits, jobs will be created for suppliers of technologies, energy services companies (ESCOs), consultants, M&V bodies, tax consultants and supporting functions to all of these activities, e.g. training/development, installation, maintenance, information/data gathering, etc.

References:

- [1] Carbon Trust, Heat Content of Fuel, http://www.carbontrust.com/1564A3CD-A1A0-411B-9224-4CFB3CFA2F60/FinalDownload/DownloadId-436314548A148481B47D8C7D2DA9AEA4/1564A3CD-A1A0-411B-9224-4CFB3CFA2F60/media/18223/ct1153_conversion_factors.pdf
- [2] Automobile Association Fuel Pricing, <http://www.aa.co.za/on-the-road/calculator-tools/fuel-pricing.html>
- [3] Carbon equivalent for 1 kWh as per the IPCC default value

More information on the 12-L Regulations can be found on the SANEDI website: <http://www.sanedi.org.za>.

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Note that the views expressed in this article are that of the author and not necessarily that of the Southern African Energy Efficiency Association (SAEE), Eskom, SANEDI or Deloitte & Touche.

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