



LTA1
• 1992

LTA2
• 2000

LTA3
• 2008

LEE
• 2009



Covenants results brochure

Long-Term Agreements on energy efficiency

2014

About LEE and LTA3

In the long-term agreements on energy efficiency – LEE and LTA3 – the government and the business community together with other organisations have reached voluntary agreements on energy savings, although these agreements do come with obligations attached. The covenants are an initiative of the Ministry of Economic Affairs. The participants in LTA3 have expressed the ambition of achieving an efficiency improvement of 30% in the period 2005 through to 2020 (on average 1.5% per year). To date, an improvement of 21.2% has been achieved (on average 2.4% per year).

The LEE covenant (introduced in 2009) is intended for large industrial companies for which participation in the European Union Emissions Trading System (ETS) is compulsory: the LEE participants fall wholly or partially under the ETS.

LTA3 (introduced in 2008) is the successor to LTA1 (1992) and LTA2 (2000) and is intended for non-ETS enterprises and municipalities. The focus in LTA3 is on process efficiency, supply chain efficiency and renewable energy. LEE relates primarily to process efficiency and supply chain efficiency.

The long-term agreements are aligned with the national Energy Agreement for Sustainable Growth, signed in September 2013. In the Energy Agreement, the Cabinet, employers, trade unions, environmental organisations, energy companies, provinces and municipalities have reached binding agreements to safeguard Dutch energy supply for the future. Energy saving is an important spearhead of the agreement. The aim is to achieve an average saving of 1.5 percent per annum on final energy consumption, and a total saving of 100 PJ in 2020.

The long-term agreements LTA3 and LEE make an important contribution to the national objectives within the Energy Agreement. The covenants encourage the government and business community to continue the joint exploration of opportunities to increase energy efficiency and sustainability, in the Netherlands.

The success of the long-term agreements has not gone unnoticed. The large-scale voluntary collaboration between businesses, institutions and government is attracting plenty of international acknowledgement, and is being imitated elsewhere. There is European interest in the LTA approach, and learning points from the covenant have been included in the implementation process for 800 signed Chinese negotiated agreements or voluntary public-private sustainability agreements, which themselves include ambitious energy efficiency and environmental targets.

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Summary of the results ●●●●●

Energy covenants

Government, industry and other institutions together have signed agreements on improving energy efficiency which have been documented in two energy covenants. These covenants are the Long term agreement on Energy Efficiency ETS companies (LEE) for companies subject to the EU emissions trading system, and the Long Term Agreement on Energy Efficiency (LTA3) for all other companies.

These agreements offer a platform within which a large proportion of Dutch industry is currently participating: over 1,100 companies and institutions take part in the two covenants, of which 110 (divided into seven sectors) in the LEE covenant and almost 1,000 (divided over 33 sectors) in the LTA3 covenant. Put together, these companies consume some 830 PJ¹ of primary energy in a year. This makes up about 80% of the total industrial energy use in the Netherlands, and approximately one quarter of the total Dutch energy use.

Integrated approach

The covenants were established to bring about a significant improvement in energy efficiency. Companies focus in particular on those energy-saving measures that can be earned back within five years, in accordance with the Environmental Management Act. Every four years, the participants draw up and subsequently implement energy efficiency plans (EEPs). Each year, the companies will receive a progress statement if the planned measures within the EEP have been sufficiently implemented. In 2014, 1,057 of the covenant companies received such a progress statement; statements were withheld from 25 companies. Not all companies submitted a monitoring report, due to having recently joined the covenant or due to other special circumstances.

¹ This refers to energy use for energy purposes, in other words excluding the use of energy carriers such as a feedstock (for example natural gas for ammonia or mineral oil for petroleum). This so-called non-energetic use amounts to more than 400 PJ (approximately half of the overall industrial energy use. Source: Energietrends 2012). If this use were also included, the covenants would be accountable for more than 35% of Dutch energy use.

In addition, most sectors have drawn up roadmaps for longer-term development (2030). The purpose of these roadmaps is to arrive at a vision for the long term to make the sector more sustainable and more competitive by means of continuous improvement and innovation. The aim is not only to save on energy costs, but also to strengthen the (international) competitive position of the sectors and participating companies. Within the covenants, people are working towards implementing these roadmaps by means of including and executing specific measures within the four-year planning periods.

EEP implementation on track

2014 is year two of the four-year planning period for the EEPs (2013-2016). Figures 1 and 2 give an impression of the degree to which the plans have been achieved. The implementation of the EEPs is on schedule, in most sectors. Eight sectors within the LTA3 have already achieved their maximum planned saving; in other words, the saving that could be achieved on the basis of the planned measures, both fixed and conditional.

Two thirds of the maximum planned saving has already been achieved for the whole of the LTA3 covenant. Within the LEE covenant, too, the implementation of the EEPs is on average well on schedule: almost three quarters of the maximum planned saving has been achieved, while the minimum planned saving (the degree of saving based on the fixed planned measures) has been achieved in full.

Savings achieved in 2014

Within both covenants, the highest energy savings have been achieved within the companies themselves, as a consequence of taking measures to improve process efficiency. In 2014, these measures led to a total saving of 14.4 PJ (1.7%), of which 7.3 PJ (1.2%) within the LEE covenant and 7.1 PJ (2.8%) within LTA3. In addition, measures in the production chain have generated an additional saving of 3.9 PJ in the Netherlands alone.

Summary of the results ●●●●

Energy efficiency achieved per covenant

Table 1 shows the results achieved within the LEE for 2014. The process efficiency improvement achieved in 2014 amounts to 1.2%. Together with the improvement in the domestic production chain, the total efficiency improvement amounts to 1.5%. As compared to 2009, the start date of the covenant, the total efficiency improvement amounts to 7.8% or 1.6% on average per year.

Figure 1 shows the savings achieved for LEE per sector up to and including 2014, in comparison to the planned savings during the current EEP period (2013-2016). Relative to its own energy use, the metallurgical industry has achieved the greatest efficiency improvement: 9.6%. The metallurgical and chemical industry have almost achieved the maximum planned savings (2013-2016) already.

Figure 1 – Maximum planned saving for the period 2013-2016 versus the saving achieved up to and including 2014 per LEE sector (process efficiency + chain efficiency)

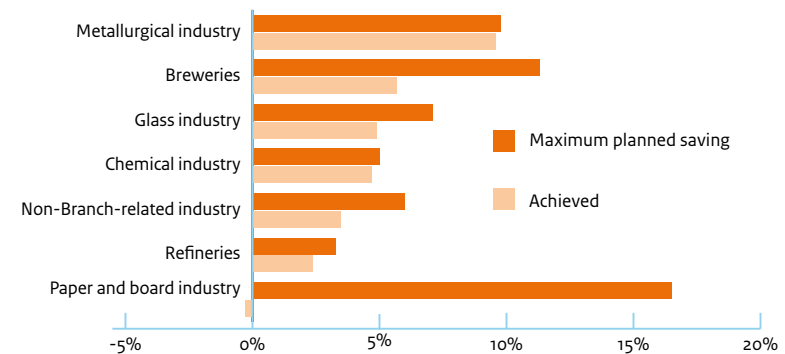


Table 1 – Results LEE in 2014

	Results in 2014 cf.				Average per year
	2013		2009		
	PJ	%	PJ	%	%
Process efficiency (*)	7.3	1.2	40.2	6.5	1.3
Production chain efficiency	1.6		8.2		
<i>domestic</i> (*)		1.2		7.4	0.2
<i>foreign</i>		0.3		0.7	
Product chain efficiency	4.9		12.2		
Total result of covenant	13.8		60.6		
Total result national (*)	8.6	1.5	47.7	7.8	1.6

(*) To determine the saving in the Netherlands, in accordance with the covenant agreements and in addition to the measures achieved through process efficiency, only the chain savings achieved in the production chain in the Netherlands are taken into account. Totals may deviate slightly due to rounding-off.

Summary of the results ●●●●

The negative result (-0.3%) in the paper and board industry is due to the fact that the calculation is compared with the reference year 2012. In 2012, this sector achieved a very high energy efficiency improvement in the chain. Partly as a result of lower sales of recycled products, the efficiency improvement achieved through recycling has decreased as well. Because the outcome is compared with 2012, the result is negative.

Table 2 shows the results achieved in 2014 for LTA3. The process efficiency improvement achieved in 2014 amounts to 2.8%, and the efficiency improvement in the domestic production chain 1.1%, bringing the total efficiency improvement to 3.9%. The participants in LTA3 have expressed the ambition of achieving a total efficiency improvement of 30% in the period 2005 to 2020. To date, an improvement of 21.2% has been achieved (on average 2.4% per year).

Figure 2 shows the savings per sector up to and including 2014 for LTA3, compared to the planned saving in the current EEP period. Eight sectors have already achieved the planned saving for this EEP period (2013-2016). The textile industry and the financial service providers have achieved the highest saving relative to their energy use, in this EEP period.

Table 2 – Results LTA3 in 2014

	Results in 2014 cf.				Average per year
	2013		2005		
	PJ	%	PJ	%	%
Process efficiency (*)	7.1	2.8	42.6	18.3	2.0
Production chain efficiency	2.8		8.2		
<i>domestic</i> (*)	2.7	1.1	7.1	2.9	0.3
<i>foreign</i>	0.1		1.1		
Product chain efficiency	0.1		4.3		
Generation of renewable energy	-0.1		1.8		
Purchase renewable energy	2.6		38.8		
Total result covenant	12.5		95.6		
Total result national (*)	9.8	3.9	49.7	21.2	2.4

(*) To determine the saving in the Netherlands, in accordance with the covenant agreements and in addition to the measures achieved through process efficiency, only the chain savings achieved in the production chain in the Netherlands are included. Totals may deviate slightly due to rounding-off.

Summary of the results

Savings – approx. 300,000 Dutch households

For the two covenants together, the measures relating to process efficiency and the improvements in the production chain in the Netherlands have resulted in savings of 18.3 PJ. This equates to the energy used by around 300,000 Dutch

households. In addition, savings are also achieved abroad within the covenants, while participants from the LTA3 covenant also contribute to the goals through the use of more renewable energy.



Figure 2 – Maximum planned saving for the period 2013-2016 versus the saving achieved up to and including 2014 per LTA3-sector (process efficiency+ chain efficiency+ renewable energy)

* On the basis of two participants

** The Dutch feeds industry signed up in 2013

Summary of the results ●●●●●

Long Term Agreements: long-term results

The covenants are planned to run through to 2020. It is therefore worthwhile assessing the results over a longer period. Figures 3 and 4 show the results of the covenant from the start to present day. These figures show that both covenants are achieving stable savings.

As compared to 2009, the starting year of the covenant, LEE achieved an energy efficiency improvement in 2014 of 7.8%, or 1.6% per year (see figure 3). The lion's share of this saving (6.5%) is due to process efficiency.

Between 2005 and 2020, the participants in LTA3 have expressed the ambition of achieving an overall efficiency improvement of 30%. To date, an improvement of 21.2% has been achieved (on average 2.4% per year). Here, too, the majority (18.3%) relates to process efficiency (on average 2.0% per year) as compared to a 20% target for internal energy efficiency (see figure 4). If chain efficiency in the production chain and chain efficiency achieved abroad as well as renewable energy are included, the total result amounts to 39.9%, of which roughly half consists of the purchase of renewable energy. In effect, this means that the 30% target for 2020 has already been achieved.

Figure 3 – Saving LEE 2009-2014 (process efficiency + production chain domestic)

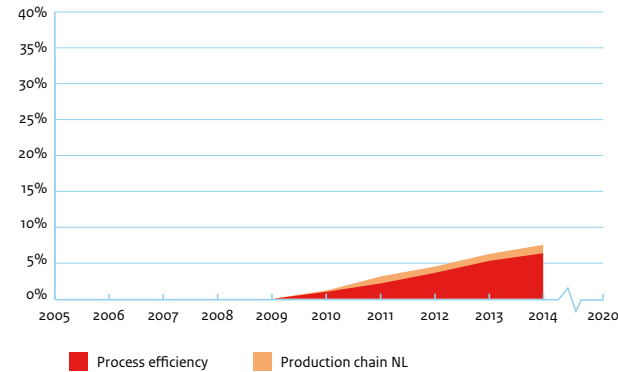
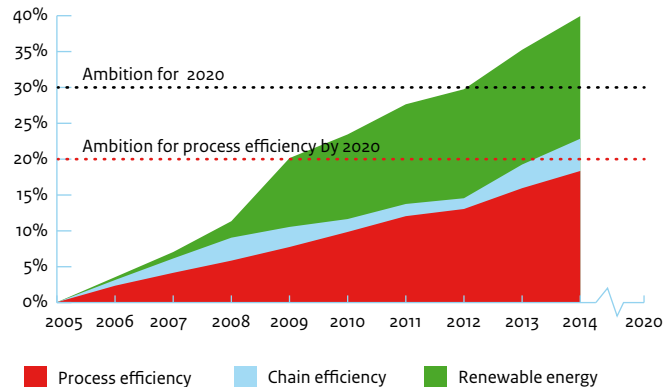


Figure 4 – Saving LTA3 2005-2014 (process efficiency + chain efficiency + renewable energy)



List of definitions from the LTA results for 2014●●

Chain efficiency (CE)

Energy saving achieved in the production chain or product chain.

Covenant on Benchmarking

A covenant signed by the Dutch government and the energy-intensive industry on 6 July 1999. The largest energy users were part of this covenant in the period 1999-2009. The aim was to reduce CO₂ emission by increasing the efficiency of energy consumption. Businesses that took part in the Benchmarking Covenant and for which participation in the European Union Emissions Trading System (ETS) is compulsory, have automatically transferred to the LEE.

Energy efficiency

The amount of energy used per unit of production. The (energy) efficiency improvements in the production process and in the production chain in the Netherlands together result in the energy efficiency improvement at covenant level.

Energy Efficiency Plan (EEP)

A tool supporting the internal planning process of businesses for implementing energy efficiency improvements. The plan lists the measures to be executed. It is a compulsory element in both the LTA₃ and MEE long-term energy efficiency agreements. Any company participating in a long-term agreement must have drawn up a draft EEP within nine months following the signing of or entering into the long-term agreement.

Fixed and conditional measures

Viable measures that are in principle fixed, except if technical, economic and/or organisational obstacles emerge in the execution of the measure. In that case, the measure is qualified as conditional, specifying the specific obstacle to implementation.

Long-Term Plan (LTP)

Sector organisations and product boards are required to draw up a long-term plan (LTP) as part of the long-term agreements on energy efficiency (LTA and LEE). The LTP encompasses the qualitative and quantitative targets for the implementation of systematic power supply, improvement in process efficiency, chain efficiency and renewable energy for the businesses affiliated with the sector organisation/product board. The EEPs of the affiliated members form the basis for the LTP that is updated every four years. In 2013, the various sectors launched a new LTP that covers the period through to 2016. See also rvo.nl.

Planned saving

The minimum planned saving is the expected saving on the basis of 'fixed' measures. The maximum planned saving is the expected saving from 'fixed' and 'conditional' measures together.

Renewable Energy

Energy generated from renewable sources such as solar and wind energy, water power and energy biomass. In LTA₃, the use of renewable energy is not presented as a means of saving energy or energy efficiency. As a consequence, it was disconnected from the production process and production chain.

List of definitions from the LTA results for 2014 ●●

Uncertain measures

An uncertain measure is a measure which first requires further investigation, before a go/no go decision can be taken; an indication is given of the steps that need to be taken in order to investigate feasibility. The effects of these measures in terms of energy saving and profitability are not yet known.

Colophon

This is a publication of:

Netherlands Enterprise Agency

Croeselaan 15

PO Box 8242 | 3503 RE Utrecht

T +31 (0) 88 042 42 42

E klantcontact@rvo.nl

www.rvo.nl/mja

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