

B-76

Green Deal: More sustainable practical use of EfW plant clinker

We, the undersigned:

- A. The State Secretary for Infrastructure and the Environment, J.J. Atsma, acting in his capacity as administrative body and as the representative of the State of the Netherlands, hereinafter referred to as 'the Government', and
- B. The following energy-from-waste plants (EfW plants)
- Afval Energie Bedrijf
 - ARN BV
 - Attero
 - E.ON Energy from Waste Delfzijl B.V.
 - Van Gansewinkel Groep
 - HVC
 - Omrin
 - SITA Nederland Holding B.V.
 - Twence B.V.

Duly represented by the Chair of the Dutch Waste Management Association, having its registered office at The Hague, and with address Hugo de Grootlaan 39, 5223 LB's-Hertogenbosch, P.H. Hofstra, hereinafter referred to as 'EfW plants';

The undersigned hereinafter referred to jointly as 'the Parties';

General considerations

1. For the purposes of this Green Deal the following terms are defined as follows:
 - EfW plant: a technical unit in the meaning of the Decree of 2 March 2004 implementing Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste (OJEC L 332) (Waste Incineration Decree), in which the heat generated is or is not recovered and that is designed solely or mainly for the incineration of waste by oxidation.
 - EfW plant clinker: the clinker remaining after incineration in a plant designed solely or mainly for the incineration of domestic waste and commercial waste in a grate incinerator or fluidised bed incinerator.
 - Sustainable practical use of EfW plant clinker: the situation in which the clinker released from incineration is treated and processed in such a way as to achieve optimum separation of the fractions present, namely iron, stainless steel, non-ferrous metals (such as aluminium, copper and zinc), unburned matter and minerals. These streams released are each separately processed to a high standard or used. The cycle can be made still more sustainable by maximising the removal of ferrous and non-ferrous metals from the mineral fraction and by reducing leaching of the mineral fraction in use, not only on first use but also at a subsequent stage in the lifecycle. Reduction shall in any event be achieved by the following means:
 - a. Recycling into a non-designed product that meets the standards laid down in the Soil Quality Decree for free use;
 - b. Use as aggregate in products;
 - c. Use in immobilisates;
 - d. New, as yet unforeseen, innovative ideas.

The Parties have agreed that this Green Deal is concerned primarily with the recycling of EfW plant clinker (a). This definition does not include the social dimension. Nor has this definition been checked for public support.

- Improving the quality of EfW plant clinker: maximum separation of metals (ferrous and non-ferrous), limiting leaching so that it can be used as non-designed building material, reducing the

non-mineral fractions with a view to using it as aggregate (in concrete, asphalt or other products) or producing an immobilisate that meets the standards for a designed product.

· ICM building material: a building material that because of the amount of emission may only be used with isolation, control and monitoring measures in accordance with the Decree of 22 November 2007 containing rules on the quality of the soil (Soil Quality Decree).

2. The purpose of the Parties in this Green Deal is to achieve a further and structural improvement in the quality of EfW plant clinker.
3. The present administration's intention is to make a Green Deal with society that makes society more sustainable in the short and longer term and that is rewarding to the government and society. The purpose of the Green Deal is to show that green and growth can go hand in hand.
4. The Parties see a public-private partnership as the best way of expediting the process of making our economy more sustainable and also benefiting from this economically. This unique joint approach has been highly successful in the Netherlands in other areas, and the Green Deal will build upon it. Creativity, entrepreneurship and innovation are essential to make this sustainability process possible.
5. The Green Deal involves specific sustainable initiatives to remove barriers, develop, fund and apply innovations and take advantage of sustainable opportunities. In practice society encounters obstacles that stand in the way of initiatives leading to greater sustainability.
6. The Parties wish to reach agreements in the Green Deal that remove these obstacles, so as to make way for initiatives that would otherwise have difficulty getting off the ground. These initiatives can then set an example for other parties and thus encourage the market as a whole to take action.
7. The initiators' projects surveyed for the Green Deal are potentially successful as a result of the removal of the obstacles described, could produce results in the short term and could result in new economic activities or cost savings in the short or longer term for industry. The results of the Green Deal could then be applied to similar projects, thus increasing the scope of the Green Deal without requiring specific support from the Government.
8. The transition to a low-carbon economy by 2050 requires a sustainable energy economy and a sustainable raw materials production. This transition must be rewarding for the Dutch economy.
9. This requires a modern energy and sustainability policy with the emphasis on a business-like, realistic approach. This will involve citizens, companies and organised interests working jointly with government bodies with the aim of getting as many initiatives and projects as possible off the ground.
10. The Government wishes to support the launching of these initiatives and projects by, where necessary and possible, bringing parties together, supplying information, abolishing unnecessary rules or clearing up anything that is unclear in the licensing process.
11. The Parties envisage market factors for economic growth in the sectors of the construction industry in the Netherlands. The value of each construction project can be increased by improving projects and products from the point of view of sustainability. There is also room for growth in innovative product concepts.
12. The Parties envisage fresh export opportunities. With their unique knowledge and early adoption of more sustainable EfW plant clinker the EfW plants will be able to extend their activities to other countries.
13. The Parties wish to achieve an effect in terms of all the sustainability aspects (planet, people and profit) throughout the cycle (from raw materials through product use to recycling). The emphasis is on reducing CO₂ and bringing it into a closed cycle, as this will have a transnational effect. Limiting emissions/leaching from EfW plant clinker and the products produced is also an absolute prerequisite.
14. The mining and quarrying of minerals such as clay, aggregates and other minerals causes damage to the landscape and loss of biodiversity. Recycling EfW plant clinker reduces this damage. Recycling EfW plant clinker can also contribute towards meeting the Government's target of a materials roundabout.
15. The Environmental Management Act as revised in 2010 lays down better waste prevention, more efficient handling of scarce raw materials and recycling of materials.
16. The Parties recognise and acknowledge that EfW plants are a link in the entire chain of dealing with combustible residual waste in the Netherlands. This obviously entails costs. The choice of how to deal with this residual waste is thus a resultant of the state of the art and the direct and indirect (long-term) costs. The EfW plants acknowledge that their social responsibility goes beyond delivery at the gate. Their social responsibility and in particular the long-term aspect will therefore be key

factors in the choices made by the EfW plants. Where appropriate they shall base these also on the broader public debate on possible solutions.

17. The Parties acknowledge that the construction industry has a public, semi-public and private market sector. The Parties acknowledge that the most dominant market operator in the public/semi-public market sector in the current situation is the Ministry of Infrastructure and the Environment/Rijkswaterstaat. Public-private coordination is needed to see how EfW plant clinker can continue to be used in public works.

Further considerations

18. The EfW plants wish to invest in the sustainable practical use of EfW plant clinker throughout the cycle (People, Planet and Profit) and expressly wish to collaborate on sustainability initiatives in the cycle and communication on the subject.
19. EfW plants have already undertaken many initiatives to improve the quality of EfW plant clinker in the past and have thus achieved many results in the past (set out in the Appendix *Expertvisie: Technische haalbaarheid kwaliteitsverbetering AEC-bodemmas* [Expert vision: technical feasibility of improving the quality of EfW plant clinker], November 2011, KEMA).
20. The Government's policy is in the proposed revision of the Soil Quality Decree in 2018 to agree further rules on the abolition of the ICM building materials category by 2020, unless research shows that this is not technologically feasible or only at unacceptable social costs.
21. Research shows that the current emission standards for antimony and sulphate in the Soil Quality Decree are incompatible with the practical conditions regarding the leaching behaviour of EfW plant clinker in constructions and that these emission standards present an obstacle to the proposed recycling of EfW plant clinker into a non-designed product that meets the standards laid down in the Soil Quality Decree for free use (Tauw, *Duurzaamheid toepassing AVI-bodemmas* [Sustainable use of EfW plant clinker], 1 April 2011).
22. In the case of a few processes improving the quality of EfW plant clinker results in a residue stream that cannot currently be recycled and therefore has to be dumped. The EfW plants are directing their efforts at minimising the percentage of residues that need to be dumped and maximising the percentage of recycled materials.
23. One of the key points in improving the quality of EfW plant clinker is the next stage in the lifecycle and whether the product can be handled in the normal recycling chain. The EfW plants shall weigh up the various quality improvement options using the methodology set out in the report *Integraal Ketenbeheer, beleid zonder spijt* [Integrated cycle management, policy without regrets] of the Centre for Transport and Infrastructure (CROW).
24. The Parties have identified a few risks in the current practice of using EfW plant clinker in works, relating to both execution and municipal authorities' limited knowledge of uses of this kind, which can result in undesirable situations. In this connection it has been noted that better quality assurance is needed throughout the cycle, from design to monitoring, in order to control risks better.

The Green Deal between the Parties comprises the following agreements:

25. The EfW plants undertake to improve the quality of the product to be used in such a way that by 1 January 2017 at the latest at least 50 percent of EfW plant clinker is given practical use outside the current ICM uses, and further set themselves the target of no longer using EfW plant clinker as an ICM building material by 2020.
26. The EfW plants also undertake to increase the percentage of non-ferrous metals separated from EfW plant clinker to at least 75 percent of the >6mm fraction by 1 January 2017 at the latest. At present only a limited number of technologies are available to recover non-ferrous metal from the <6mm fraction. The EfW plants shall investigate what methods are available for this fine fraction and then formulate a target in consultation with the Government before the end of this Green Deal.
27. The Government shall endeavour to achieve an efficient system of exemptions from dumping bans for residues released in quality improvement processes for EfW plant clinker, avoiding regional differences as far as possible.
28. The Government shall ask the National Institute for Public Health and the Environment (RIVM) and Energy research Centre of the Netherlands (ECN) to examine as a matter of priority whether it is possible to change the standards framework or review framework for antimony and sulphate and shall endeavour to implement any change to this standards framework or review framework as soon

as possible, provided this does not increase the pressure on the environment, the change commands broad public support and it does not cause market shifts.

29. The EfW plants and the Government shall jointly consider how the quality of ICM projects can be further improved. They shall in any event look into the possibilities of external verification (of design, execution and monitoring), fleshing out extended producer responsibility, and the funding of monitoring and maintenance in particular. To this end the EfW plants, in collaboration with Rijkswaterstaat, shall draw up a plan of action clearly setting out the targets, milestones and parties involved. The plan of action shall be completed by 1 July 2012 at the latest. As soon as possible thereafter, by 1 July 2013 at the latest, there shall be an operational system of quality assurance and control that meets the targets agreed in the plan of action. Rijkswaterstaat shall continue its current practice until 1 July 2013.
30. The EfW plants and the Government shall examine jointly how municipal authorities can be supported in the use of ICM works, thus further fleshing out extended producer responsibility. Work is already in progress in collaboration with the Stichting Infrastructuur Kwaliteitsborging Bodembeheer (SIKB, Soil Quality Infrastructure Foundation) on inspection guidelines to assure the quality of execution.
31. The residue stream to be dumped from quality improvement processes for EfW plant clinker shall be a maximum of 15 percent of the input to the recycling plant, measured as dry matter, and shall thus not form part of the 50 percent that will be used by the EfW plants outside the ICM category in accordance with Article 25 by 1 January 2017 at the latest.
32. The quantity of treated EfW plant clinker produced by the EfW plants in the Netherlands in 2016 shall be taken as the reference quantity for the target in Article 25. If approx. 1.3 million tonnes of clinker is produced in 2016, as in 2011, at least 650,000 tonnes will thus be given practical use outside the current ICM use. Exports shall only count towards the target if the clinker could have been used in the Netherlands as a freely usable product or aggregate but is instead used in the country of destination. Imports shall be disregarded.
33. With regard to the target in Article 26, it should be noted that specific research is currently taking place into the technological possibilities of recovering aluminium from clinker in the Recovery of Aluminium from EfW Plant Clinker project. The results of this project shall be taken into account when setting a target for the recovery of non-ferrous metal from the <6mm fraction. If the results so warrant it shall furthermore be considered whether a higher target is possible for the >6mm fraction. The Parties shall assess the new technologies and reach agreements on implementation.
34. With regard to the system of exemptions from dumping bans as referred to in Article 27, it should be noted that residues released from the recycling of EfW plant clinker are in principle covered by the dumping ban. The amendment to the Dumping Sites and Waste Dumping Bans Decree (Bssa) that is in preparation gives the Minister of Infrastructure and the Environment the option of stipulating for the whole of the Netherlands that EfW plant clinker may be dumped in derogation from the dumping ban. The State Secretary for Infrastructure and the Environment shall take advantage of this option.

Coordination and monitoring

35. Coordination between the Parties shall take place as far as possible in the context of regular contacts between the Dutch Waste Management Association and the Ministry of Infrastructure and the Environment. Coordination shall in any event take place at the annual meeting on the National Waste Management Plan (LAP) 2009-2021. Any officials of the Ministry of Infrastructure and the Environment present are mandated to speak on behalf of all the departments concerned.
36. If this is deemed necessary or desirable, a temporary Platform may be set up on an ad hoc basis at the instigation of either Party to supplement the regular contacts.
37. The purpose of coordination is to monitor the progress of this Green Deal. The Parties shall in consultation check this against the targets set out in Articles 25 and 26. The Parties shall further be jointly responsible for communication on the subject to stakeholders.
38. The EfW plants undertake to make information on their own progress, in relation to both the research targets and to any investment decisions, available in good time so that stakeholders always have up-to-date information on the feasibility of the target.
39. The Parties may launch initiatives, for example to encourage innovative ways of contributing to meeting the targets as set out in Articles 25 and 26. The EfW plants shall also report on the progress that has been made under this Green Deal in their annual reports.
40. The Government shall draw the EfW plants' attention to potentially interesting subsidies available in the Netherlands and Europe.

41. The Government shall examine whether innovative sustainable tendering could help to meet these Green Deal targets. Experience (public information) from this shall be incorporated in this Green Deal.
42. The Parties shall encourage collaboration between all companies that could contribute towards meeting the targets in this Green Deal, including collaborating in the area of technologies, the development of technical requirements for use in suitable products, quality assurance, etc.

Final provisions

43. This Green Deal shall enter into force on the day following that of signing and shall remain in force until 1 January 2017. All the agreements set out in this Green Deal shall be taken in hand as soon as possible.
44. The Parties hereby agree that these Green Deal agreements shall not be enforceable at law.
45. This Green Deal shall be published in the Government Gazette so that other parties can take cognisance of it, in order to encourage them to follow the example of this Green Deal.
46. The Parties shall inform their opposite number immediately if circumstances emerge in practice that could stand in the way of implementing this Green Deal. In that case the Parties shall consult on the further details of the Green Deal initiative.
47. The Parties shall review the implementation and effects of this Green Deal by 1 December 2014 at the latest. The Parties shall jointly set the review criteria by 1 September 2014 at the latest.
48. Either Party may make a written request to the other Party to amend or add to this Green Deal while it is in force. The amendment or addition shall require the written approval of both Parties. Copies of the amendment and the statements of consent shall be appended to the Green Deal. Any amendment or addition, or the substance thereof, shall be published in the Government Gazette.
49. If in addition unforeseen circumstances occur that have substantial consequences for the implementation of this Green Deal, the Parties shall consult on whether it is necessary to amend this Green Deal. If these consultations have not resulted in agreement within six months, either Party may terminate this Green Deal by giving three month's notice in writing.
50. If one or more provisions of this Green Deal prove to be non-binding, the Parties shall enter into consultation in order to amend this Green Deal in such a way that it no longer contains any non-binding provisions and that the aim of this Green Deal is achieved as far as possible.