

M2022:0194 Ragn-Sells Remissyttrande för Reviderat direktiv om rening av avloppsvatten från tätbebyggelse –förslag från europeiska kommissionen

Ragn-Sells är ett av Sveriges främsta kompetensföretag inom återvinning och miljö. Vi är en del av Ragn-Sellskoncernen och finns även i Norge, Danmark och Estland. Vi erbjuder nyskapande och effektiva lösningar för att minimera, ta hand om och omvandla avfall till resurser.

Ragn-Sells har fått möjlighet att lämna synpunkter på EU-kommissionens reviderade direktiv om rening av avloppsvatten från tätbebyggelse. Ragn-Sells tycker att revideringen i stort sett är bra och innehåller många relevanta och viktiga förslag men att kommissionen försitter chansen att justera lagstiftningen att bli mer cirkulär och hållbar för en framtid omställning där dagens avloppsreningsverk kan bli framtidens resursverk.

Idag används allt för lite av den potential gällande de enorma resurser som omvandas och passerar ett avloppsreningsverk. Dessa resurser kan återanvändas och återvinnas på en lång rad olika sätt i en cirkulär ekonomi. Den övergripande målbilden behöver därför vara att konvertera dagens reningsverk till resursverk, och därigenom bidra till ett hållbart och cirkulärt samhälle. Det finns en rad fördelar med att exempelvis återcirkulera renat avloppsvatten, att återvinna fosfor och kväve i högre utsträckning samt att ta hand om energin i form av biogas eller värmen i avloppsvattnet. Med detta synsätt kan reningsverken utgöra framtidens produktionsanläggningar av hållbara nyttigheter. Ett sådant systemskifte kräver dock ändrade synsätt avseende reningsverkens framtidens uppdrag, roll och reglering. Ragn-Sells lämnar därför enligt nedan ett antal sammanfattande synpunkter som på systemnivå syftar till att påskynda omställningen där dagens reningsverk kan bli framtidens resursverk.

Ragn-Sells stödjer den övergripande ambitionen att införa skärpta utsläppskrav och att öka återvinningen av näringssämnen. Vi ser dock behovet av en mer ambitiös lagstiftningsändring för att frigöra den fulla potentialen för resursåterföring från avloppsreningsverk.

Kommissionens förslag till revidering av avloppsdirektivet är ett viktigt steg i rätt riktning, men tyvärr inte tillräcklig. Avloppsvatten och avloppsslam innehåller värdefulla råvaror såsom fosfor och kväve som är viktiga för bland annat livsmedelsproduktion. För att EU ska bli mer självförsörjande och för att kunna ha en stabil produktion av gödselmedel och foder behövs höga återföringskrav på näringssämnen. Det är därför av högsta vikt att dagens avloppsreningsverk betraktas som framtidens resursanläggningar.

Att återvinna näringssämnen från avloppsvatten kommer också att minska koldioxidavtrycket eftersom den nuvarande linjära gruvproduktionen av näringssämnen och gödselmedel är starkt beroende av användningen av fossila bränslen.

Avfallshierarkin – ett effektivt hinder för en cirkulär omställning

Det finns lagstiftningshinder som måste hanteras innan avloppsreningsverk kan betraktas som resursverk. Ett sådant hinder är den så kallade avfallshierarkin, som har styrt avfallshanteringen i medlemsländerna under de senaste 50 åren. Avfallshierarkin tillkom som en end-of-pipe-lösning i den linjära ekonomin med huvudsyfte att minska mängden avfall. Avfallshierarkin föreskriver att samhället i första hand ska undvika att avfall uppstår. Därefter ska vi återbruka sådant som tjänat ut, därefter i fallande prioriteringsordning materialåtervinna, energiåtervinna och i sista hand deponera avfall. Avfallshierarkin kan ses som ett försök att motverka negativa konsekvenser i den linjära ekonomin men utgår idag från en föråldrad syn på avfall.

Enligt FN står människans brytning och omvandling av råvaror för hälften av klimatutsläppen, 90 procent av hotet mot biologisk mångfald och 90 procent av hotet mot tillgång till vatten. Att gå över till en cirkulär ekonomi är avgörande för världens möjligheter att motverka klimatförändringar, utarmning av jordens resurser och risken att vi överträder de planetära gränserna. Dagens syn på hur avfalls ska hanteras enligt avfallshierarkin står dock i vägen för en sådan övergång. Ragn-Sells anser att avfallshierarkin har spelat ut sin roll i övergången till en cirkulär ekonomi.

Ett cirkulärt samhälle förutsätter en helt ny syn på avfall, som innebär att avfall behandlas som en källa till hållbara råvaror. Att generellt minska mängden avfall i samhället leder inte mot en cirkulär ekonomi. Det viktigaste är istället att långsiktigt minska det ohållbara uttaget av allt mer utspädda naturresurser. Ragn-Sells anser att avfallshierarkin, som styr i stort sett all lagstiftning och reglering kring avfall, inte adresserar rätt problem och därmed motverkar exempelvis de storskaliga cirkulära flöden som kan tas tillvara i ett avloppsreningsverk.

Avfallshierarkin måste därför överges och ersättas med en grundläggande strategi för hållbar råvaruförsörjning som utgör utgångspunkten för lagstiftning och reglering där all produktion av råvaror måste ges samma förutsättningar, oavsett om ursprunget är avfall eller jungfrulig framställning.

Felaktig prissättning och principen om att förorenaren betalar

Det finns vidare många anledningar till att återvunna material har svårt att konkurrera med jungfruliga, vilket leder till att önskade kretslopp inte uppstår. Men den mekanism som rent praktiskt verkar i de jungfruliga materialens favor är densamma: Den felaktiga prissättningen på råvaror och emissioner.

Jungfruliga råvaror bär inte fullt ut de kostnader de ger upphov till genom sin utvinning och vidare hantering. Det kostar helt enkelt inte råvaruproducenter någonting att fortsätta skaffa fram nya material, trots att verksamheten står för hälften av världens klimatutsläpp.

Marknader och industri har vant sig vid den prissättningen och optimerat alla processer för att vara lönsamma under rådande förhållanden. Detta utgör ett oerhört effektivt hinder mot övergången till en cirkulär ekonomi. Att en produkts faktiska pris inte reflekteras i marknadspriiset innebär ju att tillverkare tjänar på att medverka till den skadliga men ökande brytningen av jungfruliga råvaror, i stället för till cirkularitet. Därför är det också mycket svårt att åstadkomma en förändring utan att införa kraftfulla korrigerande mekanismer.

Ett uppenbart exempel är användningen av PFAS, en stor grupp syntetiska ämnen med en lång rad användningar i samhället. Allt mer forskning tyder på att PFAS-ämnen är skadliga för vår hälsa, samtidigt som de bryts ned oerhört långsamt och anrikas i miljön. Ämnena bör alltså absolut inte cirkuleras vidare, vilket leder till att potentiellt värdefulla material inte kan återvinnas. Ett gram av ett vanligt PFAS-ämne kostar i dag runt en krona, medan kostnaden för att rena PFAS-förorenat vatten kan vara flera tusen gånger högre.

Det är därför bra att kommissionen lyfter behovet av principen som kallas förurenaren betalar (polluter pays principle eller PPP), Ragn-Sells tillstyrker att detta ges fullt genomslag och utvecklar resonemanget vidare i Bilaga 1, artikel 10. *Minimum requirements for producer responsibility organisations.*

Från reningsverk till resursverk

Enorma möjligheter kan skapas genom att betrakta avloppsreningsverk som resursverk. Fosfor, listat av EU som en kritisk råvara (CRM), kan återvinnas från slam och föras tillbaka till kretsloppet och säkerställa tillgången. Idag är EU till stor del (92 procent) beroende av import då de flesta gruvor ligger utanför Europa inkl. Ryssland. Den begränsade tillgången på knappa resurser, det stora ekologiska fotavtrycket från gruvdrift, geopolitisk instabilitet i omvärlden, långa transporter och hälsoproblem från kadmiumkontamination skapar ett behov av säker återvinning av fosfor.

Även kväve kan fångas upp från avloppsvattenströmmar och användas för att producera gödsel och ersätta dagens växthusgastunga produktion, som är beroende av naturgasförsörjning.

Omröstningen från avloppsreningsverk till resursverk krävs dessutom för att EU ska kunna uppfylla mål i flertalet handlingsplaner och beslut såsom handlingsplanen för cirkulär ekonomi, den gröna given/Green Deal-paketet, de gemensamma jordbrukspolitiska strategierna, regleringen kring kritiska råvaror, den integrerade handlingsplanen för näringsämnehantering och EU:s övergripande livsmedelssäkerhet.

Mot denna bakgrund vill Ragn-Sells understryka att följande övergripande aspekter saknas i kommissionens förslag:

- Ett minimikrav för återvinning av näringsämnen**

Som kommissionen nämner i sin färdplan för översynen av avloppsdirektivet måste direktivet vara bättre anpassat till EU:s ökade cirkulära ekonomiambitioner. För att uppnå det behöver krav införas på att avloppsreningsverken ska återvinna en viss andel av de näringsämnen som finns i avloppsvatten och slam. Kommissionen vill fastställa lägsta återförings- och återvinningsnivåer för fosfor och kväve från slam med hjälp av delegerade akter längre fram. **Ragn-Sells föreslår därför ett minimikrav på återvinning av näringsämnen för reningsverk från avloppsvatten och slam i EU. Dessa föreslås till 60 % för återvinning av fosfor och 15 % för återvinning av kväve, baserat på inkommande mängder.**

- Uppräcka krav på sträng avgiftning**

Starka skyddsåtgärder måste införas för att säkerställa att näringsämnen som återvinnas från avloppsvatten och slam bidrar till en giftfri miljö. **Det reviderade avloppsdirektivet bör därför innehålla ett krav på att farliga föroreningar ska tas bort i återföringsprocessen och inte bara utsämpas.** Detta kan uppnås genom införandet av högkvalitativa och vetenskapligt baserade gränsvärden samt funktionskrav för alla återvunna material och slutanvändningsapplikationer. Det skulle skapa en jämnare balans för användning av återvunna näringsämnen i ett brett utbud

av produkter (t.ex. gödningsmedel) och marknader. Tydliga principer för återvinning av näringssämnen som uppfyller ovanstående kriterier skulle kunna leda till en bättre anpassning till EU:s cirkulära ambitioner och mål.

- **Möjliggöra utbyggnad och utveckling av reningsverk för avloppsvatten**

Som ett resultat av EU-domstolens så kallade "Weser-dom" kan initiativ för att förbättra, utveckla och bygga ut avloppsreningsverk i dag stoppas, även om nettoeffekten för klimatet och miljön i stort blir bättre. Domen har trots alla goda avsikter skapat ett prejudikat som kraftigt begränsar möjligheterna att omvandla avloppsreningsverk till resursverk. Som sådan utgör domen ett stort hinder för utbyggnaden av innovativ teknik som skulle öka den övergripande hållbarheten och gynna samhället. Dessa lagstiftningshinder som förbjuder utbyggnad och utveckling av avloppsreningsverk måste skyndsamt ses över och tas bort. **Vi anser att det behövs en bättre ram för att bedöma miljöpåverkan av återvinning av näringssämnen på EU-nivå.**

BILAGA 1:

Ragn-Sells lämnar enligt nedan förslag till omformuleringar till ett reviderat direktiv om rening av avloppsvatten från tätbebyggelse – förslag från europeiska kommissionen.

Article 1 Subject matter

The European Commission	Ragn-Sells
This Directive lays down rules on the collection, treatment, and discharge of wastewater to protect the environment and human health while progressively eliminating greenhouse gas emissions and improving the energy balance of urban wastewater collection and treatment activities. It also lays down rules on access to sanitation, on transparency of the urban wastewater sector and on the regular surveillance of public health relevant parameters in urban wastewaters.	This Directive lays down rules on the collection, treatment, and discharge of wastewater to protect the environment and human health while progressively eliminating greenhouse gas emissions and improving the energy balance of urban wastewater collection and treatment activities. It also lays down rules on access to sanitation, on transparency of the urban wastewater sector and on the regular surveillance of public health relevant parameters in urban wastewaters. <i>It also introduces requirements for wastewater plants to transition to resource hubs, providing reclaimed water, energy, nutrients, and organic materials.</i>

Ragn-Sells supports the overall ambition to introduce stricter emission requirements and to increase the recovery of essential nutrients. We do, however, see the need for a more ambitious holistic legislative change to unlock the full potential of resource recovery from wastewater treatment plants. As stated by the European Environment Agency in its [report](#) on urban wastewater treatment plants, these facilities could, with the use of new techniques and innovation,” act as resource hubs providing reclaimed water, energy, nutrients and organic materials for reuse, recycling and recovering”. In line with the EEA’s recommendations, the Directive should introduce requirements for the member states to facilitate the transition of wastewater treatment plants to resource hubs.

Article 2. Definitions

The European Commission	Ragn-Sells
(14) 'sludge' means any solid, semisolid, or liquid waste resulting from the treatment of urban wastewater;	NEW (inserted between current article 6 and 7) 'reject water' means water originating from the dewatering of digested sludge; (14) 'sludge' means any solid, semisolid, or liquid waste resulting from the treatment of urban wastewater, <i>like reject water</i> ;

Ragn-Sells consider it important to include reject water in the list of definitions, as it constitutes an important source of nitrogen. We also strongly agree with the Commission's definition of 'sludge' in article 2.14. We do however find it important to specify reject water in the paragraph.

Article 10. Minimum requirements for producer responsibility organisations

The European Commission	Ragn-Sells
1. Member States shall take the necessary measures to ensure that any producer responsibility organisation established under Article 9(4): (a) has a clearly defined geographical coverage coherent with the requirements set out in Article 8; (b) has the necessary financial and organisational means to meet the extended producer responsibility obligations of the producers; (c) makes publicly available information about: (i) its ownership and membership; (ii) the financial contributions paid by producers; (iii) the activities that it undertakes every year, including clear information on how its financial means are used. 2. Member States shall establish an adequate monitoring and enforcement framework to ensure that producer responsibility organisations fulfill their obligations, that the financial means of producer responsibility	

<p>organisations are properly used and that all actors having extended producer responsibility report reliable data to the competent authorities and, when requested, to the producer responsibility organisations.</p> <p>3. Where, in the territory of a Member State, there are multiple producer responsibility organisations, the Member State concerned shall appoint at least one body independent of private interests or entrust a public authority to oversee the implementation.</p> <p>4. Member State shall ensure that the producers established on the territory of another Member State and placing products on its market: (a) appoint a legal or natural person established on its territory as an authorised representative for the purposes of fulfilling the extended producer responsibility obligations on its territory; or (b) take equivalent measures to point (a).</p> <p>5. Member States shall ensure a regular dialogue between relevant stakeholders involved in the implementation of extended producer responsibility, including producers and distributors, producer responsibility organisations, private or public operators of urban wastewater treatment plants local authorities and civil society organisations.</p>	
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Ragn-Sells strongly supports the Commission's ambition to enhance the obligations of polluters to pay for what they emit. Today, instead of the costs being borne by a producer who uses a dangerous substance, the substances follow along the value chain and, if lucky, they end up in a waste management system with a responsible recycler. Most of the substances, however, end up in the environment, forcing the general public to pay for the greatly increased waste management or clean-up when the levels of unwanted substances locally become high. When recycling companies are forced to deal with polluted waste streams, the recycled material also becomes more expensive, which again leads to the industry choosing virgin materials and the transition to a circular society is stopped.

The waste management infrastructure is sometimes connected to the urban wastewater infrastructure (through the sewer systems, i.e waste management plants send their wastewater to the sewer systems). The case of PFAS is, therefore, very relevant to the waste management sector. PFAS is present in the current waste flow and will most likely be present for decades to come. The cost of removing one gram of PFAS is many times higher than the cost of adding

PFAS into a product. Today's waste management system is not designed to handle PFAS, nor do the current market prices for waste management services reflect the costs for extra PFAS cleaning. The presence of PFAS in products would, however, likely be reduced if producers who add PFAS to their products would be forced to bear the full cleaning costs. Such a liability mechanism would also increase the speed of detoxifying the ecosystems from PFAS.

The UWWD will lead to stricter effluent standards for anyone connected to the sewer system. The commission should consider expanding the producer responsibility system to cover the upstream cleaning before it becomes the wastewater treatment plants' problem. By expanding the producer responsibility, we can thus create cost-efficient cleaning of pollutants, such as PFAS, and address point sources in a cost-efficient way. There is a risk that grey zone actors will become more competitive, and society get the PFAS emissions into the waters anyway if stricter effluent limits on PFAS should be covered by waste management companies alone. Introducing a mechanism whereby actors using PFAS in their products bear some of the treatment costs would increase the speed of detoxifying our ecosystems, which would benefit more actors than just the treatment plants.

Article 11- Energy neutrality of urban wastewater treatment plants

The European Commission	Ragn-Sells
<p>1. Member States shall ensure that energy audits of urban wastewater treatment plants and collecting systems are carried out every four years. Those audits shall be carried out in accordance with Article 8 of Directive 2012/27/EU and include an identification of the potential for cost-effective use or production of renewable energy, with a particular focus to identify and utilise the potential for biogas production, while reducing methane emissions. The first audits shall be carried out:</p> <p>(a) by 31 December 2025 for urban wastewater treatment plants treating a load of 100 000 p.e. and above and the collecting systems connected to them;</p> <p>(b) by 31 December 2030 for urban wastewater treatment plants treating a load of between 10 000 p.e. and 100 000 p.e. and the collecting systems connected to them.</p> <p>2. Member States shall ensure that the total annual energy from renewable sources, as defined in Article 2(1) of Directive (EU) 2018/2001, produced at national level by urban wastewater treatment plants treating a load of 10 000 p.e. and above is equivalent to at least:</p>	<p>1. Member States shall ensure that energy audits of urban wastewater treatment plants and collecting systems are carried out every four years. Those audits shall be carried out in accordance with Article 8 of Directive 2012/27/EU and include an identification of the potential for cost-effective use or production of renewable energy, with a particular focus to identify and utilise the potential for biogas production, while reducing methane emissions. The first audits shall be carried out:</p> <p>(a) by 31 December 2025 for urban wastewater treatment plants treating a load of 100 000 p.e. and above and the collecting systems connected to them;</p> <p>(b) by 31 December 2030 for urban wastewater treatment plants treating a load of between 10 000 p.e. and 100 000 p.e. and the collecting systems connected to them.</p> <p>2. Member States shall ensure that the total annual energy from renewable sources, as defined in Article 2(1) of Directive (EU) 2018/2001, produced at national level by urban wastewater treatment plants treating a load of 10 000 p.e. and above is equivalent to at least:</p>

<p>Directive (EU) 2018/2001, produced at national level by urban wastewater treatment plants treating a load of 10 000 p.e. and above is equivalent to at least:</p> <p>(a) 50 % of the total annual energy used by such plants by 31 December 2030;</p> <p>(b) 75 % of the total annual energy used by such plants by 31 December 2035;</p> <p>(c) 100 % of the total annual energy used by such plants by 31 December 2040.</p>	<p>(a) 50 % of the total annual energy used by such plants by 31 December 2030;</p> <p>(b) 75 % of the total annual energy used by such plants by 31 December 2035;</p> <p>(c) 100 % of the total annual energy used by such plants by 31 December 2040;</p> <p>(d) 125 % of the total annual energy used by such plants by 31 December 2050.</p>
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Ragn-Sells supports the Commission's ambition to promote energy neutrality for treatment plants. We do, however, strongly believe that wastewater treatment plants also can be used to produce more energy than they need for their operation, and thus contribute as energy plants. As suggested in article 1, the Directive should introduce requirements for the transition of wastewater plants to resource hubs. To enforce the plants to go beyond the production of their energy consumption, we suggest that the plants should produce 125 % of the total annual energy used by 2050.

When evaluating energy efficiency a broader system view should be applied not only to consider the wastewater treatment plants themselves. The energy and emissions saved through the recovery of resources, such as phosphorus and nitrogen, should be taken into consideration. By spending more energy in a wastewater plant, more resources could be recovered and thus, energy use and GHG be avoided elsewhere. To conclude, a wastewater treatment plant forced to be energy neutral might, however, risk sub-optimising the overall system. The benefits of the recovery of nutrients compared to linear production will only increase over time as ore grades go down and we resort to more contaminated deposits that will require more and more energy per unit of value that we want to extract. Current ore grades of phosphorus mined in the EU are less than 2% - the phosphorus levels in ashes are about 9%. More concentrated virgin ores are available – but they are also more complex and contain contaminants such as Uranium and Cadmium. Extraction and purification of phosphorus from increasingly more complex deposits of phosphorus will require more energy over time.

Article 20. Sludge

The European Commission	Ragn-Sells
<p>1. Member States shall take the necessary measures to ensure that sludge management routes are conform to the waste hierarchy provided for in Article 4 of Directive 2008/98/EC. Such routes shall maximize prevention, re-use and recycling of resources and minimize the adverse effects on the environment.</p> <p>2. The Commission is empowered to adopt delegated acts in accordance with the procedure referred to in Article 27 to</p>	<p>1. Member States shall take the necessary measures to ensure that sludge management routes are conform to the waste hierarchy provided for in Article 4 of Directive 2008/98/EC. Such routes shall maximize prevention, re-use and recycling of resources and minimize the adverse effects on the environment the phosphorus in sewage sludge in first hand is recovered and recycled to high quality products or to a raw material for further processing to prevent virgin phosphorus from being extracted.</p>

supplement this Directive by setting out the minimum reuse and recycling rates for phosphorus and nitrogen from sludge, in order to take into account available technologies for phosphorus and nitrogen recovery in sludge.	2. The Commission is empowered to adopt delegated acts in accordance with the procedure referred to in Article 27 to supplement this Directive by setting out the minimum reuse and recycling rates for phosphorus and nitrogen from sludge and wastewater (for example from reject water) , in order to take into account available technologies for phosphorus and nitrogen recovery in sludge and wastewater. Minimum recovery rate of phosphorus from sewage sludge should be set to 65% and 15% for nitrogen from wastewater.
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If managed correctly, increased chemical recycling of phosphorus could become an important component of circular sustainable sludge management. The highest value for society and the environment would be to prevent virgin phosphorus from being extracted, by closing the phosphorus cycle. A sustainable method for this is by detoxifying sewage sludge, followed by the recovery of high-quality phosphorus. This can be done by using treatment methods like incineration in combination with chemical recycling. Incineration destroys all organic contaminants, microplastics and pathogens and creates ash, a mineral concentrate, that can be transported and that is a valuable raw material for further extraction of phosphorus and other valuable elements. Chemical recycling has the role of recovering phosphorus into a clean recycled product, free from contaminants like cadmium.

This solution is, however, not in line with the waste hierarchy, as the hierarchy contradicts the use of incineration. Ragn-Sells, therefore proposes to remove reference to the waste hierarchy in Article 20, as it is not clear how it applies to sewage sludge and instead risks introducing further barriers to new valuable circular solutions that could replace the mining of virgin raw materials.

In our opinion, incineration in combination with chemical recycling should be used to detoxify the sewage sludge into sustainable raw material (feedstock for production) or final products, and thereby prevent extraction and processing of virgin phosphorus. This is, by far, the greatest advantage for wastewater treatment plants and gives less adverse effects on the environment.

Article 22. Information on monitoring of implementation

The European Commission	Ragn-Sells
1. Member States, assisted by the European Environment Agency (EEA), shall: (a) by 31 December 2025, set up a data set containing information collected in accordance with Article 21 including information concerning the parameters referred to in Article 21(1), point (a), and the results of the tests with regard to the pass/fail criteria established in Part D of Annex I and update that data set annually thereafter;	1. Member States, assisted by the European Environment Agency (EEA), shall: (a) by 31 December 2025, set up a data set containing information collected in accordance with Article 21 including information concerning the parameters referred to in Article 21(1), point (a), and the results of the tests with regard to the pass/fail criteria established in Part D of Annex I and update that data set annually thereafter;

(b) by 31 December 2025, set up a data set indicating the percentage of urban wastewater which is collected and treated in accordance with Article 3 and update that data set annually thereafter;	(b) by 31 December 2025, set up a data set indicating the percentage of urban wastewater which is collected and treated in accordance with Article 3 and update that data set annually thereafter;
(c) by 31 December 2025, set up a data set containing information on measures taken to implement Article 4(4) and on the percentage of the urban wastewater load from agglomerations above 2 000 p.e. which is treated in individual systems and update that data set annually thereafter;	(c) by 31 December 2025, set up a data set containing information on measures taken to implement Article 4(4) and on the percentage of the urban wastewater load from agglomerations above 2 000 p.e. which is treated in individual systems and update that data set annually thereafter;
(d) by 31 December 2025, set up a data set containing information on the number of samples collected and the number of samples taken in accordance with Part D of Annex I that have failed;	(d) by 31 December 2025, set up a data set containing information on the number of samples collected and the number of samples taken in accordance with Part D of Annex I that have failed;
(e) by 31 December 2025, set up a data set containing information on green house gas emissions with a breakdown between different gasses and on the total energy used and renewable energy produced by each urban wastewater treatment plant of 10 000 p.e. and above as well as a calculation of the percentage of achievement of the targets set out in Article 11(2) and update that data set annually thereafter;	(e) by 31 December 2025, set up a data set containing information on green house gas emissions with a breakdown between different gasses (<i>including methane and nitrous oxide</i>) and on the total energy used and renewable energy produced by each urban wastewater treatment plant of 10 000 p.e. and above as well as a calculation of the percentage of achievement of the targets set out in Article 11(2) and update that data set annually thereafter;
(f) by 31 December 2025, set up a data set containing information on measures taken in accordance with point 3 of Annex V and update that data set annually thereafter;	(f) by 31 December 2025, set up a data set containing information on measures taken in accordance with point 3 of Annex V and update that data set annually thereafter;
(g) by 31 December 2025, set up a data set containing the monitoring results referred to in accordance with Article 17(1) and (4) and update that data set annually thereafter;	(g) by 31 December 2025, set up a data set containing the monitoring results referred to in accordance with Article 17(1) and (4) and update that data set annually thereafter;
(h) by 31 December 2025, set up a data set containing the list of areas identified as sensitive to eutrophication in accordance with Article 7(2) and update that data set every 5 years thereafter; (e) by 31 December 2030,	(h) by 31 December 2025, set up a data set containing the list of areas identified as sensitive to eutrophication in accordance with Article 7(2) and update that data set every 5

<p>set up a data set containing the list of areas identified as areas where the concentration or the accumulation of micro-pollutant represents a risk for human health or the environment in accordance with Article 8(2) and update that data set every 5 years thereafter;</p> <p>(j) by 12 January 2029, set up a data set containing information on measures taken to improve access to sanitation in accordance with Article 19, including information on the share of their population that has access to sanitation and update that data set every 6 years thereafter.</p> <p>2. Member States shall ensure that the Commission and the EEA have permanent access to the data sets referred to in paragraph 1.</p> <p>3. The information reported by Member States in accordance with Article 5 of Regulation (EC) No 166/2006 shall be taken into account for the reporting required under this Article.</p> <p>With regard to the information referred to in paragraph 1, the EEA shall provide the public with access to relevant data through the European Pollutant Release and Transfer Register established under Regulation (EC) No 2006/166.</p> <p>4. The Commission is empowered to adopt implementing acts specifying the format of the information to be provided in accordance with paragraph 1. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 28(2).</p>	<p>years thereafter; (e) by 31 December 2030, set up a data set containing the list of areas identified as areas where the concentration or the accumulation of micro-pollutant represents a risk for human health or the environment in accordance with Article 8(2) and update that data set every 5 years thereafter;</p> <p><i>NEW () by 31 December 2025, draft emission reduction action plans, clearly stating how they are planning to reduce such emissions. These plans should be revised annually.</i></p> <p>(j) by 12 January 2029, set up a data set containing information on measures taken to improve access to sanitation in accordance with Article 19, including information on the share of their population that has access to sanitation and update that data set every 6 years thereafter.</p> <p>2. Member States shall ensure that the Commission and the EEA have permanent access to the data sets referred to in paragraph 1.</p> <p>3. The information reported by Member States in accordance with Article 5 of Regulation (EC) No 166/2006 shall be taken into account for the reporting required under this Article.</p> <p>With regard to the information referred to in paragraph 1, the EEA shall provide the public with access to relevant data through the European Pollutant Release and Transfer Register established under Regulation (EC) No 2006/166.</p> <p>4. The Commission is empowered to adopt implementing acts specifying the format of the information to be provided in accordance with paragraph 1. Those implementing acts shall be adopted in accordance with the</p>
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	examination procedure referred to in Article 28(2).
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Ragn-Sells strongly approve the introduction of extended monitoring of greenhouse gas emissions. The wastewater treatment plants have the potential to eliminate the emissions of gases dangerous to the environment. With Ragn-Sells solutions, it would be possible to avoid emissions of methane and nitrous oxide, by the recovery of nitrogen from the wastewater. This nitrogen can instead be used as fertilisers.

To speed up the alleviation of these emissions in the atmosphere, we propose the introduction of requirements for the member states to draft emission reduction action plans, clearly stating how they are planning to reduce such emissions.

The Weser ruling – Necessary adaptation of urban wastewater collection and treatment infrastructures in the leaked draft of the legislation. Later deleted in the proposal.

The European Commission	Ragn-Sells
	<p>Member States shall take all necessary measures to anticipate and adapt their urban wastewater collection and treatment infrastructures to address increased loads of domestic wastewater, including the construction of new infrastructures where necessary. All precautionary measures shall be taken to avoid deterioration of ecological and of chemical status of affected water bodies. Member States shall be considered to comply with the objectives set out in Directive 2000/60/EC if all following criteria are met:</p> <p>(a) alternative ways to address the increase in domestic wastewater loads, including the consideration of alternative points of discharge of domestic wastewater, would not produce more environmental benefits or they would involve excessive cost;</p> <p>(b) all technically feasible mitigation measures are set out in the authorisation of a wastewater treatment plant referred to in Articles X and Y and effectively implemented to minimise the impacts from urban wastewater on the affected water bodies including where so required more stringent emission controls, with the aim of meeting the objectives set out in Directive 2000/60/EC and the environmental quality</p>

	<p>standards set in accordance with Directive 2008/105/EC.</p> <p>Compliance with these criteria shall be demonstrated in the relevant River Basin Management Plans developed under Directive 2000/60/EC.</p>
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As a result of the Court of Justice of the EU's so-called "Weser Ruling"[\[1\]](#) during the implementation of the Water Framework Directive, initiatives to improve, develop, and expand wastewater treatment plants might today be stopped, even though the net impact would be positive for the climate and the environment at large. For all its good intentions, the ruling has set a precedent that severely limits the possibilities to transform wastewater treatment plants into resource plants. As such, the ruling poses a major obstacle to the roll-out of innovative technologies that would increase overall sustainability and benefit our societies. These undue legislative barriers prohibiting the expansion and development of wastewater treatment plants must be removed. Ragn-Sells believes that a more holistic framework to assess the environmental impacts of nutrient recycling is needed at the EU level. We strongly support Svenskt Vatten, the association representing the water supply and wastewater services of Sweden's municipalities, opinion and amendment. Svenskt Vatten believes that the directive's most serious shortcoming is the lack of rules that protect the environment and societal costs from the negative consequences of the degradation ban in the EU's water directive after the EU Court's Weser Ruling. The proposal contains requirements that could have a huge negative impact on the environment and the climate. Without such rules, we note that it will be very expensive and difficult for water and sewage operations in Swedish municipalities in the coming decades to meet all the requirements. The sewage directive causes an investment hump that becomes contemporary with the costs of implementing the EU's drinking water directive and adapting the country's urban areas to the climate. Svenskt Vatten's calculation of the investments in the year 2021 for Swedish water and sewage was 21 billion per year.

Väderholmens gård, Sollentuna
2023-02-09



Pär Larshans, Hållbarhetschef Ragn-Sells



Susanna Lind, Chef samhällskontakter Sverige Ragn-Sells