Managed by the Association of European Border Regions by an Action Grant (CCI2017CE160AT082) agreed with the Directorate General of Regional and Urban Policy, European Commission. Financed by the European Union.

b-solutions

FINAL REPORT BY THE EXPERT

Advice Case: Administrative common barriers blocking real implementation of environmental management system

Advised Entity: Galician Food Quality Agency – AGACAL

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1. **Introduction**

"**Wetwine**"" is a European project co-financed by the European Regional Development Fund (ERDF).

The **Wetwine** partners are: Axencia Galega da Calidade Alimentaria - AGACAL Consellería do Medio Rural, Xunta de Galicia, Asociación de Investigación Metalúrgica del Noroeste – AIMEN, Universitat Politècnica de Catalunya – UPC, Fundación Empresa – Universidad Gallega – FEUGA, Consejería de Agricultura, Ganadería y Medio Ambiente, Gobierno de la Rioja, Associação para o Desenvolvimento da Viticultura Duriense –ADVID, Institut Français de la Vigne et du Vin Pôle Sud-Ouest (IFV SUD-OUEST), Institut National de la Recherche Agronomique (INRA). The present report was based on meetings, interviews and contacts with some of the partners and other stakeholders.

Wetwine is a pilot experiment based on anaerobic digestion and wetland treatment of water and sludge, which puts into value the rational use of resources and their revaluation, as a result in a fertilizer for the vineyard that will limit the generation of waste and the contamination of soils and waters of our territory.

B-solutions is an initiative promoted by the European Commission's Directorate-General for Regional and Urban Policy (DG REGIO) and managed by the Association of European Border Regions (AEBR) to tackle legal and administrative border obstacles along EU internal borders.

The aim is to support the identification of legal or administrative obstacles the partners face when implementing projects in a border area and provide suggestions on strategies to remove the difficulties which hinder cooperation with the neighbouring country.

1. **Why is Wetwine pilot project a cross border issue?**

Making the methodology tested and validated in the **Wetwine** project, legally possible is a cross border issue.

Naturally, what is at stake in the **Wetwine** project is not cross-border wastewater management, because it is not feasible in practice to transport wastewater (with trucks or pipelines) for treatment in another country or to channel treated wastewater for irrigation in the other side of the border.

Even being a small-scale activity, wine production has impacts. Vineyards are spread throughout the territory and the wine making activity is being developed for long periods by a very large number of small producers. The impacts on the environment are cumulative.

Then why is the sound management of wastewater from wine houses a transboundary problem, seeking a transboundary solution? The adaptation of the legal context to allow for new wastewater treatment methods is a relevant cross border issue for four sets of reasons:

1. The river basins are common. The rivers that are affected are international rivers or tributaries of international rivers. Rivers that ***cross*** borders or rivers that ***form*** the border. For shared river management, every activity developed in each side of the river basin matters.
2. The environmental, geologic, orographic, climatic and meteorological features of the territories on both sides of the border are similar, because the biogeographic regions (Atlantic, Alpine, Mediterranean) stretch across the borders.
3. The characteristics of the rural property (small land size) and of the vineyards (grape varieties, production methods) are comparable on both sides of the border.
4. The national legal framework is strongly inspired or strictly determined by EU law both in the case of environmental protection and in the case of food safety.

In the end of the day, having different norms and administrative conditions applicable to the same activities and same environmental conditions on both sides of a border amounts to a distortion of competition.

2. Transferability and applicability of the Wetwine pilot project outcomes in Portugal and France

Another different question is the analysis of the transferability of technologies and applicability of the outcomes, in Portugal and France, of the **Wetwine** methodology which is being developed, as a pilot project, in Spain.

As a consequence, the aim of this report, is twofold:

a) first, solving legal or administrative obstacles to the project as such in the Spanish legal order.

b) second, identifying possible administrative or legal obstacles and proposing solutions in the two member states where the **Wetwine** methodology is to be implemented in the future: Portugal and France.

The question of knowing whether in other Member States, such as Portugal or France, the legal context will be suited to allow the **Wetwine** methodology and whether the administrative interpretation and application of the law in other Member States will consider the **Wetwine** methodology compatible with the legal regimes in force must be answered in the light of the changing legal context that is going through at the EU level.

3.1. The European legal context

Since the adoption of the Green Deal[1] by the new European Commission, it is clear that changes will hapen. One of them is the "Circular economy – new action plan to increase recycling and reuse of products in the EU"[2]. The other, that is already ongoing, is the adoption of new european rules on reuse of waste water by establishing minimum requirements for water reuse[3] thus promoting water reuse for agricultural irrigation. When the legislative process will be concluded, all the Member States will be obliged to

[1] https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf .
[2] https://ec.europa.eu/info/law/better-regulation/initiative/12095/publication/6195437/attachment/090166e5caa1c6ae_en .
[3] https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=2018%2F0169(COD)&l=en.

adapt their internal laws to the new legislation that will regulate the activities that reuse wastewater in agriculture.

3.2. The Portuguese legal context

In Portugal the Decree-Law 119/2019 of 21 August, defines the legal regime for the production and use of water for reuse. The Decree 266/2019, concerning the standardization of the water identification label for reuse and information.

Complementarily, an extensive (over 100 pages) Support Guide[4], will help the operators understand and apply the new laws.

The objective of the new legislative framework is to cope with the growing demand for water, by treating reuse water as an alternative source, contributing to the sustainable use of water resources in line with the principles of circular economy. The Portuguese law is based on risk assessment, incorporates control measures and monitoring plans to ensure greater security for health and the environment. Besides being a good water management practice, water for reuse is also an example of what can be a climate change adaptation measure under the Climate Change Adaptation Action Program.

Before the authorities are faced with a concrete request to authorise the reuse of wastewater treated in accordance with the **Wetwine** methodology it is not possible to know exactly if the interpretation and application of the law will be more rigid or more environmental friendly. However, considering the existence of the Support Guide it is possible to anticipate that no obstacles will be raised.

3.2. The French legal context

In France the subject is included in article R211-23 of the Environmental code that expressly allows water reuse "wastewater can, after purification, be used for agronomic or agricultural purposes, by watering or irrigation, provided that its characteristics and

[4] https://apambiente.pt/_zdata/Politicas/Agua/Licenciamento/ApR/APA_Guia_Reutilizacao_v1.pdf .

methods of use are compatible with the requirements of protection of public health and the environment"[5].

Two decrees operationalize this article:

a) a decree of June 22, 2007 clarifying that "in the event that the discharge of the treated effluents into surface water is not possible, the treated effluents can either be eliminated by infiltration into the soil, if the soil is suitable for this mode of elimination, or reused for watering green spaces or irrigating crops, in accordance with the provisions defined by order of the Minister of Health and the Minister of the Environment"[6] (article 10).

b) a decree of August 2, 2010 on the use of water from the treatment of urban wastewater treatment for the irrigation of crops or green spaces[7].

This regulation is considered insufficient[8] to allow increasing the rate of an activity which has proven to be compatible with the challenges of the Circular Economy.

The recommendation regarding France is to update the legislation establishing the requirements for reuse of wastewater in agriculture. The Portuguese technical requirements included in the recent Portuguese legislation can be a source of inspiration.

[5] https://www.legifrance.gouv.fr/affichCodeArticle.do?idArticle=LEGIARTI000006835297&cidTexte=LEGITEXT000006074220&dateTexte=20090427

[6] https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000276647&dateTexte=&categorieLien=id

[7] https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=800C092A0CFB4219B067F8BFA156478E.tplgfr22s_1?cidTexte=JORFTEXT000022753522&dateTexte=20200114

[8] Questions about this have been raised at the Senat. See for instance, https://www.senat.fr/questions/base/2017/qSEQ170625994.html.

3. The theoretical framework: prevention and correction at the source

The objective of the current report on the **Wetwine** project is to identify the administrative barriers that block the implementation of a circular wastewater management system in the wine sector. The food crisis caused by the e-coli outbreak in 2011[9] explains at least in part, the cautious approach to new fertilisers, namely those using organic matters.

In the implementation of the **Wetwine** project there is a collision between fundamental principles applicable in different contexts: the prevention principle and the correction at the source principle. They are both received in the EU treaties and secondary EU environmental law[10] and food safety law[11].

Why is the prevention principle the correct framework to the **Wetwine** issue?

Because the main objectives of **Wetwine** are prevention of environmental impacts: the wine producers aspire to prevent water consumption; to prevent wastewater discharge; to prevent soil contamination; to prevent underground water contamination; to prevent superficial water eutrophication. But this objective must be pursued adopting a preventive and even precautionary approach to public health and food safety risks, as imposed by EU food safety regulation:

> "1. In specific circumstances where, following an assessment of available information, the possibility of harmful effects on health is identified but scientific uncertainty persists, provisional risk management measures necessary to ensure the high level of health protection chosen in the Community may be adopted, pending further scientific information for a more comprehensive risk assessment. 2. Measures adopted on the basis of paragraph 1 shall be proportionate and no more restrictive of trade than is required to achieve the high level of health protection chosen in the Community, regard being had to technical and economic feasibility and other factors regarded as legitimate in

[9] Commission staff working document: "Lessons learned from the 2011 outbreak of Shiga toxin-producing Escherichia coli (STEC) O104:H4 in sprouted seeds", SANCO/13004/2011.
[10] The water framework directive, 2000/60/EC of 23 october.
[11] Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

> the matter under consideration. The measures shall be reviewed within a reasonable period of time, depending on the nature of the risk to life or health identified and the type of scientific information needed to clarify the scientific uncertainty and to conduct a more comprehensive risk assessment"[12].

By developing the techniques and the methods to use the purified water to irrigate the vineyards and sludge as a fertilizer for the grapes, the **Wetwine** project contributes to the fulfilment of another fundamental EU principle: the correction at the source principle. Following the **Wetwine** procedures the wine producers become self-sufficient and responsible for reducing their environmental impacts, transforming wastewater in liquid and solid by products reusable in the wine production. Provided that health issues are safeguarded this solution seems to deliver a higher level of environmental protection.

If a certain environmental option proves to be better for the environment as a whole but cannot be implemented because there are obstacles associated with other relevant interests, such as public health or food safety, a thorough analysis must be performed to check whether the legal requirements are really necessary, adequate and proportional to prevent the feared risks and to produce the desired effects. For this purpose, three tests must be performed:

1. **The necessity test**. The administrative burdens shall be deemed **necessary** if the value at stake is too important to take the risk of liberalizing/not regulating the economic operator's behaviour. The public authorities cannot afford to dispense administrative controls or to have minimal controls and risk a food water crisis to happen due to food chain contamination.

The preliminary answer is yes, the administrative burdens are necessary.

2. **The proportionality test**. The administrative burdens are **proportional** if the risk that they intend to prevent is serious and equivalent in importance to the burdensome character of the obstacles raised to wastewater management practices proposed. Proportionality means that for very high risks, very strong administrative requirements are allowed. For minimal risks, minimal administrative requirements. In the present context, a *strong administrative burden*

[12] Article 7 of Regulation (EC) No 178/2002.

means imposing heavy administrative duties and financial responsibilities on the economic operators. In other words, complying with strong administrative burdens requires expensive, time consuming, highly skilled human resources and/or highly complex technical solutions.

The preliminary answer is probably no, some administrative burdens may not be proportional.

4. **The adequacy test**. The administrative burdens are **adequate** if they are able to produce the desired results. This can be proven in practice by assessing the results, in the case that the norms have been in place long enough. If that is not the case, a thorough study of the presumed consequences and likely side effects must be performed.

The preliminary answer is probably no, some administrative burdens may not be adequate.

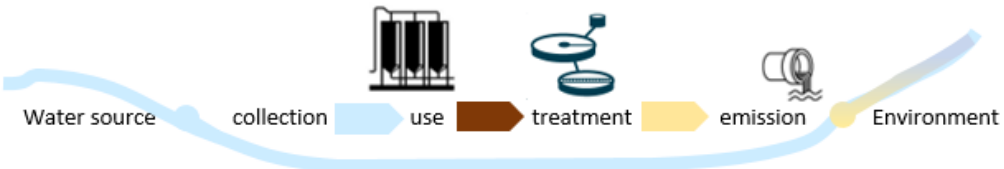
5. Generating synergies: protecting health and the environment

The concerns expressed by the stakeholders contacted or interviewed for the preparation of this report showed that the existing administrative burdens are probably neither proportional nor adequate. The excessively troublesome legal requirements dissuade the economic operators from even thinking about changing their usual *modus operandi*.

The excessive legal requirements constitute an incentive to maintaining business as usual.

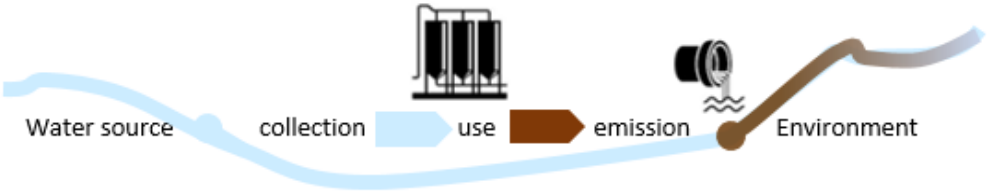
Unfortunately, in the present case, ***business as usual*** is equivalent to linear production processes, very often functioning illegally and contaminating the environment regardless of the fact that they treat, or they do not treat their wastewaters[13].

Case A – Linear production processes with legal discharge of treated wastewater.



[13] Besides the cases of wastewater producers that neither have their own individual waste water treatment system nor are connected to a collective one, audits performed by the Water Department of Xunta de Galicia reveals that, in some regions, less than 50% of the waste water treatment systems are functioning properly (Annex I).

Case B – Linear production processes with illegal discharge of wastewater.



Changing the legal requirements to more adequate and proportional ones might constitute an incentive to changing practices and stimulating **correction at the source**.

Re-using treated water for irrigation and sludge for fertilization seems to be an overall better solution for the environment, provided that treated water complies with the legal safety conditions.

Reusing treated water saves water because less abduction for irrigation is necessary. Treating and reusing treated water and sludge prevents soil and water contamination and eutrophication.

A legal framework that makes it very hard or impossible to treat and reuse the wastewater is not the best approach. The way the law is conceived is strong incentive for the producers of wastewater to change nothing. The law is too complex and too cumbersome.

On the contrary, water scarcity should be induced by establishing a growing price, proportional to the quantities of water abducted. Not doing this distorts competition because the social and environmental costs (or externalities) of the wine sector are not internalized. Besides being an environmental problem, this is a competition problem and a problem of justice.

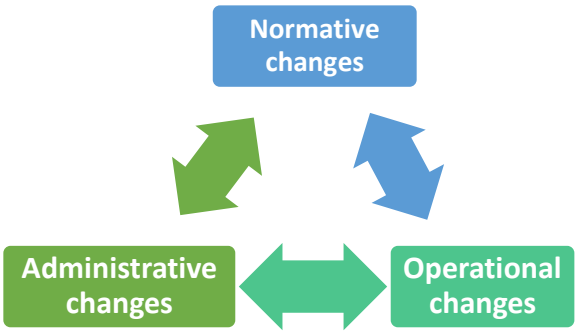
A pedagogical and more effective approach to protecting health and the environment while promoting circularity consists in assisting the wine producers in complying with the environmental, health and food safety issues and if necessary, changing the production

process[14] to make sure that the water and sludge have the desired quality for being reused in agriculture after the necessary treatment.

5. Theoretical solution: a wide range of measures

The removal of obstacles may consist on a wide range of measures and initiatives regarding the wastewater treatment and reuse as well as sludge use in agriculture.

The initiatives can involve various changes and adaptations:



Normative changes consist of harmonization, simplification or redrafting of legal requirements at the regional, national or European level.

Administrative changes amount to alterations of administrative controls or adjustment of procedures carried out by the national or regional administrations.

Operational changes embody new practices, different terms or conditions for action, transformation of attitudes.

[14] Using different cleaning methods (like heat and steam) to clean the bottles, wine tanks, winepress, etc, giving up the use of strong chemicals for disinfection, degreasing or decaling. Using methods to reduce the use of chemical fertilisers (crop rotation, fallow system) and phytosanitary products.

As will be seen later, the obstacles identified demand normative changes as well as administrative and operational changes.

Yet, implementing legal and administrative simplification is not an easy task[15].

The reason for this is the fact that environmental law and water law are quite a complete and complex system of norms whose implementation can be as demanding for the national administrations as it is for the private operators of economic and occupational activities.

Having this in mind, in 2018, the European Commission explained, in a very clear way, that non-compliance with environmental law "may occur for different reasons, including confusion, poor understanding or lack of acceptance of rules, lack of investment, opportunism and criminality"[16].

This complexity of reasons for obstacles to legal effectivity explains why the problem cannot be addressed using a *silver bullet* solution. Instead, multiple instruments must be mobilized[17].

Besides, very often, changing the law won't solve any problem. Moving from ***law-in-the-book*** to ***law-in-action*** demands different approaches depending on the cases. The competence to apply, execute and enforce environmental and waste law is up to the Member States, multiple solutions can be implemented by the competent authorities of the Member-States. The solutions can be graduated from the softest environmental education actions to the classical command and control measures. The European Commission presented three levels of 'environmental compliance assurance' measures[18]:

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[15] OECD, *Overcoming Barriers to Administrative Simplification Strategies: Guidance for Policy Makers*, Regulatory Policy Division Directorate for Public Governance and Territorial Development, Paris, 2009 https://www.oecd.org/regreform/42112628.pdf . OECD, Cutting red tape. Why Is Administrative Simplification So Complicated? Looking beyond 2010, Paris 2010 https://read.oecd-ilibrary.org/governance/why-is-administrative-simplification-so-complicated_9789264089754-en#page10

[16] *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on EU actions to improve environmental compliance and governance* {SWD(2018) 10 final} Brussels, 18.1.2018 COM(2018) 10 final https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0010&from=PT.

[17] On legal criteria for the choice among policy instruments see Sarah E. Light & Eric W. Orts "Parallels in Public and Private Environmental Governance", 5 Mich. J. Envtl. & Admin. L. 1 (2015) http://repository.law.umich.edu/mjeal/vol5/iss1/1.

[18] In the same Communication on EU actions to improve environmental compliance and governance {SWD(2018) 10 final} Brussels, 18.1.2018 COM(2018) 10 final https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0010&from=PT.

- compliance ***promotion*** helps duty-holders to comply through means such as guidance, 'frequently asked questions' and help-desks;

- compliance ***monitoring*** identifies and characterises duty-holder conduct and detects and assesses any non-compliance, using environmental inspections and other checks;

- follow-up and ***enforcement*** draw on administrative, criminal and civil law to stop, deter, sanction and obtain redress for non-compliant conduct and encourage compliance.

,

Drawing on the approach of the European Commission, a more innovative approach can be devised[19]. This novel approach is based on four levels of measures, organised from the *softest* to the *hardest*.

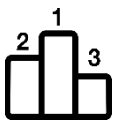
1. Informative solutions:

Besides suport systems such as FAQs or help-desks, also smart digital forms to help economic operators fulfill their obligations can help overcome administrative obstacles. Complementarily, the Autonomous Communities, the waste management entities and the economic operators can organize awareness campaigns either using the media (which can be quite an expensive option) or simply including additional information about the legal obligations regarding sound wastewater management in every written communication with the wine producers[20].

[19] Another interesting but more conventional proposal is: James Salzman, Teaching Policy Instrument Choice In Environmental Law: The Five P's 23 *D*uke *E*nvironmental *L*aw & *P*olicy *F*orum 363-376 (Spring 2013), https://scholarship.law.duke.edu/delpf/vol23/iss2/8/.

[20] In the experience held by the UK government in 2014 for the area of health (organ donation) this proven to be a very effective behavioural change tool (more information on https://www.gov.uk/government/news/celebrities-back-christmas-campaign-for-more-organ-donors).

2. 'Nudge' solutions:



The competent authorities can use *soft persuasion* techniques no induce behavioural change (also called "nudge"[21]). A positive approach can consist of creating labels or performance rankings to promote the most environmentally friendly wine producers, the early and spontaneous fulfilment of legal obligations being one of the criteria, among others. A negative approach can consist of public *blacklists* of noncompliant vine producers, or in other words, companies who were found in breach of any environmental norms or that were less diligent than expected or less cautious than desired. Positive or negative economic incentives can be considered a 'nudge' type of instrument.

3. Soft steering solutions:

Administrative authorities can lead wine producers and wastewater managing entities to develop compliance management mechanisms. For the economic operators that have already implemented compliance management mechanisms, competent authorities can apply the "Guidance on Compliance Management System supervision"[22] produced by IMPEL in 2014 together with Member States' environmental administrations to check the effectivity of compliance check strategies.

This document provides inspectors with guidance on principles and strategies for corporate inspection[23] so that the purpose of inspection is not to measure compliance levels but

[21] Richard H. Thaler, Cass R. Sunstein, *Nudge: Improving decisions about health, wealth, and happiness*, Yale University Press, New Haven, CT, 2008. For concrete examples in the UK see: https://www.gov.uk/government/organisations/behavioural-insights-team.

[22] Impel, "Guidance on Compliance Management System supervision", Brussels, 2014 http://impel.eu/wp-content/uploads/2015/03/FR-2014-16-2013-15-CMS-Supervision-Guidance-Document.pdf.

[23] In 2003 there was already an Impel project to develop and test "a voluntary scheme for reporting and offering advice on inspectorates and inspection procedures" in Galicia: *Impel Review Initiative (IRI), Phase 3: Testing of the Review Scheme, 6th Review: Autonomous Community of Galicia, Spain, 3-7 March 2003* https://www.impel.eu/wp-content/uploads/2016/06/iri_spain-2003.pdf. The final report was produced in 2009 Impel Review Initiative (IRI) "A voluntary scheme for reporting and offering advice to environmental authorities" Report on the IRI *that* took place in Lisbon between 27 to 30 October

rather to assess corporate compliance strategies. The ultimate objective is that inspections serve companies to improve their internal processes in order to ensure compliance rather than to operate outside the law, seeking to conceal situations of non-compliance. Sanctions will only be imposed on companies that fail to correct the pinpointed nonconformities. When public interests are at stake risk prevention is considered more important than mere formal compliance with the law.

4. Hard enforcement solutions:

Establishing interdictions and positive obligations followed by more environmental inspections is the classical ***command and control*** approach. Supervision and inspections[24] shall be performed by the competent authorities of the Member State (Seprona or Igamaot, for instance) in accordance with the Recommendation of the European Parliament and of the Council of 4 April 2001, providing for minimum criteria for environmental inspections in the Member States[25] and applying sanctions to all those economic operators that don't comply with their obligations. The sanctions shall be effective, proportionate and dissuasive[26].

Concluding remarks: the relevance of other non-environmental and non-health concerns

The legal, administrative or operational changes to be proposed refer to environmental legislation, to environmental administrative activities or to operational activities.

2009 at the Portuguese Environmental and Spatial Planning General Inspectorate (IGAOT), https://www.yumpu.com/en/document/view/12980358/2009-09-iri-portugal-final-report-impel.

[24] Impel, Benchmarking on Quality Parameters for Environmental Inspectorates IMPEL workshop in Copenhagen 8 - 9 September 2005, Report 8/2005, Brussels http://www.impel.eu/wp-content/uploads/2017/01/benchmarking_report.pdf. IMPEL Project *Practical Application of Better Regulation Principles in Improving the Efficiency and Effectiveness of Environmental Inspection Authorities,* Report October 2009 http://www.impel.eu/wp-content/uploads/2017/01/2009-04-Better-regulation-principles-main-1.pdf.

[25] Recommandation 2001/331/EC https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001H0331&from=PT.

[26] According to article 36 n.2 of the WFD, 22 of the WEEE Directive and the case law of the European Court of Justice (e.g. Case 68/88 Commission v Greece [1989] ECR 2965, §23 and §24).

Nevertheless, it is important to stress that the changes proposed are solely justified on environmental and health grounds.

Other non-environmental arguments, such as economic motivations (such as lowering the management costs, obtaining economies of scale or savings in transportation charges) or social and humanitarian reasons (gender equality, integration of disabled workers, social minorities or migrant workers) were not taken into account in the obstacle removal equation.

Furthermore, any proposals for harmonization or simplification of the legal framework and administrative practices shall respect other non-environmental values, such as transparency, freedom of competition, prevention of tax evasion, fraud or corruption.

If the proposed solutions contribute to these other considerations they can be considered as a *plus*, a collateral advantage of obstacle removal, but they are not treated as critical factors unless some of these advantages represent environmental gains as well, such as increased energy efficiency and reduced greenhouse emissions.

6. Obstacles to Wetwine project

In the context of the present report, a broad concept of obstacles was adopted. Obstacles are not just plain interdictions that constitute a legal barrier to the performance of certain desired activity. Obstacles are also other burdens, ommission, contradictions, uncertainties, that hinder the fulfilment of a certain desired result. These obstacles are the practical result of complex, inappropriate or too demanding legal requirements, considering the environmental and health risks at stake.

The obstacles described below were identified during the contacts held (in the form of meetings, interviews and digital contacts) with six stakeholders[27]: two in Portugal (Associação para o Desenvolvimento da Viticultura Duriense and Adega Cooperativa Regional de Monção, CRL) and four in Spain (Axencia Galega da Calidade Alimentaria, Consellería do Medio Rural de la Xunta de Galicia, Consellería do Medio Ambiente, Territorio y Vivienda de la Xunta de Galicia and Confederación hidrografica del Miño-Sil).

In the case of the **Wetwine** project, the obstacles are the result from excessive legal requirements posed to the waste management operators. From the point of view of the economic operators, the new legal requirements to treat wastewater and reuse water and sludge in the vineyards, are too complex, too expensive and too time-consuming, making it extremely hard for wine producers to adopt the new circular procedures tested in the **Wetwine** experimental plant.

In traditional wine production systems wine producers use clean water and discard wastewater in a “linear” one way process. The water for the production process can be either tap water or water abducted from natural water reservoirs or both. After using the water, wine producers should treat wastewater before discharging it to in natural environment. This can be done using their own wastewater treatment plant (large producers) or sending their wastewater to a

[27] Contacts with French (Institut Français de la Vigne et du Vin Pôle Sud-Ouest and Institut National de la Recherche Agronomique) and other Portuguese and spanish stakeholders were tried but no input was received.

collective (usually public) wastewater treatment plant (small-scale producers). In "linear" wine production, wine producers are required to have an authorization to abduct water and to discharge wastewater. Discharged wastewater must be submitted to chemical analysis every two months and a discharge fee must be paid.

In a "circular" water management system such as the **Wetwine** project, the wine producers become waste management operators and, as a consequence, all the legal requirements scale up quite impressively.

Financial burdens:

administrative fees for demanding the authorization to become a waste management operator (over 700€)

an environmental bond of 10.000€ (minimum) to guarantee any environmental damages caused by the activity.

Discharge fees are still mandatory as there is no obligation to reuse the treated wastewater, and despite having committed to anaerobic digestion and wetland treatment of water and sludge the wine producers are allowed to discharge wastewater for the environment.

Other economic burdens: the chemical analysis of the treated wastewater to prevent environmental and health risks must be performed every weak instead of 6 times a year.

Time consumption: obtaining the authorisation for waste management requires no less than one year. The administrative authorities have 10 months to respond, plus the time needed for the operator to respond to any additional requests by the administrative authorities. In the end it takes longer than one year.

Administrative procedures: the paperwork necessary to obtain the authorization to become a waste management operator is quite extensive, including two projects: a technical project[28] and

[28] 1. Report describing the **technical project** in detail:
- Protective and / or corrective measures to avoid any type of impact to the air, water or soil during the entire treatment process and guarantee the adequate characteristics of the final products resulting from waste management.
- Legislation and regulations applicable to the project.

an operation project[29]. Depending on the complexity of the installations, preparing both projects can be quite expensive, time consuming and cumbersome.

- Detailed technical justification of the type of storage and containerization of waste prior to treatment, after it as well as intermediate storage, if applicable.
- Description and characteristics of the treatment machinery.
- Description and characteristics of the materials used.
- Justification of the technology adopted compared to others available for the treatment of waste, and, in the event of waste disposal, the non-possibility of recycling or recovery of waste to be managed will be justified.
- Any precise reference for the complete definition and knowledge of waste treatment facilities.
- Details of civil works or adaptation of the specific ship or plot for the intended activity as well as others that allow the general definition of the installation.

2. **Budget.**

3. **Plans.** Plans of the plot, facilities and civil works will be attached to describe the situation, the whole of the installation and all the details necessary for the correct execution and evaluation by the Administration.

[29] 1. **Process:**

- General scheme of the processes and flowcharts (synoptic and on the floor plan).
- List of equipment, devices and furniture to be installed in the different lines of the process.
- Maximum and normal capacity for waste treatment by machine and process.
- Indication of the percentage of rejection in the process. Characterization and management of it.
- Maximum capacity of the different stocks of waste in units of volume and weight. (Pre-treatment storage, intermediate storage and storage of managed waste).
- Characteristics of the nature of the waste in its different management phases.
- Quality controls of the waste once it has been recovered. Characterization of it.
- Description of the means of transport, handling and internal transport.
- System of use of the service by users.

2. Staff: Relation of the personnel, with indication of their categories and specialties, that will be dedicated to the activity. The staff will have the degree and experience according to the functions to be performed. In turn, the data of a person will be indicated in order to make all the relations with the services of the Administration.

3. Maintenance of the facilities:

- Maintenance plan and periodic reviews of the facilities. Especially they will be developed in relation to the systematic controls of the measures of control, detection and correction of the possible contamination, as a consequence of, breakdown, accident, or other contingencies.
- Procedures for action in case of breakdown or accident.

4. Quality or environmental accredited management systems, in the cases that exist:

- Justification that the site chosen for the installation complies with the criteria established in the Plan of Xestión of Industrial Waste of Galicia 2016/2022, only in the case that they are located outside an industrial estate.
- Proof of payment of the administrative fee.
- Tax identification number (NIF) of the company or, if applicable, of the applicant (legal persons only).
- Proof of representation of the legal entity with a copy of the notarial deed of the representation duly registered in the commercial register.

7. Legal norms behind the obstacle

There are different norms for the liquid and the solid waste fraction.

Liquid waste fraction:

Royal Legislative Decree 1/2001, of July 20, the water law.

Order AAA / 2056/2014, of October 27, which approves the official models for requesting authorization and declaration of water discharge.

Royal Decree 1620/2007, of December 7, which establishes the legal regime for the reuse of purified water.

Solid waste fraction.

Main acts:

Decree 125/2012, of May 10, of the Autonomous Community of Galicia on the use of sewage sludge in the field of the agricultural sector.

Royal Decree 1310/1990 of October 29, transposing the Council Directive of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture 86 / 278 /EEC.

Other acts:

Law 22/2011, of July 28, on contaminated waste and soil.

Law from Galicia, 10/2008, of April 21, on waste.

Decree 174/2005, of June 9, of Galicia, which regulates the legal regime of waste production and management and the General Registry of Waste Producers and Managers.

Order of July 20, 2009, which regulates the construction and management of landfills within the scope of the Autonomous Community of Galicia.

Royal Decree 180/2015, of March 13, on waste transfer within the national territory.

Decree 59/2009, of February 26, on the traceability of waste.

Royal Decree 506/2013, of June 28, on fertilizer products, modified by Royal Decree 999/2017, of November 24.

Decree 156/1995, of June 3, on environmental inspections.

8. Description of a possible solution

The proposed solutions are intended to enable circular water use in the wine sector reducing complexity, streamline the administrative procedures, lightening the financial burdens and facilitating environmental compliance, while preserving a high level of environmental and health protection.

1. Prepare and make available online guidelines, examples of good practices, frequently asked questions and auto-complete forms to support producers willing to implement a circular system of anaerobic digestion and wetland treatment of water and sludge.
2. Remove inadequate payments such as financial charges for potential discharges. In the case that the operator uses the public waste treatment system despite having committed to use a circular system, the fee can be collected afterwards (retroactive payment).
3. Allow replacement of the environmental bond for other financial security instruments, also effective but less burdensome, but such as insurance, or collective deposits to be used as a common financial guarantee for several operators.
4. Speed up authorization processes by analysing the environmental conditions for circular use of water in the wine producing sector, in every river basin and considering several available technologies, to determine beforehand the minimum technical conditions required.
5. Develop stereotyped technical and operational projects to allow small scale producers to adopt the projects as a package.
6. Actively suggest changes to the wine production process to ensure that the wastewater loss has the desired chemical features to make the anaerobic digestion and wetland treatment of water and sludge viable.
7. More supervision and sanctioning, namely using remote sensing real time surveillance systems, to identify deviations from the authorised thresholds or procedures and to sanction breaches to environmental conditions established in the authorisation both for the circular and for the linear systems.
8. Create a logo to reward and make visible the economic operators that within a certain time-period prove to have improved their environmental performance reducing their water footprint and the overall environmental impacts.

None of these measures requires changing EU law, insofar as they remain within the margin of discretion of the Member State. The entities involved are the regional autonomous communities. Regional Parliaments for changes in the regional laws (for instance the Decree 125/2012, of May 10, of the Autonomous Community of Galicia on the use of sewage sludge in the agricultural sector) and Regional and local administrations for changes in the administrative practices.

It is also possible to envisage amending Council Directive 86 / 278 /EEC of 12 June 1986 on the use of sewage sludge in agriculture, to establish flexibilization mechanisms for internal use of certain types of sludge after adequate treatment, in accordance with the high level of environmental protection. In this case the European Institutions would be involved as well.

10. Pre-assessment of whether the case could be solved with the ECBM

There are advantages in establishing Cross-border Coordination Points to make sure that the legal amendments, the changes in administrative practices and the bureaucratic adjustments aimed at achieving a higher level of environmental protection don't distort competition between similar activities on both sides of the border.

Alexandra Aragão

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10. Annexes

La Voz de Galicia

OURENSE

Las depuradoras de Maceda y Verín presentan un estado muy deficiente

La auditoría de Augas de Galicia señala fallos en equipos y acumulación de lodos

SANTI M. AMIL **CÁNDIDA ANDALUZ** OURENSE / LA VOZ 25/09/2019 08:12 H

https://www.lavozdegalicia.es/noticia/ourense/verin/2019/09/25/depuradoras-maceda-verin-presentan-estado-deficiente/0003_201909O25C3991.htm

Una auditoría de Augas de Galicia solo salva a 50 de 119 instalaciones supervisadas en toda la comunidad. Este informe incluye 13 plantas en la provincia. Verín y Maceda, suspenden. La depuración de las aguas es, según la auditoría, muy deficiente en estas dos instalaciones. El resto presenta diferentes deficiencias.

verín

Sin capacidad y con problemas funcionales. La auditoría señala que se producen alivios prácticamente continuos desde el pozo de agua bruta, con una elevadísima dilución que limita el tratamiento biológico posterior. El informe señala que las rejas automáticas de desbaste (retiene solidos) instaladas en uno de los canales están fuera de servicio por una defectuosa instalación. El desarenado y desengrasado del pretratamiento no tiene capacidad por parámetros de diseño y por problemas funcionales. Los dos decantadores instalados no tienen un reparto equitativo de caudal, por lo que uno está sobrepasado.

maceda

Deficiente estado de los equipos. Hay elevadas infiltraciones de aguas blancas (lluvia o la que se utiliza en la limpieza de parques y calles) en la red de colectores que provocan caudales de entrada elevados y alivios. La valoración global de la capacidad estructural de la instalación es deficiente, según el informe, así como el estado de conservación de los equipos de la planta, con continuas averías.

allariz

Pretratamiento deficiente. El pretratamiento es muy deficiente, lo que provoca que parte de los residuos pasen al resto de los proceso provocando problemas. En los meses de más calor y mayor carga contaminante, no se realizan períodos de desnitrificación (eliminación de nitratos) para asegurar la destrucción de materia orgánica, lo que ocasiona puntualmente incumplimientos de la autorización de vertido en nitrógeno. Se superan los límites de vertido en fósforo total en los meses de mayor carga contaminante coincidiendo con la descarga de fosas sépticas.

o carballiño

Arenteiro y Carrás. El proceso de desarenado y desengrasado resulta insuficiente para asegurar una correcta separación de las grasas, debido a la elevada carga superficial tanto con caudal medio como al máximo. La falta de agitación en los reactores biológicos limita la duración de los ciclos de desnitrificación. Recientemente la planta de Carrás asume los vertidos del nuevo matadero municipal. Incapacidad en el tratamiento de lodos.

a rúa

Problemas de gases en la planta. La problemática principal está en la red de saneamiento y el principal fallo está en la incapacidad de tratamiento de las aguas, según el informe. Recientemente se puso en marcha la deshidratación mediante filtro banda (permite obtener fango fácilmente manipulable), sin contar el edificio de la estacion depuradora con ningún tipo de extracción de aire , lo que podría ocasionar problemas con los gases generados.

celanova

Mala configuración del decantador. Los problemas se centran en la mala configuración del decantador lamelar (separa elementos semipesados y pesados) que favorece la acumulación de lodos y posterior levantamiento con el agua tratada, empeorando en ocasiones su calidad.

o barco

Sin barandillas ni setas de emergencias. En la red de saneamiento de O Barco se producen importantes incorporaciones de aguas blancas, según la auditoría. El 30 % del caudal de entrada es aliviado después del pretratamiento sin pasar por el tratamiento secundario. No dispone de corona deflectora para la recogida de flotantes, ni barandilla de seguridad, con riesgo de caída. En cuanto a elementos de protección, no hay setas de emergencia en los equipos, solo el de parada general da instalación.

Trives

Problemas de atascos. Hay incorporación de aguas blancas a la red de saneamiento. Carece de un sistema de desarenado automatizado, lo que exige la limpieza continua por parte del personal. Los aceites y grasas no son retenidos eficazmente. El caudalímetro está instalado en un lugar inadecuado y no contabiliza el de entrada correctamente. El explotador no es capaz de extraer y deshidratar el exceso de lodos por problemas de atascos de las conducciones con residuos acumulados.

Xinzo

Mala configuración del decantador. Los tratamientos de la instalación no presentan problemas relevantes. Los parámetros de funcionamiento del clarificador están fuera de rango. El equipo de desinfección permanece apagado ya que la autorización de vertido no marca valores límite.

San Cibrao: falta de calibración de instrumentos y de conservación de los equipos

Una de las depuradoras con más problemas visibles es la de San Cibrao das Viñas. La carga industrial ha provocado en los últimos años varios vertidos al Barbaña. La auditoría señala que hay un elevado aporte de aguas blancas (lluvia, sobre todo) en los períodos con precipitaciones. «A explotación está moi condicionada pola incidencia dos vertidos industriais que recibe a planta, sobre todo polo efecto de hidrocarburos, deterxentes que provocan fortes incidencias de escumas no medio receptor (tratadas con produtos antiescumantes) e pH extremos (para o que existe un sistema de detección automática e neutralización no tratamento primario)», señala. En ocasiones, explican, es necesario dosificar cloruro férrico para limitar la cantidade de fósforo total por verter a una zona sensible. «Debe mellorarse o pretratamento xa que hai dificultades na extracción de areas e graxas separadas na canle desareadora edesengraxadora. Ademais na zona de acopio de residuos do desbaste a falta de espazo condiciona actualmente o funcionamento dos equipos», prosigue. La auditoría señala que es necesario mejorar la conservación de los equipos electromecánicos y la instrumentación de la planta dado el efecto del tiempo sobre los mismos y la falta de calibración en buena parte de los instrumetos.

La de Ourense, con ajustes

El concejal de Infraestructuras de Ourense, Miguel Caride, se refirió a los datos de la auditoría que indican que la depuradora de Reza abrió con fallos de diseño en algunos equipos: «Al parecer son problemas comunes en la puesta en marcha de este tipo de instalaciones, que requieren ciertos ajustes y modificaicones en el diseño inicial». Señala que eso no afecta a su buen funcionamiento.