

# eco consultants

#### **COMPANY & HISTORY.**

Eco consultants have been demonstrating since 1999 how economically efficient as well as technically and legally sound environmental protection can be. As a professional partner with vision and a complete range of services in all areas of environmental technology, we provide companies, authorities and research institutions with everything from consultancy, sampling and analysis to preparing expert opinions.

Eco consultants may be new as a brand but the environmental experts have actually been active in their area of expertise for many years. Established as "UTC" in the form of a spin-off of the Leoben University of Mining, Metallurgy and Materials, we have been operating since 1999 as the professional contacts for all complex questions on issues such as waste management and recycling. With our new corporate image, we are setting our sights firmly and dynamically on the future, constantly expanding our portfolio with appropriate investments and providing our customers with additional potential today for a decisive competitive advantage in the future. Absolute punctuality, reliability and a high level of costconsciousness complete this focus on the future. In every working relationship, whether with companies or authorities, we make a point of handling things reliably and on time for sustainably successful results.

#### A TEAM FOR ANY EVENTUALITY.

Eco consultants can draw on a strong, cohesive, experienced team. Our employees have already worked for us for years, they know our passionately high standards and reflect them in every single project. Only our pooled experience and combined skills can facilitate above-average results for solution-oriented and imaginative environmental protection with added value.





#### **OUR PERFORMANCE PROMISE.**

Legislation envisages a multitude of environmental requirements, specifications and standards at European and also national level. Compliance with them is mandatory but they should be used sensibly rather than simply ticking them off. As eco consultants, we value solutions to problems that can do "more" and serve an extended purpose – for the environment and for you as an entrepreneur. Comprehensive experience, extensive skills and ongoing knowledge transfer ensure appropriately efficient and sustainable results in the long term. In addition to our well-rehearsed team, however, we also have a network of reliable expert partners and, thanks to our high quality standards, over the years we have gained a high level of acceptance from a wide range of authorities.

# ALWAYS AN EYE ON THE FUTURE.

Imagination and innovation define a substantial part of our work. We are constantly developing; we participate in relevant advanced training courses and we are active members of various professional associations and committees (e.g. ÖWAV [Austrian Water and Waste Management Association], VÖEB [Association of Austrian Disposal Companies], etc.) and the Austrian Standards Institute. This continuous expansion of our expertise provides us with an overview of the legal and technical side of environmental solutions which is always up-to-date. Perfectly supplemented by above-average intensive R&D activities, we are equipped to deal with special challenges which demand innovative ways of thinking and a high level of problem-solving expertise.

Among others, **eco consultants** are members of the following professional associations/institutions:

- ÖWAV [Austrian Water and Waste Management Association]
- VÖEB [Association of Austrian Disposal Companies]
- Austrian Standards Institute (ASI)
- Central Federation of Court Experts
- ISWA (International Solid Waste Association)
- Chamber of Civil Engineers (ZT-Chamber)
- Greentech Cluster
- ...

# Services

CONSTRUCTION
INDUSTRY
——
PROPERTY DEVELOPMENT

CONSULTING

LANDF CONTAMII SITE

SAMPL

WASTE
MANAGEMENT
--RECYCLING

**eco** consultants

SURVEYING SURVEYING GEOINFORMATION

ANALYTIC

RESEARCH FUNDING

# ПП NATED **ENVIRONMENTAL ANALYSIS EMISSION MEASUREMENTS APPROVAL PROCEDURES BASELINE REPORT**

#### A ONE-STOP SHOP

We have been in the profession of providing legally and technically sound special solutions for all aspects of environmental technology for 20 years. We will provide you with support both in individual subareas and also within the scope of comprehensive overall projects, from analysis and licensing procedures to expert opinions and preservation of evidence monitoring. Our work always focuses on reputable, punctual and reliable handling of each and every project step while maintaining a high standard of quality. We see ourselves as your personal trusted partner and environmental specialist. The eco consultants only carry out those services which are really expedient to your goals and always add value for your company.

#### **OUR CUSTOMERS**

Our customer groups are as diverse as our range of services. Our many years of experience, extensive expertise and legal understanding make us the ideal partner for companies from a wide variety of industries as well as for public authorities and infrastructure companies such as ÖBB (Austrian Federal Railways) or Asfinag. We also work regularly with research institutes to ensure our technical lead.

#### Our customers:

- Waste management companies
- Industry and commerce
- Construction industry and property developers
- Infrastructure companies
- Federation, State, Courts
- Research institutes
- Private individuals



#### **WASTE MANAGEMENT**

Resource conservation and sustainability are currently playing an increasingly important role. A large number of technical but also legal challenges are waiting, particularly in the business field. Eco consultants assist companies to implement waste management in compliance with the law and open up new potential and competitive advantages with solution-oriented and innovative approaches.

The definition of waste is often ambiguous. Whether something is deemed to be waste in legal terms must be examined in detail since the applicability of the waste property or, where appropriate, the end-of-waste property has a massive impact on the economic efficiency of processes. Based on the solid foundation of many years of experience and the technical skills this involves and supplemented by a sound legal understanding, we will show you how innovative ideas can be used to appropriately recycle or dispose of waste. We will assist you with a wide range of measures, from analysis and assessment via funding options to demonstration of evidence, monitoring and documentation requirements e.g. in the context of EDM (Electronic Data Management) and ZAReg (Central Plant Register).

#### RECYCLING

Recycling is the order of the day, especially in the industrial sector. What is particularly interesting here is the possibility of using waste as a profitable secondary raw material. Eco consultants know how to optimise "annoying" valuable waste and your company's life cycle assessment.

We know that as a production operation, it is impossible to avoid waste completely. However, waste can certainly be reduced and at best can be recycled. On the one hand, this may be substituting primary raw materials with waste if it is suitable for reprocessing and can thus be used as a secondary raw material for new production processes. Equally, it is possible to use waste as a substitute fuel or alternative fuel. We will develop appropriate concepts for you and also support you with corresponding quality assurance to ensure compliance with all environmentally relevant requirements. Monitoring during assessment procedures provides clarification of environmental compatibility and gives you legal certainty even before your project is implemented.







#### **ENVIRONMENTAL ANALYSIS**

Eco consultants use their extensive expertise for the professional measurement of pollutants in soil, water and air, especially in particularly sensitive cases, such as hazardous waste, exhaust gas and wastewater.

Environmental analysis usually forms the basis of our projects and covers a wide range of possibilities. We measure or investigate everything that could be relevant in terms of comprehensive environmental protection. surface water, groundwater, soil, waste and air. In addition, we deal with issues involving local residents and occupational safety, such as measuring odour and noise pollution as well as checking the TLV value (threshold limit value).

Every analysis is different and requires special equipment. We have the necessary equipment; among other things, with our own state-of-the-art measuring bus we can become active on site.

As parties potentially responsible for environmental damage, industrial companies are obliged to provide evidence of no pollutant loads or only environmentally friendly pollutant loads. With comprehensive evidence-preservation monitoring programs based on environmental analysis, we will provide appropriate evidence, both for companies themselves and also on behalf of authorities, courts or local residents.

#### **EMISSION MEASUREMENTS**

If pollutants are released into the environment, they can damage nature and, in the worst case, people as well. Eco consultants offer effective protection and legal certainty using professional emission measurements tailored to your needs.

Industry is confronted with a large number of (constantly new) laws, especially when it comes to pollutants. We help you to comply with them by implementing emission measurements which are adapted to the specific requirements of your company or your production processes.

Our range of services is correspondingly comprehensive, ranging from exhaust air measurements in industrial plants and flue gas measurements in firing plants, maximum admissible concentration value measurements, noise measurements and landfill gas measurements. In addition, we help you to implement systems for selfmonitoring, emission-related plant optimisation and quality assurance.





## CONSTRUCTION INDUSTRY & PROPERTY DEVELOPMENT

When setting up new business locations and developing residential and office projects, the risk of any existing pollution due to soil contamination or the level of pollutants in the building fabric is an unpleasant burden. Eco consultants provide both property developers and companies with detailed analyses in advance to clarify the nature of real estate and buildings.

On the one hand, eco consultants will assist you with investigation of the real estate. Based on Austrian Standard S2088 (Fundamentals of Real Estate Investigation), before purchasing land we check whether there are any risks that could delay or completely challenge the implementation of your project. For this, we take samples and prepare expert opinions. Not only is this absolutely to be recommended, especially on previously polluted real estate such as industrial sites, but above all it is the client's duty. Another essential point is the soil excavation assessment, which checks the quality of the excavated material. Excavated material can only be recycled or send to landfill if the requirements of the Federal Waste Management Plan (BAWP) and the Landfill Ordinance are met.

In another area of focus, we concentrate on the building itself by comprehensively investigating harmful substances and compiling a pollutant cadastre. The statutory basis for this is the Recycling of Building Materials Ordinance and the detailed standards Austrian Standard B3151 or Austrian Standard EN ISO 16000-32.

If the building substance is correspondingly contaminated, we also create the obligatory demolition concept which records the technological implementation of redevelopment and recovery-oriented demolition.







# INCOMING GOODS INSPECTION AND LANDFILL SUPERVISION

Eco consultants provide comprehensive incoming inspection and landfill supervision services to ease the burden on landfill operators regarding their obligation to monitor and check.



In addition to this planning and approval function, we offer the entire spectrum of all necessary monitoring and checking procedures during operation which significantly lightens the workload of operators and authorities. This service starts with incoming goods of the waste to be deposited and performing identity checks. It extends to communication and support for official checks as part of periodic environmental inspections and assuming the function of the officially appointed landfill supervisory body. As highly skilled environmental analysts, we also use emission controls (leachate, landfill gas, etc.) to ensure legally compliant operation of your landfill site.

#### **CONTAMINATED SITES**

The acquisition or development of real estate always raises the question of potential contaminations present which could endanger the environment or human health. Eco consultants use real estate investigations to save you from unpleasant surprises and, if the situation arises, come up with appropriate proposals for safeguarding and remediating contaminated sites.

Eco consultants explore the history of real estate according to Austrian Standard S2088 by means of real estate investigations and prepare a corresponding risk assessment based on historical research and sampling of both the soil and the groundwater. For abandoned industrial sites which are actually contaminated, our experts work out safeguarding and remediation proposals and agree them with the authorities. The possibility of obtaining funding from the Site Remediation Fund (ALSAG), which is where our relevant funding expertise comes in useful, provides a high level of added value and financial relief for the liable party responsible for the contaminated sites.

If the result is safeguarding or remediation, we monitor the entire process to ensure the desired result. We check with clearance measurements whether safeguarding or remediation of a contaminated site has achieved its goal and the spread of pollutants can be prevented. We regularly check the property as part of the preservation of evidence monitoring to prevent any new pollutant emissions.



#### APPROVAL PROCEDURES

The concept exists for an innovative waste technology or a new process for production-integrated environmental protection. However, it is often necessary to go through an extensive approval procedure before even thinking about implementation. Eco consultants will support you with a broad range of expertise and a high level of acceptance from authorities for our quality work.

In a first step, we will prepare the submission project with all details regarding planning, process description, quality assurance, emission values, etc. This comprehensive documentation is used by the authority as a basis for assessing the suitability of your project.

Thanks to our many years of experience and wide range of work, we have precise knowledge of the regulatory landscape. We have established a very good reputation with our high quality standards, absolute reliability and extensive skills and we use the acceptance of the authorities for purposeful interaction, particularly with technical experts. In this way, we ensure perfect coordination with the authorities both in the preliminary stages and over the entire approval procedure.

And our work doesn't end when the approval has been granted: as part of monitoring and preserving evidence, we also ensure that the specified emission limits are adhered to and that you are on the right side of the (environmental) law.

#### **BASELINE REPORT**

Since 1999, it has been stipulated by law that industrial plants must not create any new contaminated sites for the environment. In order to implement the objectives of this Industrial Emissions Directive, affected industrial sites (IPPC plants) need a baseline report for soil and groundwater. Eco consultants will prepare these for you, including long-term measures for preservation of evidence monitoring.

For the baseline report, we will compile all the necessary documents, such as the substance inventory of relevant hazardous substances, carry out the corresponding analyses and assist you during the preservation of evidence monitoring. In addition, we will support you in complying with adapting to the state of the art in accordance with the BAT (best available technology) reports which appear periodically.

If the plant is later decommissioned, the baseline report serves as a basis for restoring the original status of the company site, by means of remedial measures if necessary, in conjunction with the final status report.







#### RESEARCH AND FUNDING

Innovation drives all progress. Only new ideas and technologies create a spirit of the future and secure the company's success. We eco consultants also know about the importance of lively R&D activity, both inhouse but also for our customers. We will help you to evaluate and accelerate new technologies and to acquire the best possible funding for cost-effective implementation.

Production residues that are returned to the process and no longer end up in landfill; ash which is used as an environmentally compatible fertiliser instead of being landfilled, etc. This and similar successes in the field of waste management contribute a lot to both the environment and the relevant company and may be the result of intensive research work. It is precisely such profitable ideas and the search for corresponding potential which define our work for you.

A high level of financing is usually required if new ideas are actually to be implemented. Appropriate funding support can significantly ease this burden. Our many years of experience in the funding landscape and also in the field of funded project management return a high success rate in attracting funding for cost-intensive innovations. We are committed to your project in every detail from A to Z, starting with the funding application and covering project initiation and project support through to project implementation, including any approval procedures required and ultimately commissioning. Continuous innovation lays the groundwork for sustainably differentiating oneself from the competition and securing the company's long-term success. We will gladly assist you with this too!



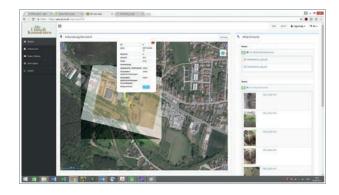


## SURVEYING & GEOINFORMATION

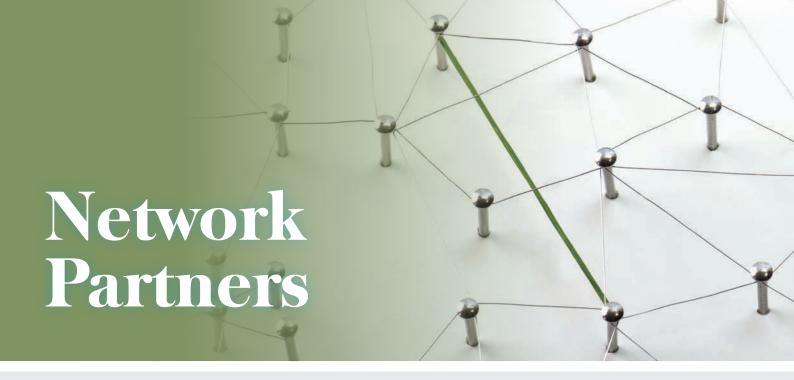
Our work focuses on samples, measurements and analyses. Surveying and geoinformation complement our range of environmental technology solutions from a single source to accurately assign and visualise measurement results. Added to this, our latest service of structural testing and damage documentation provides exciting new opportunities.

Eco consultants also carry out surveying and geoinformation tasks as part of a comprehensive environmental analysis. We place factual information in a specific spatial reference, locate the measurement results generated and visualise them on a map.

We have extended this standard range with a new system for structural testing and damage documentation which has been developed jointly with cooperation partners and can now offer you an even wider range of services. Using camera recording via drones plus automatic image recognition and geodetic methods, we check the functional performance of structures such as bridges, slope stabilisers, etc. All damage, such as cracks, is documented, visualised using Web-GIS, thus highlighting any necessary repairs.

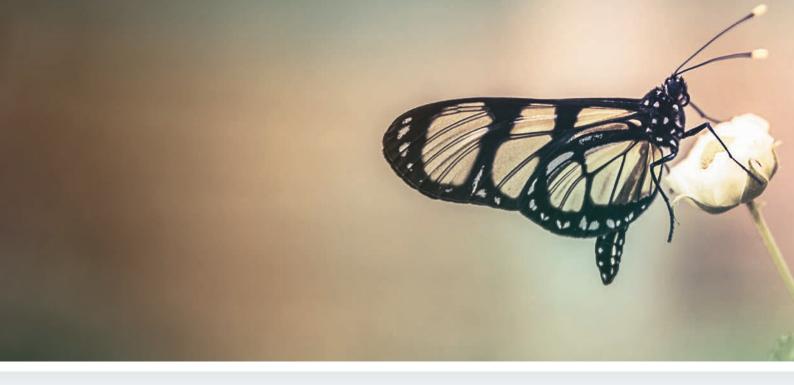






#### **NETWORK & PARTNERS**

We know how important real, well-rehearsed teamwork is for optimum results. Pooling skills and experience, however, is not just the in-house philosophy of the eco consultants but also includes our work with external partners. Firstly, we have an extensive network of accomplished implementation partners for ongoing projects. Secondly, in the area of research and development, our teaching at various universities and colleges also provides us with very good personal access to research stakeholders throughout Austria. And last but not least, the eco consultants have made a name for infrastructure companies in the road, rail and energy sector as well as in the regulatory landscape. Thanks to our extraordinary quality standards, we enjoy a high level of acceptance, especially among authorised technical experts. This diverse network to which new and interesting partners are continuously being added makes the eco consultants fit for all present and future challenges.



#### THE FUTURE AT A GLANCE

The eco consultants have been active for more than 20 years: for the environment and our customers. Our experience is one of our major strengths but constantly looking towards the future makes a significant contribution to our proven quality concept.

We always have our finger on the pulse, are geared to the needs of our customers and the market and, last but not least, we align ourselves with further developments and innovations in both the technical and legal arena. It goes without saying that we have a correspondingly high R&D quota for the development of innovations.

Our goal is to continue to grow dynamically and to create competitive advantages for our customers through new ideas and investments – now and in the future. So that we can provide our customers with all-round protection economically and in terms of legal compliance.

#### FOR ENVIRONMENTALLY-AWARE DEVELOPMENT

We have a heart for our environment; it's the very nature of our business. In each of our projects, we not only aim at (economic) added value for our customers but also at conserving and protecting our environment sustainably in the long term – by means of reduced emissions, ecologically sound recycling, remediation of contaminated sites, etc. All services provided by the eco consultants are provided in compliance with the full range of environmental regulations and in harmony with nature, so that not only we but also the generations following us can still enjoy fresh air, clean water and a diversity of flora and fauna.



# We are passionate about the environment.



