

Energy stakeholders

Helping you
become safer

SECTOR LINES



Making safety a priority in the development and operation of new energy models

The energy sector is undergoing a major (r)evolution. Risk management is key to developing sustainable energy production and operation solutions which meet the challenges of sustainable development. With dedicated expertise, Apave supports all stakeholders in the energy sector on a daily basis and in all of your project phases (upstream, operation, maintenance).

Bioenergy

What with biomass boilers, the production of biomethane (methanisation, injection of biogas into networks), cogeneration from biogas and biomass producing heat and electricity (motors/turbines), bioenergy is exhibiting strong momentum to strengthen the energy transition. With our past experience in thermal equipment and installations, Apave is at your side during all stages of your projects:

- Environmental studies (ICPE - facilities classified for environmental protection, authorisation).
- Risk analysis (HAZOP, hazard studies, ATEX, lightning, etc.).
- Pressure equipment (PE) inspection.
- Validation of energy metering chains.
- Validation of the energy efficiency calculation method.
- Assistance with the drafting of technical appendices to power sales contracts.
- Biomass sampling for basic wood analysis.
- Ash analysis.
- Noise measurement.
- Characterisation of flue gas treatment at the biomass boiler outlet.
- Measurements / performance testing and acceptance testing.
- Air pollution measurements.
- Carbon footprint.
- Operational monitoring and control.

Hydrogen

Hydrogen is an important asset in accelerating the energy transition and developing renewable energies. Safety must be the cornerstone of the production, operation, transport and storage phases. Apave acts as a trusted third party and supports you throughout each stage of your hydrogen development projects with:

- Risk analyses (HAZOP, hazard studies, ATEX, lightning, etc.).
- Pressure equipment (PE) inspections.
- Non-destructive tests (NDT).

Photovoltaic energy

Before installing and operating photovoltaic equipment, many risks must be addressed in order to guarantee the safety of the sites and workers. Apave supports you throughout your photovoltaic projects:

- **Design:** feasibility studies, design analysis, environmental assessment.
- **Construction:** securing of sites, technical inspection of constructions, verification of structural calculations, renewable energy inspections.
- **Operation:** maintenance assistance (TIR inspection of panels by drone, evaluation of HV installations, etc.).
- **Management:** electrical hazard training, prevention of fire hazards, increased performance, equipment recycling.

Nuclear

Nuclear energy requires an optimal level of safety and very specific skills to ensure the smooth operation of power plants and guarantee the safety of everyone involved.

Our expertise covers the entire life cycle of nuclear facilities including the design, manufacturing, construction, operation, maintenance and decommissioning-dismantling stages.

Throughout the world, we provide services related to safety, regulatory compliance, qualifications and the development of knowledge and skills, and we also provide specific services such as:

- ISO 19443 certification.
- Supply chain assessment.
- Risk-based monitoring.
- Safety and risk management.
- Organisation of technical support.
- Equipment qualifications.

Oil & gas

Oil and chemical production sites must meet strict standards (in particular SEVESO/ICPE) to ensure the safety of people and the environment.

Our oil & gas experts provide you with their knowledge of:

- Environmental controls (ATEX, noise, asbestos, emissions, etc.).
- Equipment qualification (SPS, HIRA, NPHS).
- Maintenance support software (MAINTA, CMMS).
- Support in site renovation (project management assistance, dealing with contaminated sites and soil, etc.).

Wind energy

Apave offers stakeholders from the wind energy sector (onshore, landed offshore, floating offshore) comprehensive safety support. From setting up the project in its environment to operating and maintaining facilities and recycling end-of-life components, including in particular:

- Feasibility studies.
- Ecological inventories, environmental assessments.
- Acoustic modelling.
- Technical inspections of the construction of wind turbine farms.
- Securing of worksites.
- Renewable energy compliance certification.
- Maintenance support for HV/LV electrical installations.
- Training sessions in electricity, working at a height, etc.
- Advice on waste recovery.

Our expertise

- 1 A partnership approach, ensuring alignment with the project's final collective target
- 2 Our multidisciplinary approach to meet your needs and guarantee the safety of all stakeholders thanks to our Sopemea, Apave Certification, BVT, NDT and Certifer subsidiaries, test centres and all our business lines (inspection, training, construction, infrastructures, consulting & technical support, certification & labels)
- 3 Our expertise in risk management in many renewable energy projects and our credentials in hydrogen systems for industry and mobility (stationary or on-board facilities)
- 4 Our awards and accreditations for example, for energy, the environment and equipment

You can find all our awards at www.apave.com



Contact us

www.apave.com

