




2023 WPC YP RO Program - Open learning online course: “Sustainable development in energy transition of the extractive industry”

Information on the course

will offer information about sustainable development for extractive industry and the opportunity to gain new skills, updated knowledge and a certificate of completion.

Subject name		Sustainable development in energy transition of the extractive industry	
	Course tutor		Dr. Eng. Iulian OFFENBERG
			<i>Industrial Engineering</i>
			<i>General Director – S. Titan Power SA Bucharest</i>
			<i>Former President of National Authority of Mineral Resources from Romania – NAMR</i>
			o2fnbrg@yahoo.com
Coordinator		Dr. Eng. Pandele NECULAE – WPC CPC	
Course Duration: 6 hours	Start date: March 15, 2023, every two weeks, Wednesday	Time: 18:00PM-18:50 PM Bucharest Time	Presentation and Examination type: Oral on Zoom Meeting Platform Registration: o2fnbrg@yahoo.com
Content			Teaching strategies
Sustainable development -definition and short history -approach -goals and description			Presentation and discussion March 15, 2022
Extractive industry and SDGs integration -approach in energy resources, perspectives, infrastructure, clean energy supply chains -SDGs integration (goals and description)			Presentation and discussion March 29, 2022
Environmental Management in Oil & Gas Exploration & Production -introduction -overview of the upstream OG industry -environmental management approaches -environmental impacts and mitigation -regulatory and other requirements			Presentation and discussion April 12, 2022
European Union Best Available Techniques for hydrocarbon exploration and production -introduction -risk management approaches -onshore BAT -offshore BAT			Presentation and discussion April 26, 2022
Energy transition -the oil and gas industry today -oil and gas in energy transitions			Presentation and discussion May 10, 2022

-risks facing the industry -strategic responses	
Exploring low-emissions pathways -low-emissions future -low-emissions pathways for transport - net-zero emissions - carbon capture and storage	Presentation and discussion May 24, 2022
Follow up <ul style="list-style-type: none"> - Prof. PhD Eng. Euring. DHC Mihai MIHAITĂ – President of AGIR and Honorary member of the ASTR - Prof. PhD. Eng. Sorin Mihai RADU - Rector of the University of Petroșani, President of Section X of ASTR - Mines, Oil, Geonomy - Prof. PhD Eng. Nicolae ILIAS – Vice-president of Section X of ASTR - Mines, Oil, Geonomy - Ass. Prof. PhD. Nicolae HAR - Head of the Geology Department of Faculty of Biology and Geology - PhD. Eng. Pandeale NECULAE – WPC CPC RO Representative - PhD. Eng. Iulian OFFENBERG – General Director of Titan Power, Correspondent member of the ASTR and AGIR – Course tutor 	Presentation and discussion June 07, 2022

Bibliography

The Sustainable Development Goals Report, 2022, United Nations, <https://unstats.un.org/sdgs/report/2022/> ;
Economist Intelligence Unit, Surviving the crisis, EIU (Energy outlook), 2023, London, <http://www.eiu.com/industry/energy> ;
N. Sekhran, B. Sheahan, B. Sullivan, Mapping the Oil and Gas industry to the sustainable development goals: An atlas, 2017, UNDP, International Finance Corporation – World Bank Group and IPIECA;
Environmental management in oil and gas exploration and production – An overview of issues and management approaches, 1997, UNEP technical publication, <https://wedocs.unep.org/handle/20.500.11822/8275> ;
Environmental management in the upstream oil and gas industry, 2020, International Association of Oil & Gas Producers (IOGP) and IPIECA;
EU, Best Available Techniques guidance document on upstream hydrocarbon exploration and production, 2019, Brussels, http://ec.europa.eu/environment/integration/energy/pdf/hydrocarbons_guidance_doc.pdf ;
E. Asmelash, R. Gorini, International oil companies and the energy transition (Technical Paper 1), 2021, IRENA (International Renewable Energy Agency), Germany, www.irena.org ;
R. West, B. Fattouh, The Energy Transition and Oil Companies' Hard Choices, 2019, Oxford Institute and Energy Studies, <https://www.oxfordenergy.org/publications/the-energy-transition-and-oil-companies-hard-choices/> ;
IEA (International Energy Agency), The Oil and Gas Industry in Energy Transitions (Insights from IEA analysis), 2020, IEA, Paris;
R. J. Johnston, R. Blakemore, R. Bell, The role of Oil and Gas companies in the energy transition, 2020, Atlantic Council Policy on Intellectual Independence, Washington, DC, www.AtlanticCouncil.org.
International Petroleum Industry Environmental Conservation Association (IPIECA), 2022, IPIECA (Fact sheets), <https://www.ipieca.org/our-work/climate/exploring-low-emissions-pathways/>
N. Iliș, S.M. Radu, I. Offenber, M. Minescu, Energy metamorphosis and resource sustainability, Days of the Academy of Technical Sciences (ZASTR Presentation), 2021, Bucharest, Romania



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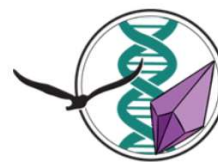
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