

CZECH STUDY TOUR

**THE NEW THINGS I HAVE LEARNED DURING THE VISITS AND
ALBANIAN SITUATION**

DIAMO-NOVE-MUZAK

- NEW TECHNOLOGY IN EXPLOITATION OF URANIUM ORE
- WITHOUT MINING WORKS (GALLERI, WELL, DYSENTERY ETC)
- REDUCE IN MAX SOLID WASTE
- SOLID AND LIQUID CLEAN WASTES
- DURING CRYSTALLIZATION PROCESS THE ALUM ($\text{NH}_4\text{Al}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$) IS PRODUCED
- ALUM IS REPROCESSED ONTO ALUMINUM SULFATE AND AMMONIUM SULFATE
- PRINCIPLE OF HYDRO BARRIERE
- TO RESTORE THE ROCK ENVIRONMENT TO A CONDITION GUARANTEEING CONTINUING USABILITY OF TURONIAN WATER OF NORTHERN BOHEMIA CRETACEOUS,
- TO DECOMMISSION BORE HOLES AND SURFACE INSTALLATIONS,
- TO INCORPORATE THE SURFACE OF LEACHING FIELDS INTO THE ECOSYSTEMS TAKING INTO ACCOUNT REGIONAL SYSTEMS OF ECOLOGICAL STABILITY AND URBAN PLANS
- MONITORING ALL THE PROCESSES
- USE OF BEST AVAILABLE TECHNOLOGJY

MOST CITY MINING LANDSCAPE

RICULTIVATION & RECREATION ACTIVITIES

- INTERLACING BETWEEN EXPLOITATION AND RICULTIVATION
- SHIFTING THE CITY AND VILLAGES
- PROTECTING AND PRESERVING HISTORIC AND ARCHITECTURAL HERITAGE
- RICULTIVATION ON THE BIG AREAS
- COMMENCING OF THE CREATION OF AN ARTIFICIAL LAKE AND START UP MEASURES TO HAVE STABILITY ON THE MINING AREA .
- RECREATION ACTIVITIES

RECREATION ACTIVITIES, IN SOKOLOV MINING SITE

(GOLF FIELDS AND ARTIFICIAL LAKE)

- ALL THE PROCESS OF RICULTIVATION
- CREATION RECREATION ENVIRONMENTS
- POPULATION ON THE RICULTIVATED SURFACES BY FLORA ELEMENTS
- POPULATION OF AQUATIC ENVIRONMENTS BY FAUNA ELEMENTS

STUDY TOUR SUMMARY

- BEST AVAILABLE TECHNOLOGY
- THE GOVERNMENT FINANCES THE RICULTIVATION PROJECT
- THE EXPLOITATION AND REMEDIATION PROCESSES CONTROLLED BY CENTRAL GOVERNMENTS
- THE LOCAL GOVERNMENT APPROVE AND CONTROL THE RICULTIVATION PROCESSES
- ALL PROCESSES ARE MONITOR ON LINE DURING THE EXPLOITATION AND REMEDIATION

THE SITUATION IN ALBANIA

HERITAGE FROM DICTATORSHIP

- AN REMEDIATION TAILINGS SOLID, HUNDREDS HA
- IN BULQIZA CHROMIUM AREA MINE ABOUT 11 MILLION M³. THOSE COVERT 2 HA SURFACE.
- IN GJEGJAN COPPER AREA MINE (BOTH OPEN PIT MINE AND UNDERGROUND MINE) ABOUT 10 MILLION M³. BUT HERE THE CONTENT OF CUPPER IS 0.28-0.3% THOSE COVERT 10 HA SURFACE
- ETC
- ETC
- ABSENT OF LEGAL FRAMEWORK



TAILING DAMS OF CUPPER TREATMENT PLAN

- KURBNESH AREA SIP. 72 500 M2
- REPS AREA SIP. 98 150 M2
- FUSH ARRËZ SIP. AREA 82 210 M2
- RRESHEN AREA SIP 21 552 M2
- REHOVA AREA SIP 32 000 M2
- GOLAJ AREA SIP 60 000 M2
- MJEDE AREA SIP 8 200 M

IN TOTAL 371612 M2 OR 0.37 KM 2

PICTURE FROM TAILING DAMS

PHOTO OF THE DAM, FUSHE ARREZ
TREATMENT PLAN



PHOTO OF THE DAM, RRESHEN
TREATMENT PLAN



REMEDIATION HERITAGE IN ALBANIA

THEY HAVE PLANT THE TREES IN THE PAST ON MINING AREA

1. TIRANA, QUARRIES IN DAJTI MOUNTAIN IN 60-70 YEARS LAST CENTURY
THE SURFACE IS 10 HA



2. . IN BULQIZA, CHROMIUM MINE

IN 80 YEARS LAST CENTURY. THERE HAVE PLANT PINE, ABOUT 8 HA, BUT
THERE CONTINUE DEPOSITION IN SURFACE THE SOLID MINE WASTES



photo in Bulqiza with pines and sterile disposal

POGRADEEC (FE-NI MINE, GURI I KUQ)

IN THIS SITE THERE IS ALSO DONE THE CULTIVATION WITH PINES AND ACACIAS
IN THE AREA OF FE-NI MINE FOR ALMOST 80 YEARS OF THE LAST CENTURY.

THE SURFACE PLANTED IS 5 HA



PHOTO OF THE PINE HILL ON THE SHORE OF OHRID LAKE

LEGAL FRAMEWORK

ALBANIA MINING LAW NR. 7796, DATE 17.02.1994

- **ART. 98**
- THE REHABILITATION OF THE SURFACE OF LAND CONCERNED IN A MINING ACTIVITY SHALL BE CARRIED OUT BY THE HOLDER OF THE MINING RIGHT IN ACCORDANCE WITH A SPECIFIC REHABILITATION PROGRAM PROPOSED BY THE HOLDER AND APPROVED BY THE MINISTER.
- ENVIRONMENTAL LAW
- LAW ON ENVIRONMENTAL IMPACT ASSESSMENT
- DECISION OF THE COUNCIL OF MINISTERS
- MINISTER'S GUIDELINES

TODAY SITUATION

- WE HAVE NOT OPEN PIT MINE FOR COAL OR OTHER MINERAL OR
- WE HAVE QUARRIES, (LIME STONE, CLAY, MURMUR, BASALTS, CHROMIUM, FE-NI ETC)
- NONE HOLDER OF THE MINING RIGHT DOES NOT REMEDIATE THE QUARRIES SURFACE
- THE MINING LAW DOES NOT OBLIGE THEM



TWO PHOTOS - STRIPPED AREAS

REMEDIATION CASES

- HAVERIK SUBJECT EXTRACTS GRAVEL AND SAND FROM THE SHKUMBINI RIVER, STARTED IN 1996, AT THE SAME TIME THIS SUBJECT HAS STARTED REMEDIATION OF THE AREA CLOSE TO THE RIVER.
- REMEDIATE AREA – 8 HA
- PLANTED 20 000 POPLAR. NOW THOSE ARE 12 M HIGH, ACACIAS E EUCALYPTUS, APPLE TREES AND DATE PALM
- BUILT A BASIN TO CULTIVATE FISH
- BUILT HOUSE TO REAR COWS, APIARIES, ETC.
- NOWADAYS THERE CAN BE FOUND WILD RABBITS, FOXES, HEDGEHOGS, TURTLES ETC.
- IT'S A PLACE FOR MANY VISITORS

HAVERIKU SUBJECT



Three photos showing the created forest, aquaculture area and fruit trees

KRIVA SUBJECT KRIVA

- KRIVA SUBJECT, EXTRACTS GRAVEL AND SAND FROM THE SHKUMBIN RIVER, STARTED THE ACTIVITY IN 1998, AND AT THE SAME TIME THE SUBJECT HAS STARTED TO PLANT TREES IN THE AREA CLOSE TO THE RIVER
- HAS PLANT ABOUT 10 000 POPLAR
- THE AIM IS TO PROTECT THE AREA FROM FLOODING AND EROSION
 -

QUARRIES IN ALBANIA

SURFACE BY CITIES

CITY	KM2	MINERAL ORE
KRUJE	8	LIME STONE, CLAY
VLORE	7.9	LIME STONE AND BITUMEN
KUKES	7	LIME STONE AND FE-NI
LEZHE	5.6	LIME STONE
TIRANE	5.1	LIME STONE
DEVOLL	4.7	FE-NI

SURFACE BY MINERAL

MINERAL ORE	KM2
FE-NI	6.7
CLAY	6.9
LIME STONE	46.5
CHROM	3.7
OTHER	72.8
TOTAL	56.0

NEW MINING LAW (DRAFT)

THE SPECIFIC OBJECTIVE OF THE LAW IS PROMOTION, DEVELOPMENT AND MONITORING OF THE ACTIVITIES RELEVANTE TO EXPLOITATION AND ELABORATION OF MINING RESOURCES IN ALBANIA THROW DETERMINATION OF RELATIONS BETWEEN THE STATE AND JURIDICALS PERSONS (ALBANIAN OR FOREIGNERS) TO BENEFIT THE MINING RIGHTS TO UNDERTAKE THE MINING ACTIVITIES AS WELL AS REHABILITATION OF THE ENVIRONMENT AT THE MINING POINT OF THE SOURCES.

OIL AND SUB PRODUCTS ARE NOT INCLUDE IN THIS LAW.

- IS IN LINE WITH EU DIRECTIVE ON MINING
- THE COMPANY BOTH STATE OR PRIVATE IS OBLIGED TO INTRODUCE REMEDIATION ACTION PLAN TOGETHER WITH THE BUSINESS PLAN.
- THE COMPANY SHOULD PUT INTO THE BANK A GUARANTEE FOR THE REMEDIATION.