



CELLAR ROW CLUB

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ANULUM'S PROJECT - CELLAR ROW CLUB

BACKGROUND

- Historical object – a **winery house** near geographical centre of Europe, south-central Slovakia, agricultural & forestry landscapes <http://lucenec.sk>
- Interesting and rich history – biggest european **synagogue** in town, reconstructed **medieval castles** in surroundings, **winter sports, caving**
<http://www.lukus.sk/synagoga> <http://grandviglas.com> <https://zamockyhotelgalicianueva.sk>
- Yet difficult socio-economical situation, poor use of renewables

MISSION

- Reconstruction into an **eco-self-sustainable object**, minimizing it's energetical consumption using all available **local sources** of energy combined with the **technology** within **perma-cultural** philosophy
- Sheltering a **social, educational, sports & wellness recovery** centre, whole year **food harvesting** and **research** capabilities, **e-transportation**
- Enlightening **education** & unlimited **support** to the local **youth**

LEGACY

- We would love to see our society raising back on it's feet morally, solving today's biggest worldwide problems in peace, using greatest progress in technology ever to fulfill all human needs. Society, that decides to stay open-minded in these difficult times, capable of surviving in **happiness** and **harmony** for **Ages** . Co-founders of the project are thankful for given opportunity - to participate on such a **fiction** ...



TECHNICAL SOLUTIONS

NATURAL INPUTS

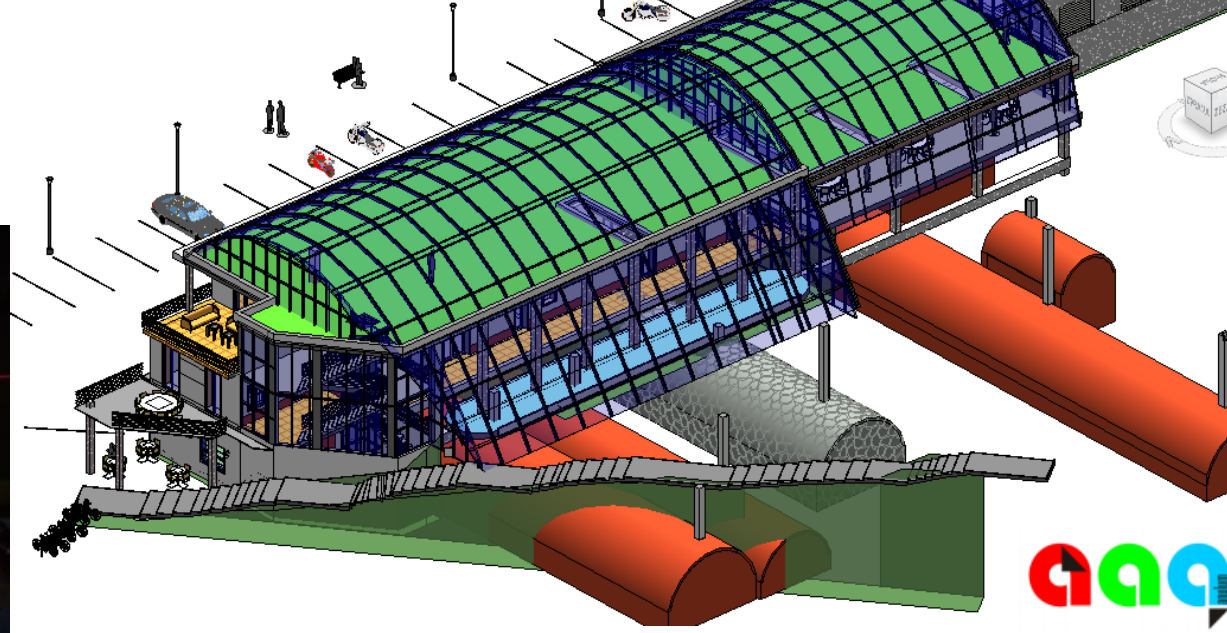
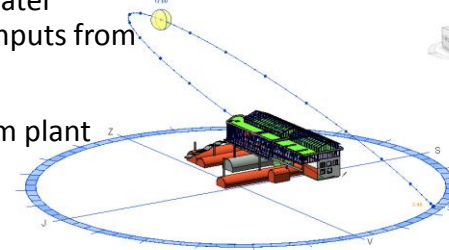
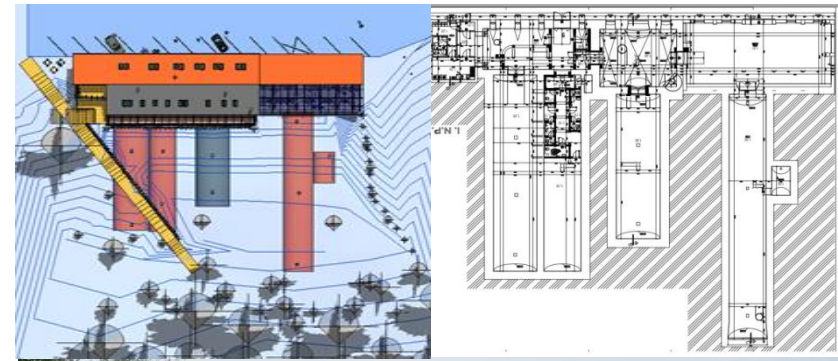
- East-west orientation, not ideal northern slope (over-dimensioned thermal insulation on northern façade is considered), 3 wells on site with cca 25m³ capacity /24hours
- Stable yearly temperature in underground cellars, heat stack effect, geothermal
- Mushrooms growing naturally in cellars, producing heat during growing cycles

POWER, HEATING & WATER

- Photovoltaics implemented directly into translucent greenhouse materials – comb. glass & ETFE foils as the final layer of objects thermal insulation
- Storing excessive electrical energy into static in-house batteries, low – voltage consumers (LED, pumps)
- Roof surface nanotech modification „no-drop“ for inner condens & recycling of rain water
- Hydrothermal storage pools, central low-temperature circulation with exchangers & inputs from various sources - solar, cascaded heat pumps and recuperation/heat recovery
- Heating & cooling via capillary floor/ceiling/wall strategically over the object
- Heat recovery of all premises incl. greenhouse, gym, pools, kitchen & oyster mushroom plant
- Each visitor's body is a potential input to the central heating system

CONTROLLING SYSTEMS

- Sensors measuring actual conditions, SW regulating required temperature & humidity in different building sectors, incl. plants watering, chemical testing & distribution
- Power management, lightning, water & air pumps, charging stations & batteries
- Company's legal, economical & business management , employee services, eTaxi
- App/web based interactive solution, permit levels , memberships , bookings, schedules
- 12-24 months testing/systems adjusting period until full potential reached



BUSINESS PLANS / PUBLIC SERVICE / ROI

- **BU's** under one roof supporting each other :
 - **Food Plant (Greenhouse + Cellar mushroom), Recovery Wellness, Gym & Kids Day Centre, Restaurant/Club, Hotel/Hostel, Salad/Smoothies/Juice Bar, eTaxi/Delivery/Shuttle**
- Considering **local economical situation**, adjusting to „dump“ prices, while still able to **deliver quality & public service** (please see tables on next pages)

REGIONAL PRECONDITIONS

population	county 100.000 (350.000 radius 40km)	town 35.000	direct neighbourhood 7.000 (radius 500m)	+ neighbouring basic school, cemetery, no public services	+ wheelchair disabled housing in direct neighbourhood
airports	Budapest 150 km	Wien 300km	BA,KE,PP within 250 km	Sliač 60km	local airport Boľkovce (2x WC in parachuting) 5km

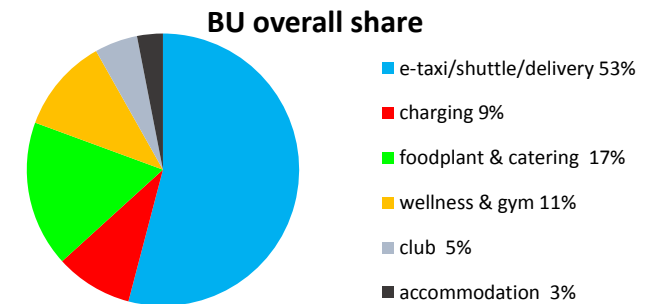
- **No known** greenhouse production (in radius of 100km), no oyster mushroom plant (100km), no wheelchair recovery centre (150+km), no indoor swimming pool (35km), no scuba-diving pool (150+km), no veggie restaurant (35km), no indoor climbing wall (40km), no cultural/educational historical eco- self sustainable premises with such a capacity (150+km), no eTaxi, nor such a technical solution and/or businesses combination project yet anywhere

CUSTOMER BASE & BUSINESS GROWTH

- Membership **BASEd**, need to be able to attract cca **400 customers** daily in any of the service BUs = 2800 weekly visitor base + kids/sport clubs + occasional & random visitors
- For further calculations using terms **capacity & efficiency**, crucial for the ROI (**cap** = customers & services, **eff** = energetical input needed/food plant harvest)
- First 4 years keeping up min 70% cap & eff, expected business **growth after year 4** by **expanding eTaxi/Charging** and optimization of processes

DEPENDANCIES, NON-PROFIT, MANDATORY

- ROI strong dependancy is on eTaxi & charging services (53% resp. 9%), but we also strongly believe this is future reality in few years (examples Sweden, Norway banning burning engines, studies predict dramatical decline in next 8-10 years + many countries worldwide investing into renewables – Austria, Germany, Denmark, China, Dominican Rep, Holland, Aruba ,...)
- Hotel services bring the lowest share, but some TO is expected from **accommodation for key employees** – 240m² available
- ROI doesn't consider **side businesses able** to shelter by the project – flowers & cemetery goods shop, bioshop, graves maintenance, neighbouring trees allee park, county cemetery parking & charging, etc ...
- All other activities – workshops, cultural & educational events, music & arts performances , expositions, biking & chess club, healthy food courses, etc. are meant to be **non-profitable**, but idea is to bring more people to chip in ...
- **Co-founders reserve cooperation with local specialized highschoools as mandatory for the project – pedagogical, agricultural, healthcare, f&b/catering, construction/geodesy, music&arts**
- Cooperation with local basic schools - swimming courses, biking club, arts rehearseals & perf, salad/smoothies distribution, etc .



BUSINESS PLANS / PUBLIC SERVICE / ROI

FOOD PLANT

- Over **2500m²** and **5.000m³** available for **whole year** vegetables, fruits, herbs, spices & flowers intensive production in **greenhouse gardens**
- Ideal conditions for harvesting **oyster mushroom** and related mycellias in **2 cellars**, cca **1500m³**, germination, drying and storage of local seasonal fruits
- R&D lab** for greenhouse & cellar food harvesting – **aquaponics**, mycology and biologically controlled eco-systems **w/o** use of **chemical fertilizing**, bees & bum´bees enviro. protection

BU	capacity m ³	usable vol - corridors, shading zones, equipments m ³	koef veggies/oyster per m ³ (expected 70pct efficiency)	yearly kg	per day harvest kg	per day for restaurant/smoothies kg	per day direct sales kg	koef	turnover direct sales yearly eur	serv/maint eur yearly	yearly eur from direct sales
greenhouse	6000	3500	3,5 kg 3x /year (4months cycle)	36750	101	80	21	eur 2/kg	15330	12000	3330
germination trays	50	50	0.2 kg per day per 1m ² tray (5x in m ³)	18250	50	25	25	eur 2/kg	18250	1200	16250
cellar mushroom plant	2500	1500	4kg 4x /year (3months cycle)	24000	65	20	45	*eur 8/kg	192000	6000	186000

*incl home delivery & seasonal pick up

FORTE CLUB - ACCOMMODATION, CATERING, CLUBBING & WINE TRADITION

- Arc-ceiled **underground premises** with combined **capacity** of **400 ppl** sheltering cultural, social and educational events for all groups & ages
- Workshops, music rehearsals, live performances, chess & poker clubs, karaoke, cinema, theater, puppeteering, stand-up comedy & sit-down discussions
- Expositions & art installations, photo & video services, events recording & post-processing, digital printing
- Restaurant/bioshop, **salad /smoothies/fresh juices bar** based on raw products harvested and/or locally supplied
- Accommodation – **600m²** (with 3.50m high ceilings) designated for **key employees & guests**, expandable capacity (**b&b** and/or **hostel style 8x 30m² apartments**)

BU	qt meals á eur 5 (30% profit)	qt tea/coffee (koef profit 50% from eur 1.50)	qt non-alc (koef profit 50% from eur 1.50)	qt alc (50% profit from eur2)	koef days/year	yearly turnover	employees	serv/maint eur yearly	yearly eur
restaurant/catering	150	150	100	50	350	207250	8	6000	1250
club prime time (300pers)	50	50	600	600	80	85400	0	4000	81400
club functions (50pers)	50	50	50	50	80	26000	0	2000	24000

BU	portions salad á 250g á 2eur	portions smoothie/juices 0,4l á 250g á 2eur	turnover yearly eur 350 days	employees	serv/maint yearly eur	yearly eur
salad/smoothies/juice bar	200	200	280000	8 (covering greenhouse and mushroom plant)	6000	74000

BU	qt bottled archive á eur 7 daily	turnover daily eur	table/tap wine koef eur 0.50/0.25l	daily TO eur	koef days	employee/service	yearly eur 50% profit
vinotheque	5	35	20l	40	350	0	13125

BU	capacity	koef	yearly turnover eur	employees	serv/maint per year eur	yearly eur
hotel/b&b	8x 30m ²	50 eur/night 300 nights/year	120000	4	12000	13000
hostel	70 pers	10eur/night 60 nights/year	40000	0	5000	35000



BUSINESS PLANS / PUBLIC SERVICE / ROI

GYMNASIUM & RECOVERY WELLNESS

- 500m² in 2 storeys **multifunctional gym**, roping centre/upper body gym with **13m vertical climbing wall**, top of the roof & garden exercise areas
- **Kids & parents day centre** - block use for various end groups/clubs with main focus on **body & soul development** – yoga and related
- **Wheelchair disabled recovery centre / alternative medical treatments** - **diving therapy, natural oxygen bar, upper body gym, streetball halfcourt**
- Proposed wellness incl. **2x swimming/diving pools 25x6x4m + 8x6x6m, saunas, whirlpool, massage, 2x 8m tall waterslides**
- **Biking & eBiking club** with service station for fans of all ages , basic **scuba diving** courses (up to 5m)

BU	capacity	block use koef	yearly turnover 70% capacity	Employees	serv/maint per year eur	yearly eur
wellness	30	e3/h 9h/day 350 days/year	236250	4 incl. trainer/pool watch	36000	100250
gym	30	e2/h 9h/day 350 days/year	126000	6 (covering rope centre) incl medic & pedagogue/animators	12000	14000
masagge	2++	e25/h 6h/day 350 days	105000	4 ++	1200	3800
climbing wall	6	e2/h + trainer, 9h/day 350 days/year	37800	1 trainer per block per 6 pers	1200	11600
rope centre/upper body gym	15	e1/h 9h/day 350 days/year	47250	0 (gym/parents)	1200	46050

eTAXI/SHUTTLE/DELIVERY

- 3 international airports in range of 300km (BUD, BA, VIE), **e-vehicles charging station 24/7**
- Proposed flotila of 8 vehicles would take over cca 8% of currently existing local Taxi business, TO calculations are undeniable, others will follow
- Food & goods **local distribution** with after sunset/before sunrise **home delivery** service

BU	e-vehicles/charging stations	daily drivers	flotila employees	koef	yearly turnover eur	yearly serv/maint eur	koef input - 1h charging cycle per station á 100kW á eur 0.10/kW	yearly eur
local taxi/shuttle	8/2	16	32	eur 1/km á 500km/day/car 365 days/year	1460000	96000	122800	862000
charging stations	0/2	0	0	20x 1h charging cycle á 100kW á eur 0.20/kW	292000	12000	146000	134000
expanding after year 4	8/8	16	64	detto	2200000	120000	292000	1400000

potentially after year 4

WOULD MAKE SENSE (not only) BTW ...

- Whole concept designed for **wheelchair** as a guest as well as **an employee** – protected workspace
- Building inhabitants **central services** – laundry, kitchen, parking, living room, library, ...
- Cover neighbouring secondary grammar school catering & county cemetery services
- 24/7 services in case of an extended interest (gym, pools, eTaxi, catering, clubs)
- After hours **free food for those in need**

... the day@ANULUM – breathe, eat , move, educate, chill & recharge ...



ROI CALCULATION

EMPLOYEE calculation

yearly eur per 1 employee	working hours	+ functions/primetimes	+ maintenance	account and legal	maintenance	employees	employees yearly eur	employees yearly 70 pct capacity
25000 (nett eur 1400/month)	180 days á 10h (1h break)	20+ (10h schichts)	20 x 4h schichts	1 employee (paperless office)	2 employees	72 (40 + 32 drivers)	1800000	1500000

INVESTITION needed (eur)

project + legal+ colaudation process	earth moving, static - steel concrete incl crane/conveyor belt up to 180 days	insulations + glass	pools - stainless steel	static greenhouse wood/alu/st steel	translucent roof + photovoltaics/batteries	lift x2	remaining infrastructures + equipments/air vent, solar, water circulation, sensors, exchangers	SW	interior design and furnishings	+ construction manpower incl local craftsmen, total 14 pers 10-12 months	startup	sub sum construction phase	+ buffer 15%
250000	400000	600000	600000	600000	1600000	300000	900000	250000	1300000+	240000	150000	7190000	8268500

e-cars á eur 150.000 + 8x e-bikes	charging stations á eur 20.000 + 8x e-bike	construction/infrastructure/electrics trafo eur	sub sum e-business eur	total investition max eur
8	8	100000	1460000	9452500

ROI yearly by 70% cap/eff

from above businesses eur yearly	-20% VAT	accountable costs	yearly profit	reinvest 11% yearly	nett ROI/year eur by 70% capacity/efficiency
1638230	327646	212600	1523184	167550,24	1355633,76

ROI 10 YEAR PLAN (considering expanding eBusiness after year 4)

year of investment	year 0 construction phase	year 1 testing & systems adjusting, startup	year 2 (70 % capacity/efficiency)	year 3	year 4 (first exchange of e-vehicles flotila)	year 5 (expanding charging/taxi capacities)	year 6 (full capacity)	year 7 (second exchange of e-vehicles flotila)	year 8	year 9	year 10 - min lifespan of equipments/greenhouse materials
yearly eur	0	0	1355633,76	1400000	700000	400000	2800000	2000000	2800000	2800000	2800000
ROI	-8650000	-8650000	-7294366,24	-5894366,24	-5194366,24	-4794366,24	-1994366,24	5633,76	2805633,76	5605633,76	8405633,76

- Reconstruction is on-going, sponsored 100% by co-founders with help of supporters/volunteers, current status with all local relations are **must to see**
- Offer for an investor/s is **ROI (year 7+) and/or share on business and/or share on building and/or 120 m² mezzo apartment own-designed**



... plan and share the day@ANULUM – breathe, eat , move, educate, chill & recharge ...

... typical customer – **local teacher Števká with 2 pre-schools Jakub & Sofia**

- **Limited budget/ 12 eur**, coming 1-2 times a week,
- Teaches classical music but likes also groovy jazzy disco, husband doesn't
- Member, books free slots online, considers swimming course for Jakub

customer value	yoga class for moms & kids 1h	smoothies x3	wellness/swim for Števká 1h	rope centre for kids with an animator 1h	sum	membership discount 30%
price for service eur	6	6	3	2	18	12

- Or she leaves both punks there and finally could mind her own business for half a day

... typical customers – **local retired couple Terezka & Jožko**

- **Limited budget/ 12 eur**, coming 1-2 times a week , usually on their own bikes
- Jožko still plays akordeon and chess with friends, Terezka loving folklor & theatre
- Learning to book online, prefer not to be members of any club

customer value	wellness	salad x2 own selected, veggies picked from the garden	coffee for Terezka	glass of local red wine for Jozef	sum
price for service eur	6	4	1,50	0,50	12

- Or in case of bad weather - eTaxi door2door within the town, + extra 3 euros incl. both bikes

... typical customers – **local teenage lovers Miško & Zuzka**

- **Limited budget/5 eur**, coming almost daily as they are also part-timing @functions
- Both preparing for further education outside home town
- Miško became a passionate climber, Zuzka swims like a submarine

customer value	climbing wall Miško Incl trainer	swim Zuzka incl trainer	smoothies	employee discount 50 %	sum
price for service eur	3	3	4	5	5

- Both dancing hip-hop since ever & both enjoy karaoke evenings with friends

... uncommon visitors – **spanish student group Gabriela, Rodrigo, Manu & Pau**

- **Economy budget /44 eur per person = eur 176 for the group**, booked online
- Purpose of the trip – party party party, following their favourite techno dj
- Arriving Friday lunchtime by train from Bratislava, continue to Budapest the next day
- Don't know if they ever return, but they defo going to recommend

value	eTaxi train station both ways	hostel	all you can eat 18h	friday night primetime entry	8 Drinks or 4 bottles of wine	bike rental Manu & Pau	yoga for couples Gabriela & Rodrigo	wellness & swim all 1h	sum group
price eur	4	4x10	4x12	4x10	20	2x2	2x2	4x3	4x44 = 176

- All 4 passing vegetarian cooking course as a bonus before leaving on Saturday afternoon, preparing their own snacks for the road

... rare first time customer – **business owner Yuji from Japan for 4 days**

- **Unlimited budget**, but limited possibilities - Yuji is wheelchair disabled
- Deeply is interested in architecture, being on european trip, flying in/out from Vienna
- In 4 days visits 4 major castles in 100km radius, gets therapies, plays streetball with local guys

customer value	eTaxi incl personal assistent 2x8h + airport terminal both ways	hotel	all you can eat 24h	wellness incl diving therapy, physioterapeut 2h daily	rope centre/upper body gym 1h daily	massage daily 1h	Sum
price for service eur	2x200+2x50	4x50	4x20	4x2x20	3x1	3x25	1018

- Yuji claims he can play poker ... weell he can, winning monthly tournament on the last night, beating 25 chipping co-players and gaining 1000 eur prize money ... he is coming back every year after ...



GENESIS

late 2010

- Buy, cleaning, survey

2011 – 2013

- Conservations, planning & studies
- Cont cleaning, minor reconstruction works
- Archeological works under the cemetery
- New canalization system, basic infrastructures

2014 - 2015

- Major reconstruction works – extra floor & partial new flat roof (steel/concrete „spyrol“ structure)
- Partial insulations, greenhouse , statics lift & pool #2
- Stucka bricklaying

2016 - 2017

- West wing apartment & therase static, wood works
- Expanding IT, electricity & water infrastructures
- Capillary floor & wall heatings, pressure tank, heat pump installations, stucka bricklaying, ...
- Q4 investment ??

2018

- Q2 club/restaurant & 1x 70sqm apartment completed for colaudation process
- Q4 end of construction/start of testing phase

