

«IT SEEMS THAT PERFECTION IS FINALLY ATTAINED NOT WHEN THERE IS NO LONGER ANYTHING TO ADD, BUT WHEN THERE IS NO LONGER ANYTHING TO TAKE AWAY...»

> Antoine de Saint-Exupéry Aviator and Writer, 1900-1944. Terre des Hommes, 1939.



TABLE OF CONTENTS_

004_ABSTRACT.

005_INTRODUCTION.

006_OBJECTIVE: A SUSTAINABLE LIFESTYLE.

007_LIVING IN 2025: TARGET CUSTOMERS.

008_COVID GENERATIONS? IMPACT OF THE PANDEMIC ON GENRATIONS Y AND Z.

009_MENTAL HEALTH: THE SOURCES OF STRESS AND ANXIETY IN GEN'S X, Y AND Z.

010_THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT.

011 PRELIMINARY CONCLUSION.

012_PROBLEMS AND QUESTIONS.

013_CIRCULARITY: CHANGING HOW WE DO THINGS.

014_CIRCULARITY: CONTROLLING THE LIFECYCLE.

015_SLOW LIFE.

016_SCENARIO: THE GRAND TOUR, A HEALING JOURNEY.

017_SCENARIO: THE GRAND TOUR, A HEALING JOURNEY.

018_PERSONA.

019_CONCLUSION.

020_PERSONAL BRIEF.

021_SAAB, THE REBIRTH - THE NYTÄNDNING PROJEKT.

022_THE NYTÄNDNING PROJEKT: FROM PLANES TO GRIFFINS.

023_THE NYTÄNDNING PROJEKT: S.A.A.B. SWEDISH AUTOMOTIVE AKTIEBOLAGET.

024_THE NYTÄNDNING PROJEKT: FROM NINES TO NAMES.

025_THE NYTÄNDNING PROJEKT: FAMILY MATTERS.

026_THE NYTÄNDNING PROJEKT: FACTORY RECONVERSION.

027_SAAB ODIN: FROM THE INSIDE OUT, INTERIOR ARCHITECTURE STUDY.

028_SAAB ODIN: FUEL CELL HYDROGEN, PACKAGE STUDY.

029_SAAB ODIN: FUEL CELL PACKAGE STUDY, FINAL PACKAGE AND BENCHMARK.

030_SAAB ODIN: AERODYNAMICS.

031_SAAB ODIN: INTERIOR INSPIRATIONS.

032_SAAB ODIN: INTERIOR RESEARCH.

033_SAAB ODIN: INTERIOR RESEARCH.

034_SAAB ODIN: EXTERIOR INSPIRATIONS.

035_SAAB ODIN: EXTERIOR RESEARCH.

036_SAAB ODIN: EXTERIOR RESEARCH.

037_SAAB ODIN: PHOTOSHOP RENDERS.

038_SAAB ODIN: INTERIOR 3D RENDERS.

040_SAAB ODIN: INTERIOR 3D RENDERS.

041_SAAB ODIN: INTERIOR 3D RENDERS.

042_SAAB ODIN: INTERIOR 3D RENDERS.

043_SAAB ODIN: EXTERIOR 3D RENDERS.

044_SAAB ODIN: EXTERIOR 3D RENDERS.

045_SAAB ODIN: EXTERIOR 3D RENDERS.

046_SAAB ODIN: EXTERIOR 3D RENDERS.

047_BIBLIOGRAPHY AND REFERENCES.

048_THANK YOU!

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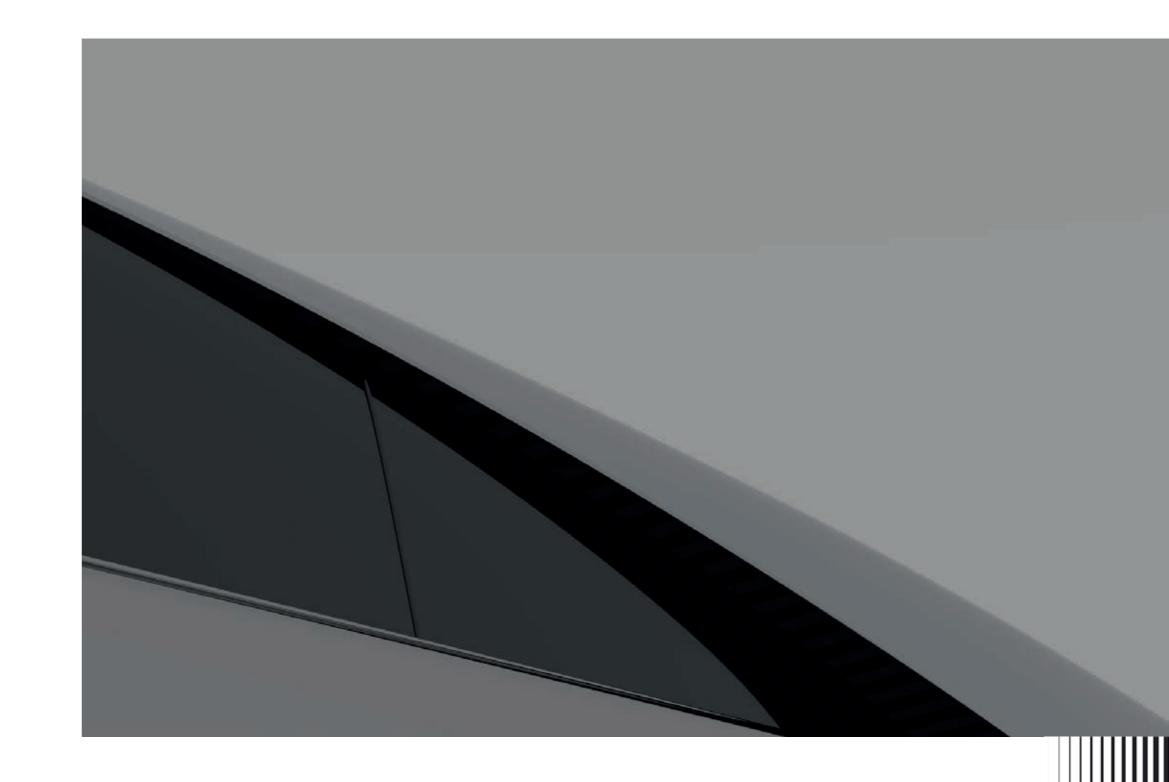
ABSTRACT_

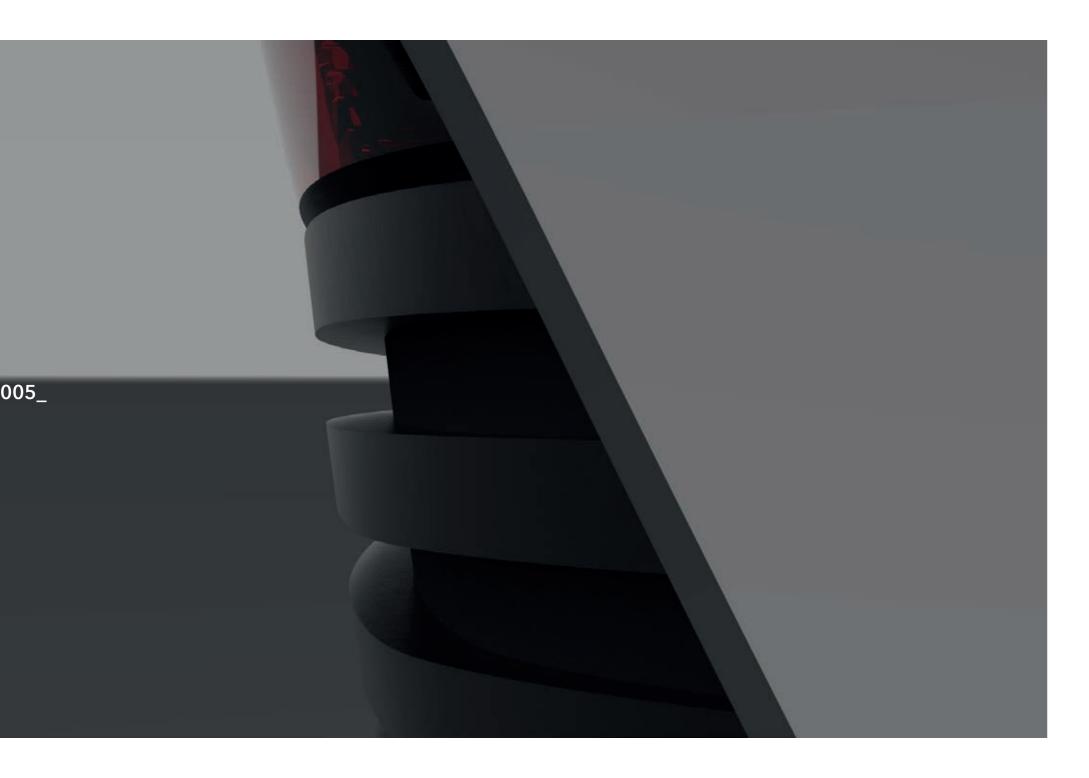
THE COVID-19 PANDEMIC HAS IMPACTED US ALL IN WAYS THAT GO FURTHER THAN WE CAN MEASURE. THERE IS NO PART OF OUR SOCIETIES THAT WERE LEFT UNTOUCHED.

BUT THE CONSECUENCES ARE NOT ONLY NEGATIVE. DURING THE LOCKDOWNS, FACING THE FRAGILITY OF OUR LIVES AND CIVILISATION, A LOT OF PEOPLE WERE ABLE TO RECONNECT WITH THEMSELVES AND DECIDED TO CHANGE WHATEVER WAS WRONG. AT THE SAME TIME, WE ALL OBSERVED HOW OUR WAY OF LIVING WAS DESTRUCTIVE FOR THE ENVIRONMENT AND HOW SLOWING DOWN AND BEING CAREFUL HAD INMEDIATE EFFECTS AND HOW NATURE COULD HEAL IN UNSUSPECTEDLY FAST WAYS. IT ALL SHOWED US THAT ANOTHER WAY WAS POSIBLE, A BETTER WAY EQUALLY BENEFICICAL FOR US AND NATURE, MORE SYMBIOTIC, MORE NATURAL.

MY SECONDARY RESEARCH EVIDENCED THAT THE PANDEMIC REVEALED SOME HIDDEN PROBLEMS, LIKE MENTAL HEALTH ISSUES THAT WERE THE SYMPTOMS OF OUR WAY OF LIFE. THE LOCKDOWNS AND RESTRICTIONS ALSO REVEALED TO THE GENERATIONS X, Y AND Z HOW UNHEALTHY THEIR LIFES WERE AND MOTIVATED THEM TO TAKE THE LEAD FOR CHANGE. TRANSPORTATION HAS A CENTRAL ROLE IN THAT CHANGE TOWARDS A SUSTAINABLE LIFE AND SOCIETY. IT IS IN OUR NATURE TO TRAVEL. IT HAS A HEALING EFFECT ON OUR PHYSICAL AND MENTAL HEALTH. AND IT IS POSSIBLE TO DO IT IN A SUSTAINABLE WAY.

MY RESEARCH LED ME TO PROPOSE A SUSTAINABLE VEHICLE, BASED ON THE CIRCULAR ECONOMY FOR LONG DISTANCE TRAVEL. THE AIM OF THE VEHICLE IS TO PROVIDE A SAFE, CALM, RELAXING, MINIMALISTIC AND HEALING PLACE TO DISCONNECT FROM INTRUSIVE TECHNOLOGY AND ENJOY THE JOURNEY.





INTRODUCTION_

THE 2020/21 LOCKDOWNS SHOWED US HOW MOBILITY IS ESSENTIAL IN OUR LIVES. IT'S ONE OF OUR MOST FUNDAMENTAL FREEDOMS, IT BRINGS US CLOSE TO EACH OTHER, IT PROVIDES US NEW EXPERIENCES AND ALLOW US TO EXPAND OUR KNOWLEDGE OF OUR ENVIRONMENT. LAST BUT NOT LEAST IT'S ALSO A FORMIDABLE SOURCE OF PLEASURE.

BUT IF WE CONTINUE THE MOBILITY MODEL OF THE LAST CENTURY, THEY WILL BE NO MORE ENVIRONMENT TO DISCOVER AND WE WILL PUT OUR OWN EXISTENCE (AS A SPECIES) AT RISK.

LUCKILY FOR THE PLANET (AND US), THE CHANGE AS STARTED. AS WRITTEN BY NICHOLAS STAFFORD IN A FORM TRENDS ARTICLE « THE AUTOMOTIVE INDUSTRY IS GOING THROUGH AN EVOLUTIONARY ADJUSTMENT AS WE SEE THE EMERGENCE OF AN INDUSTRY-WIDE TRANSITION FROM INVESTMENT IN GASOLINE INTERNAL COMBUSTION ENGINE (ICE) POWER TO BATTERY ELECTRIC POWER AND AUTONOMOUS VEHICLES ».

THE AUTOMOTIVE INDUSTRY IS IN A SHIFTING MOMENT THAT IS REVOLUTIONISING THE OBSOLESCENCE ORIENTED WAY IN WHICH WE PRODUCED, USED AND DISPOSED OF CARS SINCE THE 1950S. SOCIAL CONSCIOUSNESS, ENVIRONMENTAL AND WORK REGULATIONS, TECHNOLOGICAL PROGRESS AND EXTREME WEATHER CONDITIONS ARE PUSHING FOR CHANGE. ALL COMBINED, IT IS LIKE ALL HUMANITY IS WAKING UP OUT OF CHILDHOOD INTO ADULTHOOD.

In the most recent years, I have seen some progress in different areas. Some constructors have converted their first vehicles into electric cars, others have improved their production lines, but it is very frustrating for me to observe that none has done a complete work from A to Z to really « (R) evolutionise » the automotive industry to face the challenges of the 21st Century.

THE PROCESS OF THINKING, PRODUCING, USING AND RECYCLE ANY OBJECT, IN THIS CASE A VEHICLE, CAN'T BE DONE ANYMORE WITHOUT CONSIDERING, INCLUDING AND INVOLVING ALL THE PROCESSES, PEOPLE AND PLACES THAT ARE DIRECTLY AND/OR INDIRECTLY TOUCHED BY IT DURING ITS ENTIRE LIFE CYCLE.

AN ESSENTIAL AIM OF THIS VEHICLE, THROUGH ALL ITS LIFE CYCLE, IS TO REDUCE THE ARM TO NATURE TO ZERO, OR TO ITS MINIMUM POSSIBLE.

THE ELECTRIFICATION OF VEHICLES OPENS UP NEW POSSIBILITIES AND HAS A DIRECT IMPACT ON THE USAGE, THE INTERIOR SPACE, THE HANDLING AND DRIVING SENSATIONS.

THE BIG GOAL OF THIS PROJECT IS TO PROPOSE A VEHICLE THAT RECONCILIATES REASON WITH PASSION.



OBJECTIVE: A SUSTAINABLE LIFESTYLE_

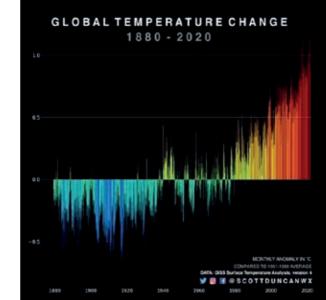
LIVING IN 2025: STATE OF THE WORLD.

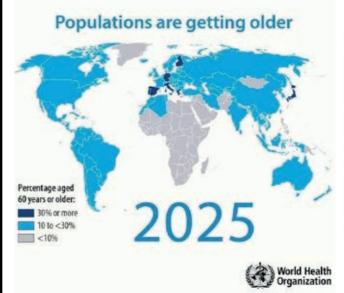
BASED ON THE CURRENT TRENDS, AND GIVEN THE CLOSENESS OF IT, IT IS EASY TO IMAGINE WHAT 2025 COULD LOOK LIKE. WE KNOW THAT THE FUTURE STARTS NOW, BUT NO MATTER WHAT WE DO TODAY, WE WILL INHERIT A SERIES OF UNSTOPPABLE THREATS LIKE GLOBAL WARMING, THE AGEING OF THE DEVELOPED COUNTRIES POPULATION OR THE POPULATION INCREASE AND THEIR MIGRATION TOWARDS CITIES THAT WILL NEED DAMAGE LIMITATION. HOPEFULLY, WE COULD BE FINALLY LEAVING THE PANDEMIC STATE OF COVID-19 TOWARDS AN ENDEMIC SITUATION. BUT THE ALL THE SECONDARY HEALTH EFFECTS OF IT WILL STILL HAVE TO BE IDENTIFIED AND TREATED.

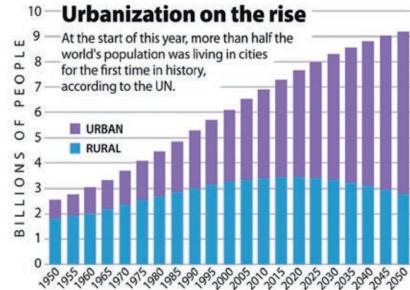
SCIENCE AND TECHNOLOGY WILL BE THE PILLARS OF A SUSTAINABLE FUTURE. HYPER CONNECTIVITY WILL CONTINUE ITS EXPANSION IN ALL THAT WE'LL USE. COMMUNICATIONS AND TRANSPORTATION WILL CONTINUE THEIR RACE TOWARDS HIGH CAPACITY/EFFICIENCY. TECHNOLOGY WILL ALSO HELP TO MET THE CLIMATE WARMING LIMITATION OBJECTIVES THROUGH GREEN ENERGIES AND BY IMPROVING THE WAY WE WILL PRODUCE OUR INCREASING NEEDS OF RAW MATERIALS AND FOOD.

Al, QUANTUM COMPUTING AND ROBOTISATION WILL START ENTERING OUR LIVES WITH THE OBJECTIVE OF IMPROVING OUR PRODUCTIVITY AND EFFICIENCY. BUT IT COULD ALSO PRESENT A THREAT IF MISMANAGED.

Ultimate expression of human progress and inequalities, space tourism will continue its expansion.





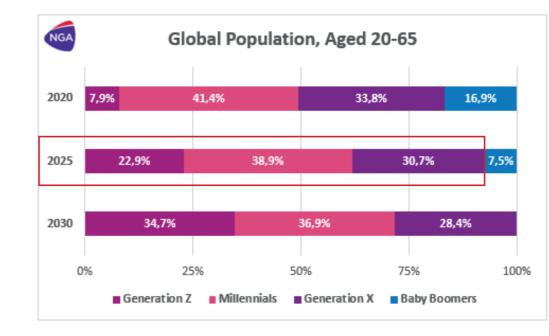


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GENERATIONAL REPARTITION IN 2025

	BORN	AGE TODAY	AGE IN 2025
Silent	1925 -1945	96 - 76	100 - 80
Boomer	1946 -1964	75 - 57	79 - 61
X	1965 -1979	56 - 42	60 - 46
Millenials (Y)	1980 -1995	41 - 26	45 - 30
z	1996 -2009	25 - 12	29 - 16
Alpha	2010 -2025	11	15 - 0



LIVING IN 2025: TARGET CUSTOMERS.

The primary target customers are mostly from the generations X, Y and Z as they are professionally active and can potentially afford buying/renting a car. Boomers are not excluded but are secondary target.

- XYZ GEN REPRESENT 92,5% OF THE WORKFORCE IN 2025.
- Their needs in mobility are intensive.
- THEY HAVE IN COMMON TO HAVE LIVED THROUGH THE TRANSITION BETWEEN ANALOGICAL AND DIGITAL AND BETWEEN FOSSIL AND RENEWABLE ENERGY-FUELLED ECONOMIES.



COVID GENERATIONS? IMPACT OF THE PANDEMIC ON GENERATIONS Y AND Z.

TRAVEL

AS REPORTED BY A 2021 SURVEY FROM DELOITTE, THE PANDEMIC HAS CHANGED THE PRIORITIES OF ALL THE WORLD'S POPULATION. GENERATIONS X, Y AND Z ARE ESPECIALLY EAGER TO REGAIN THEIR FREEDOM AND WANT TO MAKE UP FOR ALL THE LOST TIME, NOT ONLY DURING THE LOCKDOWNS, BUT FOR ALL WHAT THEY DIDN'T DO BEFORE THE PAN-DEMIC. TWO-THIRDS OF GEN Y AND Z ARE «EXPECTING TO MAINTAIN OR INCREASE THEIR RATE OF PERSONAL OR WORK TRAVEL AFTER PANDEMIC RESTRICTIONS ARE LIFTED».

ENVIRONMENT

AT THE SAME TIME, THE LOCKDOWNS ALSO SHOWN THAT CHANGE WAS POSSIBLE IN THE ENVIRONMENTAL ASPECT AND THAT INDIVIDUAL ACTIONS CAN HAVE AN IMPACT. IN THE SAME DELOITTE SURVEY, ALMOST 70 % OF BOTH GENE-RATIONS WERE OPTIMISTIC ABOUT THE FUTURE.

BUSINESS RELATIONSHIP

ALMOST A THIRD OF THE SURVEY'S RESPONDENT SAID THAT THEY STARTED, DEEPENED, STOPPED OR LESSED THEIR CONSUMER RELATIONSHIP WITH BUSINESSES DUE TO THEIR POSITIVE OR NEGATIVE IMPACT ON THE ENVIRONMENT.

MENTAL HEALTH

Surprisingly, the levels of stress and anxiety among Gen Y and Z hasn't changed during the pandemic. THAT BEING SAID, IT REMAINED REALLY HIGH, PARTICULARLY FOR WOMEN.

% who strongly/tend to agree with the statement, "The environmental changes seen during the pandemic make me more optimistic"

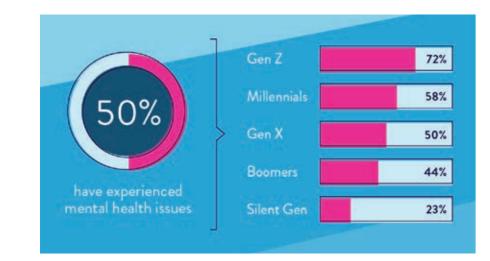




LEVELS OF STRESS HAVE REMAINED HIGH THROUGHOUT THE PANDEMIC, PARTICULARLY FOR WOMEN

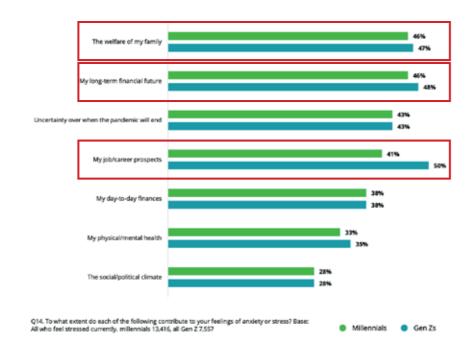






TOP STRESS DRIVERS

% who said the following factors contribute to stress



MENTAL HEALTH: THE SOURCES OF STRESS AND ANXIETY IN GEN'S X, Y AND Z.

THE DELOITTE SURVEY DETECTED THAT THE LEVELS OF STRESS AND ANXIETY AMONG GEN Y AND Z HADN'T CHANGED DURING THE PANDEMIC BUT WERE ALREADY REALLY HIGH, PARTICULARLY FOR WOMEN, PRIOR TO IT.

In an article about mental health, Natasha Devon (Devon, N. (2021). Seems to confirm that the generations X, Y and Z are experiencing more mental health issues than their predecessors.

THE DELOITTE SURVEY GOES INTO THE DETAILS OF WHAT GENERATES STRESS.

IT SEEMS THAT THE BIGGEST STRESS FACTORS ARE LINKED TO ANTICIPATING OR PLANNING THE FUTURE, LIKE THE JOB/CAREER PROSPECTS, THE LONG-TERM FINANCIAL FUTURE OR THE FAMILIES WELFARE.

As reported by the World Health Organization: "Mental health conditions can have a substantial effect on all areas of life, such as school or work performance, relationships with family and friends and ability to participate in the community. Two of the most common mental health conditions, depression and anxiety, cost the global economy US\$ 1 trillion each year."



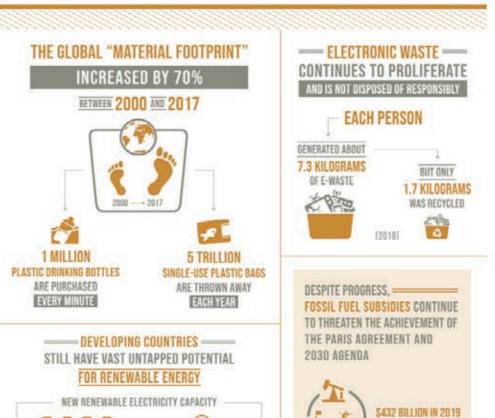


THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT.

ADOPTED BY UNITED NATIONS MEMBER STATES IN 2015, THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT FIXES 17 Sustainable Development Goals which are an urgent call for action by all of us. All countries re-COGNIZE THAT ENDING POVERTY MUST GO HAND-IN -HAND WITH TACKLING CLIMATE CHANGE AND STRATEGIES THAT IMPROVE HEALTH AND EDUCATION, REDUCE INEQUALITY AND SPUR ECONOMIC GROWTH.



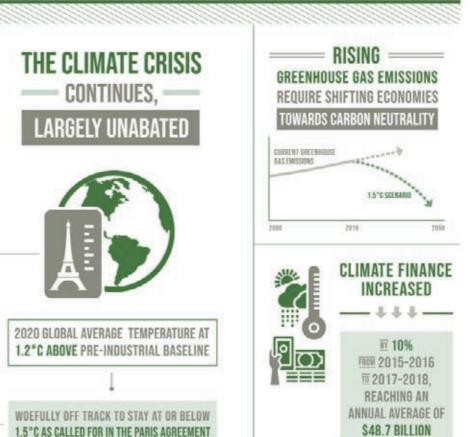
ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS





THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2021: UNSTATS.UN.ORG/SDGS/REPORT/2021/

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



125 OF 154 DEVELOPING COUNTRIES ARE FORMULATING AND IMPLEMENTING NATIONAL CLIMATE ADAPTATION PLANS



THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2021: UNSTATS.UN.ORG/SDGS/REPORT/2021/





PRELIMINARY CONCLUSION.

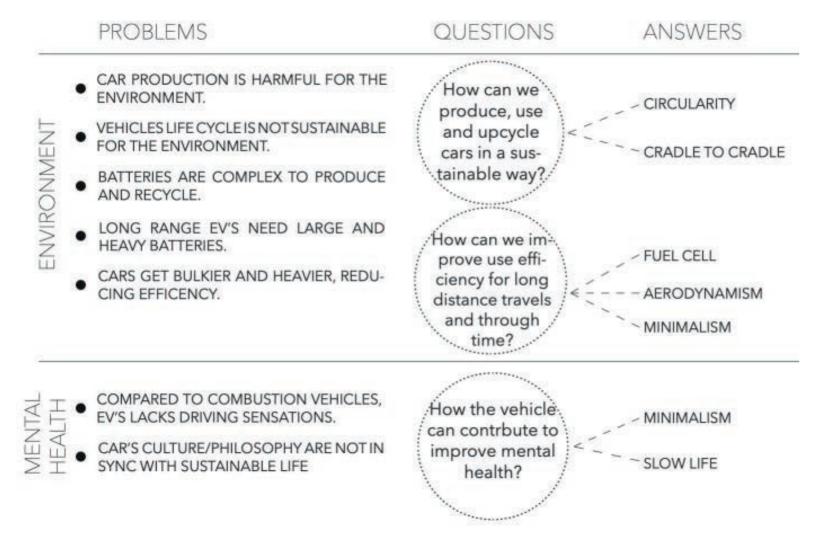
The life after the pandemic will be different. And for the generations X, Y and Z, it will mean a sustainable life style that embraces everything, from travel, to shopping and possibly also a better life-work balance that reduces stress and anxiety.

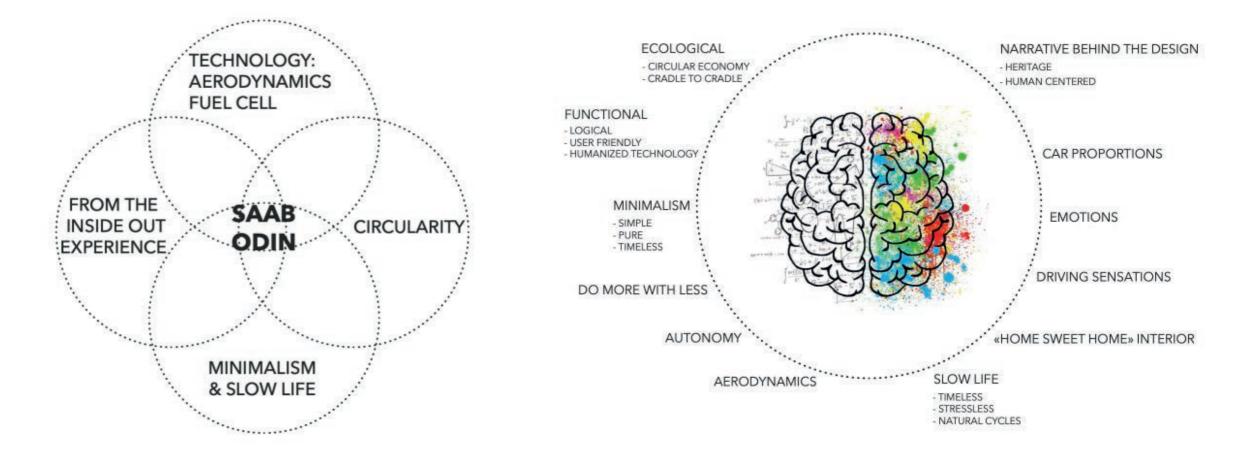
My objective is to respond to these points with a sustainable vehicle that allows zero emissions travel in a comfortable and peaceful manner. I see my vehicle as a piece of a wider puzzle towards a more sustainable life style.



PROBLEMS AND QUESTIONS_

IDENTIFYING THE PROBLEMS AND POSSIBLE ANSWERS.







CIRCULARITY: CHANGING HOW WE DO THINGS.

AS DESCRIBED BY THE ELLEN MCARTHUR FOUNDATION, THE CIRCULAR ECONOMY IS BASED ON THREE PRINCIPLES, ALL DRIVEN BY DESIGN:

1) Eliminate waste and pollution:

WE NEED TO CONSIDER WASTE AND POLLUTION AS DESIGN FLAWS RATHER THAN INEVITABLE BY-PRODUCTS OF THE THINGS WE MAKE.

BY CHANGING OUR MINDSET AND HARNESSING NEW MATERIALS AND TECHNOLOGY, WE CAN ENSURE THEY'RE NOT CREATED IN THE FIRST PLACE.

2) CIRCULATE PRODUCTS AND MATERIALS:

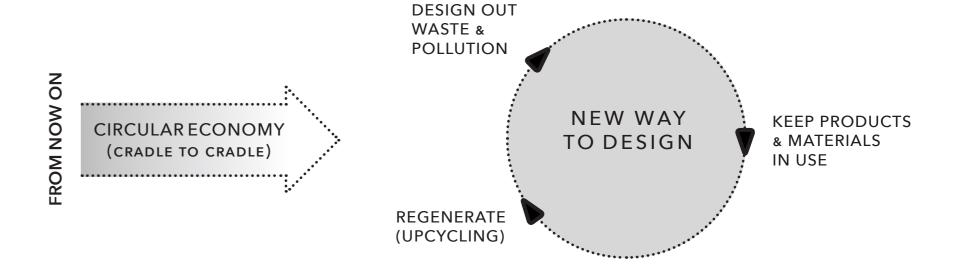
WE CAN DESIGN PRODUCTS TO BE REUSED, REPAIRED, OR REMANUFACTURED. BUT MAKING THINGS LAST FOREVER ISN'T THE ONLY SOLUTION.
WHEN IT COMES TO PRODUCTS LIKE FOOD OR PACKAGING, WE SHOULD BE ABLE TO KEEP THEM IN CIRCULATION, SO THEY DON'T END UP IN LANDFILL.

3) REGENERATE NATURE:

THERE'S NO CONCEPT OF WASTE IN NATURE. EVERYTHING IS FOOD FOR SOMETHING ELSE - A LEAF THAT FALLS FROM THE TREE FEEDS THE FOREST. BY RETURNING NUTRIENTS TO THE SOIL AND OTHER SYSTEMS, WE CAN ENHANCE NATURAL RESOURCES.









CIRCULARITY: CONTROLLING THE LIFECYCLE.

THE LIFE CYCLE OF A PRODUCT CAN BE CONTROLLED IN TWO, NON-EXCLUDING WAYS:

1) ACTIVE LIFE CYCLE CONTROL:

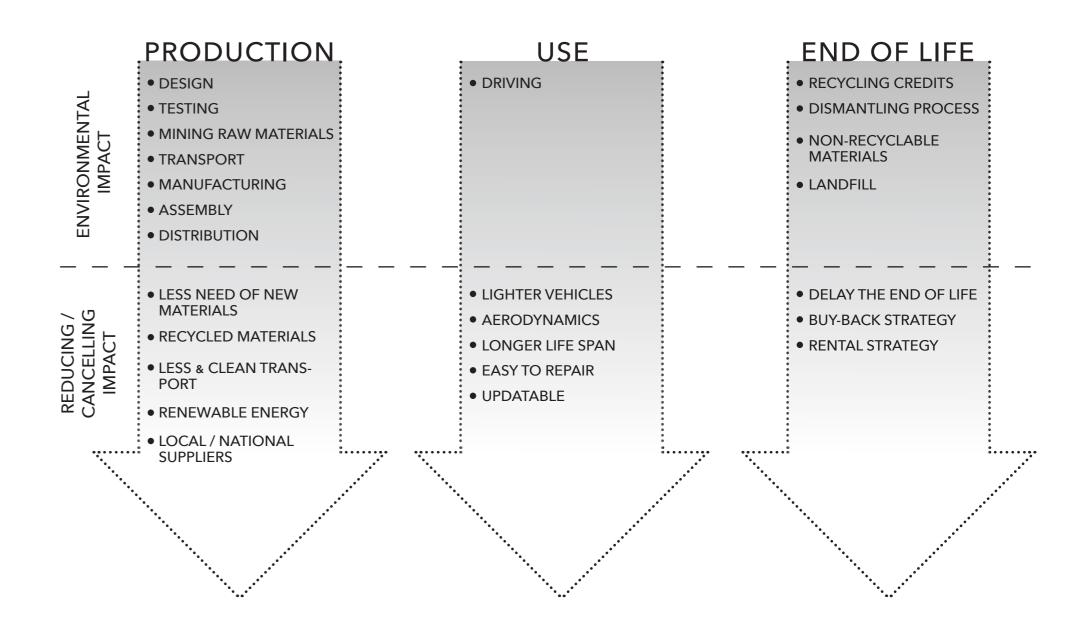
Consists on non giving the property of the product to the user. This way, when the product reaches the end of its life, the owner (which is also who built it) is responsible of its return into the system by a complete up-cycling or by replacing the needed parts. The product doesn't disappear in nature.

2) Passive/indirect life cycle control:

CONSIST ON DESIGNING AND USING SIMPLE AND EASY TO MANUFACTURE, RECYCLE, ASSEMBLE AND DISASSEMBLE PARTS. SOME EXAMPLES COULD BE:

- REDUCING THE AMOUNT OF PARTS,
- NAKED AND ANODISED METALS INSTEAD OF CHEMICAL PAINTS,
- RECYCLED MONO-MATERIALS INSTEAD OF COMPOSITES,
- 3D PRINTING TO REDUCE OFFCUTS

LESS AND SIMPLER COMPONENTS AND MATERIALS ALSO HAVE A GREAT SECONDARY EFFECT; THEY REQUIRE LESS ENERGY TO BE PRODUCED.







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SLOW LIFE.

THE SLOW MOVEMENT

THE SLOW MOVEMENT AIM IS TO RECONNECT US WITH FOOD, PLACES, PEOPLE AND LIFE BY SLOWING DOWN. IT'S AT THE BORDER BETWEEN ECOLOGY, MINIMALISM, ORGANIC NUTRITION AND PHYSICAL AND MENTAL WELLBEING.

In a way, and without knowing it, a lot of people have experienced certain aspects of slow life during the recent lockdowns, and it was in most cases really appreciated. We all stopped and reconnected with ourselves and nature.

THE AIM OF THE SLOW MOVEMENT IS WELL EXPLAINED BY CARL HONORÉ (2004) «THE CENTRAL TENET OF THE SLOW PHILOSOPHY IS TAKING TIME TO DO THINGS PROPERLY, AND THEREBY ENJOY THEM MORE.».

DOWNSHIFTING

Downshifting consists in people who adopt long-term voluntary simplicity in their life. They accept less money through fewer worked hours in order to have time for the important things in life. Downshifters also place emphasis on consuming less in order to reduce their ecological footprint.

There are two primary aspects to downshifting. One is about connection – connection to life, family, food, place – and the other is about maintaining a healthy balance – balance in the personal, work, family, spiritual, physical, and social aspects of their life.

BASICALLY DOWNSHIFTERS SEEK A LIFE FILLED WITH MORE PASSION AND PURPOSE, MEANING, FULFILMENT AND HAPPINESS. A LIFE TO LOOK BACK ON WITH NO REGRETS.



SCENARIO: THE GRAND TOUR, A HEALING JOURNEY.

FOR A SPECIES LIKE HUMANS, THAT ARE NATURALLY NOMADS, BEING IN LOCKDOWN DURING MONTHS WAS A TRAUMATIC EXPERIENCE. IT HAS SHOWED US HOW PRECIOUS AND FRAGILE OUR FREEDOM WAS. IT HAS ALSO MOTIVATED TO TRAVEL EVEN MORE AND BETTER THAN BEFORE, ONCE ALL THE RESTRICTIONS WILL BE LIFTED.

BUT IT RAISES A QUESTION: HOW TO TRAVEL BETTER?

THE QUESTION AUTOMATICALLY EXCLUDES TRAVELLING BY PLANE. THE SOLUTIONS ARE THEN « LIMITED » TO GROUD/WATER TRAVEL.

In the 17th and 18th Century, The Grand Tour was an educational trip across Europe for young men of the upper-class. It could last from a few months to several years. The objective was to visit and admire the artistic wonders of classical antiquity and the Renaissance and discover other cultures and enjoy local gastronomy.





SCENARIO: THE GRAND TOUR, A HEALING JOURNEY.

In 2025, A Grand Tour around Continental Europe seems the best way to enjoy life, celebrate the recovered freedom and take a break from our daily stress. It offers a large amount of destinations with an infinity of possible stops and experiences along the way. But it has to be done in a sustainable way. Although high speed railways are spreading across the continent, they can't go in the most remote (and beautiful) places. Therefore, the best way to travel is still an automobile, electric of course.

While battery EV's are still limited by the weight and capacity of their batteries, fuel-cell vehicles are the most efficient option for this kind of long distance travel (1000km and more).

That is where my vehicle comes into play. It is a sustainable car, based on circularity for its entire life cycle, that can fit 5 people, in a relaxing and peaceful space that leaves the passengers enjoy the journey as much as the destination. The atmosphere is minimalistic, simple, essential. It's a bubble that disconnects you from the technological and virtual world and helps you reconnect with yourself and nature.

COME AND ENJOY THIS HEALING JOURNEY!







PERSONA.

GENERATION Y / MILLENIALS (BORN: 1980-1995 / AGE IN 2025: 45-30)

KEY WORDS: PROACTIVE / CONFIDENT / DIGITAL NATIVE / TEAM ORIENTED / TECH SAVVY / ENVIRONMENTALLY INVESTED



DURAND-LENOTRE FAMILY ENGHIEN-LES BAINS, ILE DE FRANCE, FRANCE.

HENRY DURAND, 40, CYBER SECURITY EXPERT. FANNY LENOTRE, 38, AI ENGINEER.

YEARLY REVENUES: EUR 120K / OWNERS OF A 3-BEDROOM APARTMENT.

IF THE ACTIVITIES DURING THE WEEKDAYS ARE QUITE REPETITIVE (GOING TO WORK, GROCERIES, ETC.), THE WEEKENDS ARE MORE ORIENTATED AROUND VISITING CULTURAL SITES WHILE STAYING IN NICE AIRBNB'S.

YEARLY SUMMER VACATIONS ARE GENERALLY ENJOYED WITH FRIENDS IN FRANCE OR IN CONTINENTAL EUROPE AS THEY DON'T WANT TO USE AIRPLANES FOR SUSTAINABILITY REASONS. CHRISTMAS/NEW YEAR VACATIONS ARE SPENT ALTERNATIVELY WITH FANNY AND HENRY'S PARENTS IN NORMANDY AND ALSACE.

TO MAKE THEIR TRAVELLING MORE PRACTICAL AND EXTEND ITS RANGE AWAY FROM THE BIG RAILWAYS LINES, THEY ARE LOOKING FOR A SUSTAINABLE VEHICLE WITH A LARGE AUTONOMY, A GREAT INTERIOR SPACE THAT MAKES THE JOURNEY AS GOOD AS THE DESTINATION ITSELF.



PERSONALITY

INTROVERT	EXTROVERT
ANALYTICAL	CREATIVE
CONSERVATIVE	LIBERAL
PASSIVE	ACTIVE

MOTIVATIONS



CAR TASTE

ESTHETIC	_	FUNCTION
PLEASURE	_	PRACTICAL
CONFORTABLE	_	SPORTY
HICH-TECH	_	SIMPLE
EXPENSIVE		CHEAP
QUALITY		LOW-COST
OWNER		ON-DEMAND
DAILY	WEEKLY	MONTHLY





CONCLUSION.

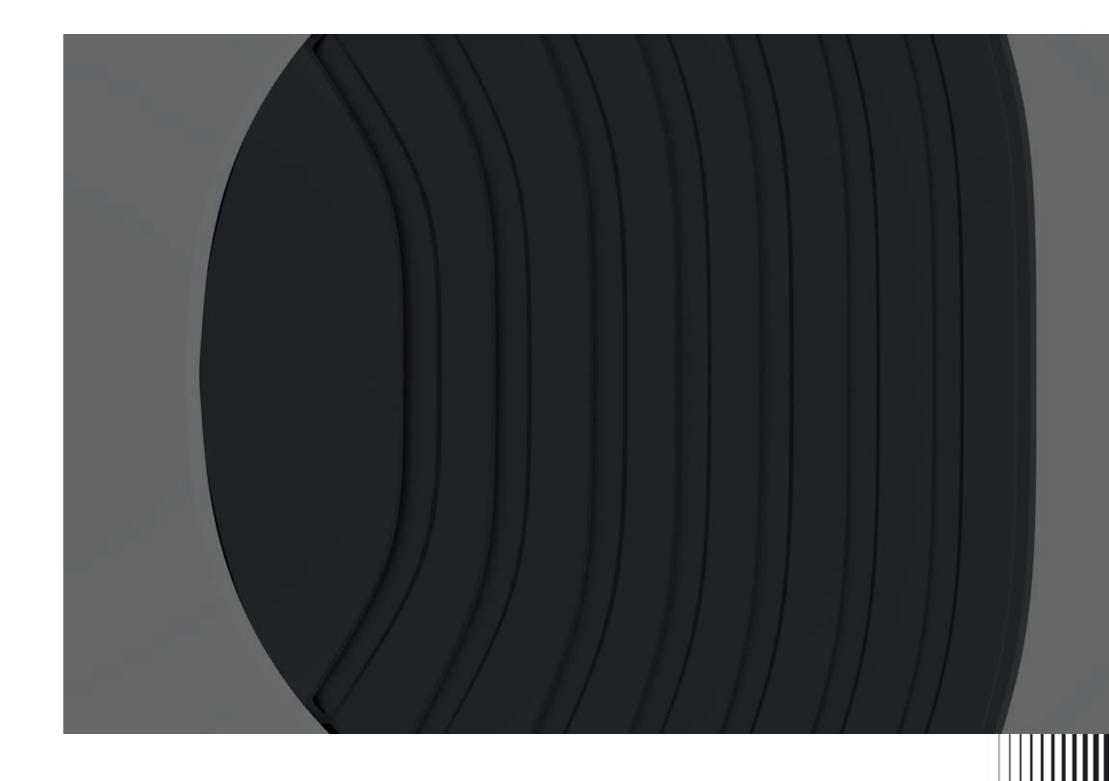
THE CURRENT PANDEMIC IMPACT IS SO DEEP AND LARGE THAT WE WILL NEED SEVERAL YEARS TO MEASURE AND ANALIZE THEM PRECISELY.

Mental health was already an issue for a large portion of people of generations X, Y and Z before Covid-19. One of the rare positive consequences of the crisis was to put the spotlight on this issue, revealing that it was more extended than imagined. The silence about it has been broken and people started to aknowledge and treat it. The most common symptoms are anxiety and depression and are caused by stress at work and uncertainty about the future.

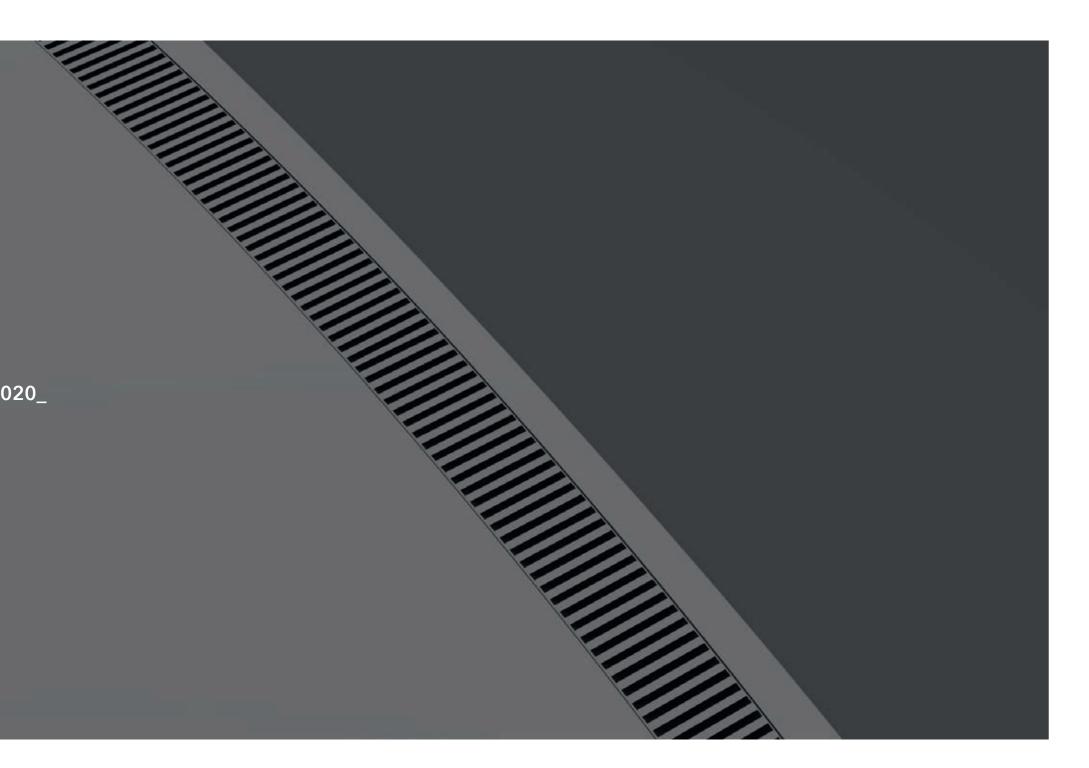
THE REPEATED LOCKDOWNS HIGHLIGHTED HOW SLOWING DOWN COULD HELP HEALING NATURE AND HOW THE NEED FOR TRAVEL AND FREEDOM AND ALL THE ENRICHING EXPERIENCES THAT COME WITH IT WERE UNDERESTIMATED WHILE TAKEN FOR GRANTED.

The slow life philosophy seems to be a reasonable and balanced way to respond to these issues. Slowing down, focusing on what is natural, simple, enjoyable, downshifting, experiencing real things with real people and disconnecting from our computers, smartphones and tablets.

This way of taking the time of experiencing life could be the solution to the mental health issues that come with our modern societes.



019_



PERSONAL BRIEF.

BASED ON THE PREVIOUS CONCLUSION, THE OBJECTIVES OF THE PROJECT WILL BE:

- Propose a sustainable vehicle that follows the rules of circular economy,
- Propose a vehicle that prioritize the wellbeing and pleasure of its occupants,
- Propose a vehicle that puts the focus on the experience of travelling,
- The travelling experience has also to be about the journey,
- The vehicle will promote minmalistic values, to avoid distractions and enhance the reconnection with the environment and people,
- The brand values and image should be compatible with the previous objectives.



/SAAB, THE REBIRTH - THE NYTÄNDNING PROJEKT_

OLD AND NEW DNA, PHILOSOPHY, VALUES.

Using the brand SAAB for my project was an evidence from the beginning, not only because my family had several models from the brand and I personally always was a big fan, but also due to the values and the image of the brand, always oriented towards innovation, dynamism, safety, practicality, ecology... All qualities presented in an original yet coherent way.

FOR DIFFERENT REASONS, THE BRAND HAD TO CEASE OPERATIONS IN 2012. SOME ASSETS WERE SOLD TO EVERGRANDE THROUGH NEVS.

THE BRAND SAAB WASN'T SOLD AND ITS STILL THE PROPERTY OF SAAB AB.

LAST MONTHS, SOME RUMOURS THAT THE PRODUCTION ASSETS WERE AGAIN FOR SALE APPEARED, GIVING SOME NEW UNCERTAINTY ABOUT THE FUTURE.

This situation opens-up the door to the imagination for an hypothetical come-back, the Nytändning Projekt (Project Reawakening in Swedish).

FOR THIS REBIRTH, I PROPOSE TO UPDATE AND ENRICH THE BRAND'S VALUES IN LINE WITH MY RESEARCH CONCLUSIONS AND PERSONAL BRIEF:

- SUSTAINABILITY THROUGH CIRCULARITY AND CRADLE TO CRADLE DESIGN,
- GOING BACK TO THE AIRCRAFT ORIGINS OF THE BRAND, WITH A PARTICULAR EMPHASIS ON AERODYNAMICS AND, IN THE INTERIOR, WITH A REAL COCKPIT EXPERIENCE THAT OFFERS NEW AND INCREASED DRIVING AND TRAVELLING EXPERIENCES FOR THE DRIVER.
- FOR THE OTHER PASSENGERS, CREATING A LIVING SPACE WITH CODES FROM INTERIOR DESIGN, ESPECIALLY INSPIRED BY THE HYGGE PHILOSOPHY.

















(1960s) Saab Automobile AB

SAAB SCANIA

Saab - Scania (1974)



Saab - Scania (1984)











Saab (2000)



THE NYTÄNDNING PROJEKT: FROM PLANES TO GRIFFINS.

THROUGH TIME, SAAB HAD SEVERAL LOGOS.

THE MOST ICONIC AND SYMBOLICALLY INTERESTING ELEMENTS ARE THE SCANIA GRIFFIN AND THE SAAB PLANE.



THE GRIFFIN WAS ORIGINALLY THE LOGO OF SCANIA AND WAS INSPIRED BY THE GRIFFIN OF THE COAT of arms of the swedish city of Skåne.

THE GRIFFIN IS A LEGENDARY CREATURE WITH THE BODY, TAIL AND BACK LEGS OF A LION AND THE HEAD AND WINGS OF AN EAGLE.

IT SYMBOLIZES STRENGTH, INTELLIGENCE, COURAGE AND LEADERSHIP.

THE GRIFFIN IS PROPERTY OF SCANIA AND SAAB AB. THE NAME SAAB IS ALSO PROPERTY OF SAAB AB. BOTH NEED THE AP-PROVAL OF THE OWNERS TO BE USED, WHICH THEY HAVEN'T GIVEN TO THE CURRENT OWNERS (NEVS).



THIS ITERATION OF THE 1949 LOGO STARTED TO APPEAR IN THE EARLY 60S.

THE OBJECTIVE OF THIS REDESIGN WAS TO AMPLIFY THE AIRCRAFT HERITAGE.



THE NYTÄNDNING PROJEKT: S.A.A.B. SWEDISH AUTOMOTIVE AKTIEBOLAGET.

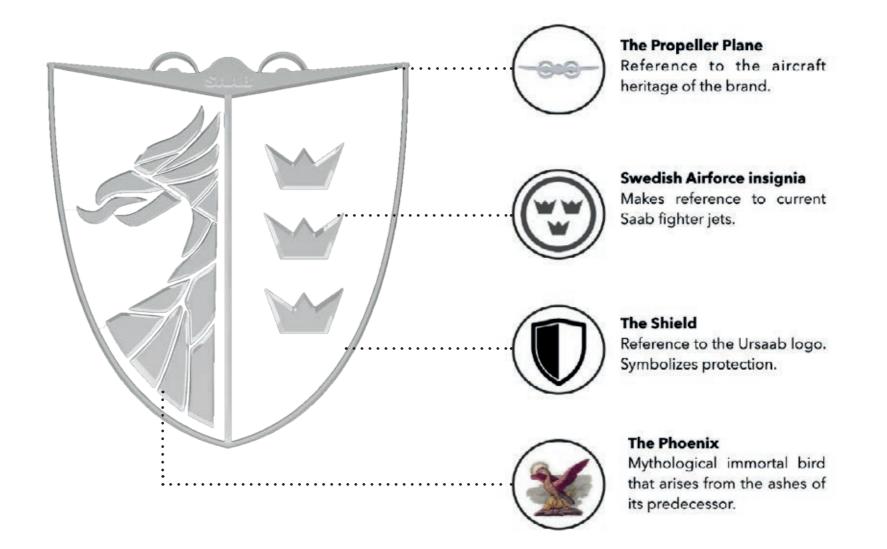
FOR THIS NEW CHAPTER, IT COULD BE INTERESTING TO SLIGHTLY CHANGE THE NAME OF THE BRAND IN ORDER TO REFLECT MORE ACCURATELY ITS ACTIVITY WHILE KEEPING A CONNECTION TO THE PAST. THIS COULD ALSO AVOID LEGAL IMBROGLIOS.

As an essential element of a brand's identity, the logo has to reflect the history of the brand, its current situation and its ambition for the future. To do so, it would be necessary to update the logo as well, for example, by replacing the griffin, not only for legal reasons, but also because it has historically always been more related to Scania than Saab.

NEW BRAND'S TYPOGRAPHY:



NEW POSSIBLE KEY SYMBOLS

















THE NYTÄNDNING PROJEKT: FROM NINES TO NAMES.

Almost all Saab models used a numerical name starting with the number nine. With the exception of the sports cars Sonett, the non-numerical names were only used for some concept cars.

TO MARK THIS NEW ERA, I WANTED TO USE ONLY ALPHABETICAL NAMES THAT HAVE A SCANDINAVIAN ORIGIN, IN ORDER TO REALLY HIGHLIGHT THE CULTURAL ROOTS OF THE BRAND.

Going back to mythology (Phoenix logo), the use of the Norse gods is interesting because they are all associated with certain characteristics or powers. They also form a sort of hierarchy or family that could easily be used for an hypothetical future development of the brand.

FOLLOWING THIS LOGIC, IT'S AN EVIDENCE FOR ME THAT THE FIRST MODEL HAS TO BE CALLED «ODIN».

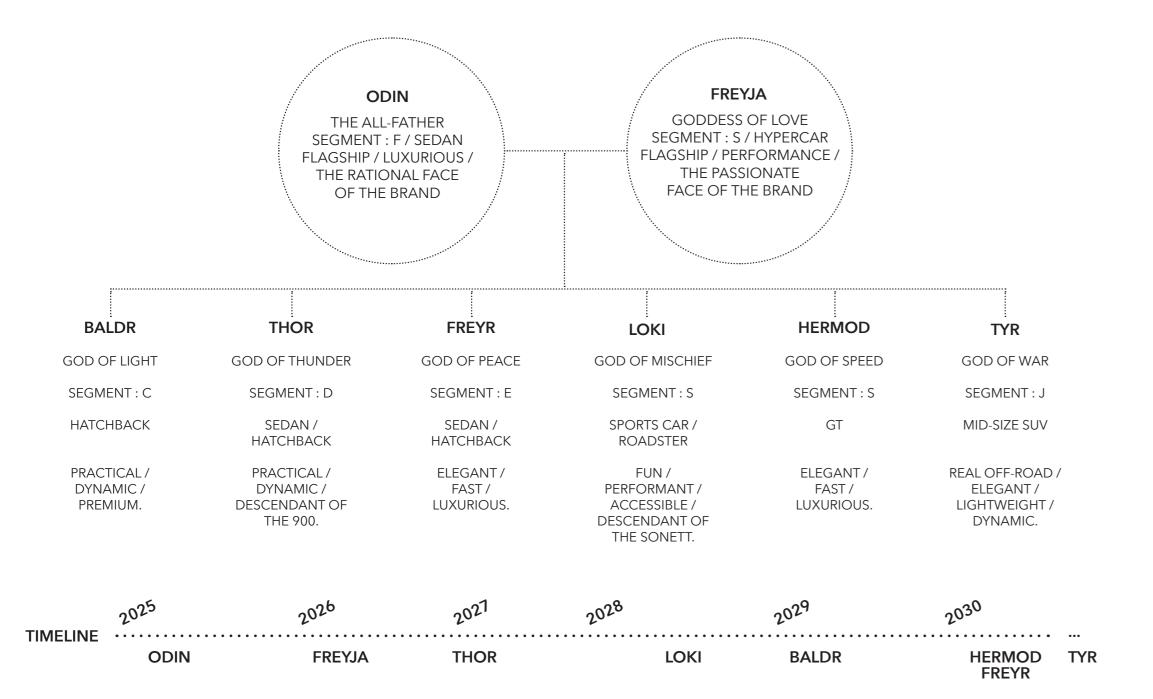
ODIN - ÓÐINN

ODIN IS KNOWN AS THE FATHER OF ALL GODS.

He was one of the most powerful and revered of all the Norse gods and was associated with wisdom, knowledge, healing, death and war.

He also ruled over Valhalla.





THE NYTÄNDNING PROJEKT: FAMILY MATTERS.

AS MENTIONED, USING THE NAMES OF NORSE GODS OFFERS THE ADVANTAGE OF CREATING A VIRTUAL HIERARCHY/FAMILY THAT COULD EASILY BE USED FOR AN HYPOTHETICAL FUTURE DEVELOPMENT OF THE BRAND.

This name-based hierarchy also offers the opportunity to create a design narrative in which one or more principal vehicles (parents) would give certain aesthetic traits to future models (descendents), creating a family with similar characteristics but still individually distinguishable.

On that basis, it seemed logical to use Odin for the first vehicle of the brands rebirth. A second potential vehicle could use the name Freyja (Frigg).

BOTH WOULD BE THE FLAGSHIPS OF THE BRAND FROM WHICH ALL THE OTHER MODELS WOULD DERIVE IN TERMS OF AESTHETICS AND DESIGN PHILOSOPHY.



THE NYTÄNDNING PROJEKT: FACTORY RECONVERSION.

The greatest advantage of bringing a brand like Saab «back to life» is that you don't need to build a new infrastructure which can be costly, especially with sustainability in mind.

Converting an existing infrastructure into sustainability is less expensive and armful, as you are up-cycling something that already exists instead of creating something new. This is highly less impactful for the local ecosystems.

THE OLD SAAB FACTORY IS SITUATED IN TROLLHÄTTAN, IN THE SOUTH OF SWEDEN.

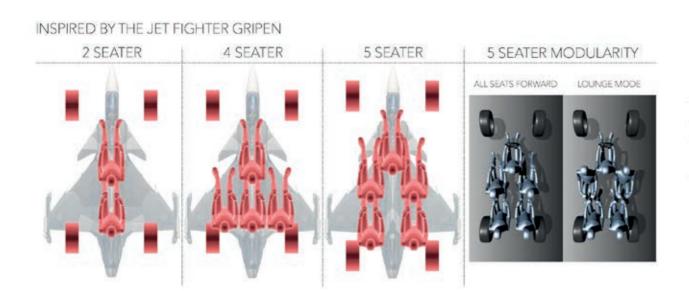
THERE IS AN HYDROPOWER PLANT NEAR THE FACTORY THAT ALREADY PROVIDES GREEN ENERGY, BUT THE FACTORY COULD EASILY COMPLETE THIS ENERGY SOURCE WITH SOLAR PANELS ON THE ROOF, FOR THE LONG SUMMER DAYS.

FOLLOWING THE PRINCIPLE OF CRADLE TO CRADLE, THE HEAT GENERATED BY THE PRODUCTION TOOLS COULD BE REUSED FOR HEATING IN WINTER, AS WELL AS THE WATER FROM THE NEARBY GÖTA ÄLV RIVER FOR COOLING IN SUMMER. THE WINDOWS COULD BE INCREASED IN ORDER TO ENJOY THE NATURAL LIGHT OF THE LONG SUMMER DAYS AND REDUCE THE ELECTRICITY CONSUMPTION. IN ADDITION TO THE SOLAR PANELS, THE ROOF COULD ALSO BE COVERED WITH VEGETATION IN ORDER TO IMPROVE THERMAL INSULATION AND COOLING BY KEEPING THE RAIN WATER AND PROVIDE SHELTER AND FOOD FOR LOCAL INSECTS AND BIRDS.



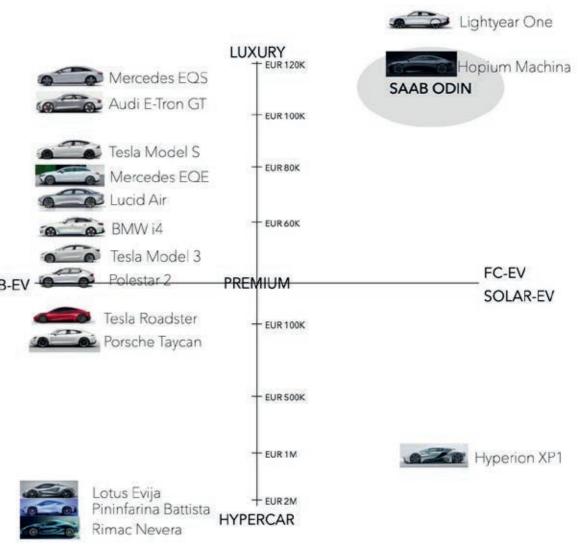
SAAB ODIN_

FROM THE INSIDE OUT, INTERIOR ARCHITECTURE STUDY.



	2 SEATER	4 SEATER	5 SEATER
	*	林林・ガル・	林。みん
Increasing driving sensations Modularity/Practicality	<u> </u>	<u> </u>	<u> </u>
Potential application	Sports/Hyper car	Family/Travel car	Family/Travel car
Market segment Potential competitors - Battery powered	Tesla Roadster Porsche Taycan Lotus Evija Pininfarina Battista Rimac Nevera	Tesla Model 3 Mercedes EQE BMW i4 Polestar 2	Tesla Model S Mercedes EQS Lucid Air Audi E-Tron GT
- Solar powered			Lightyear One
- Fuel cell powered	Hyperion XP1		Hopium Machina

MARKET SEGMENTATION.





FUEL CELL HYDROGEN.

A Fuel Cell is an electrochemical energy conversion device. It utilizes hydrogen and oxygen to generate electricity, heat and

The hydrogen atoms enter the anode.

(2) The atoms are stripped of their electrons in the anode.

The positively charged protons pass through the cathode and the negatively charged electrons are forced through a circuit, generating electricity.

After passing through the circuit, the elctrons combine with (4) the protons and oxygen from the air to generate the fuel cell's by products; water and heat.

GREEN HYDROGEN

This H2 is generated exclusively with renewable energies like solar or wind. It is zero CO2 emis-

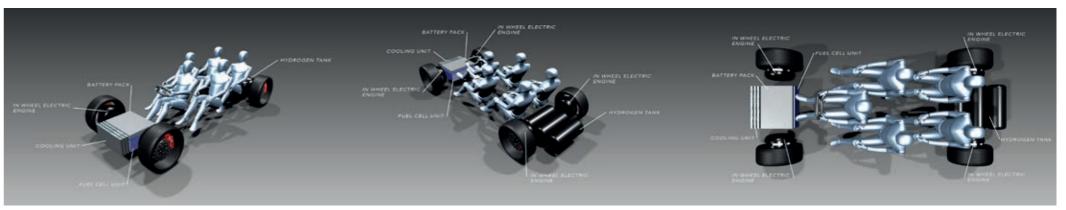
PURPLE HYDROGEN

This H2 is generated with Nuclear power. It is also zero C02 emission.



PACKAGE STUDY.

FUEL CELL HYDROGEN



✓ Lower height

Longevity

Faster refuelling

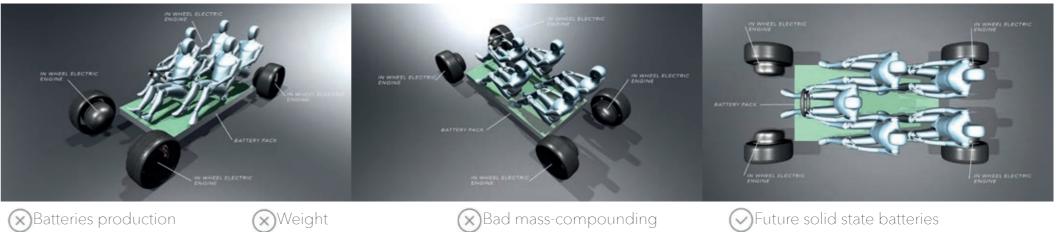
Green/blue Hydrogen not guaranteed

Better autonomy

Less refuelling stations

BATTERIES

Lighter



Batteries production

Batteries recycling

XHigher height

Bad mass-compounding

Batteries longevity

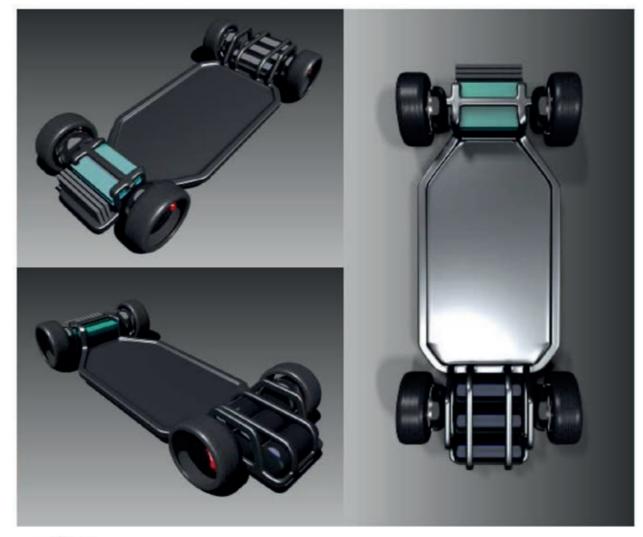
Future solid state batteries

Recharging stations

028_



FUEL CELL PACKAGE STUDY.



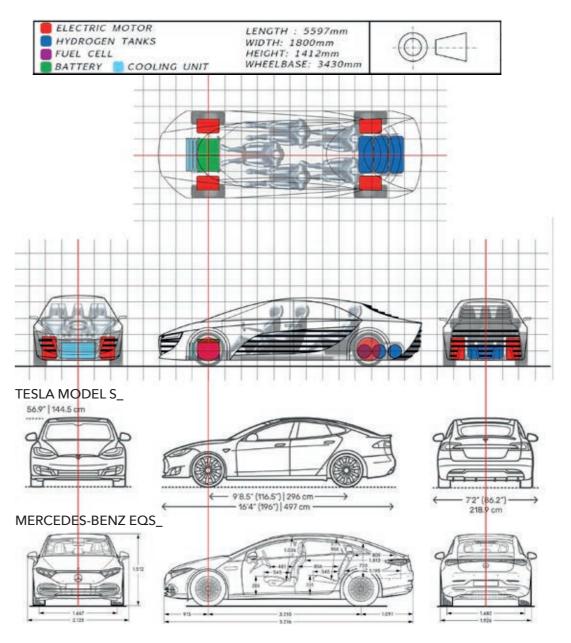


029_

100% RECYCLED ALUMINIUM

THE CHASSIS IS EXCLUSIVELY MADE WITH ALUMINIUM. THIS ALLOWS A REALLY GOOD RIGIDITY, LIGHTNESS AND THE MATERIAL CAN BE RECYCLED UNLIMITEDLY WITHOUT LOSING ITS QUALITIES.

PACKAGE AND BENCHMARK.





AERODYNAMICS.

AERODYNAMISM IS A KEY ELEMENT OF SAAB'S IDENTITY.



IT IS ALSO A TOOL THAT HELPS BEING MORE SUSTAINABLE WHEN USING A VEHICLE.

The objective of an aerodynamic car is to require less energy to fight air resistance (drag). There are various ways to do so;

- REDUCING THE FRONTAL SURFACE,
- REDUCING THE COEFFICIENT OF DRAG.

BASED ON THAT, IT'S EASY TO UNDERSTAND THAT A LOWER AND LONGER CAR WILL BE AERODYNAMICALLY MORE EFFICIENT.

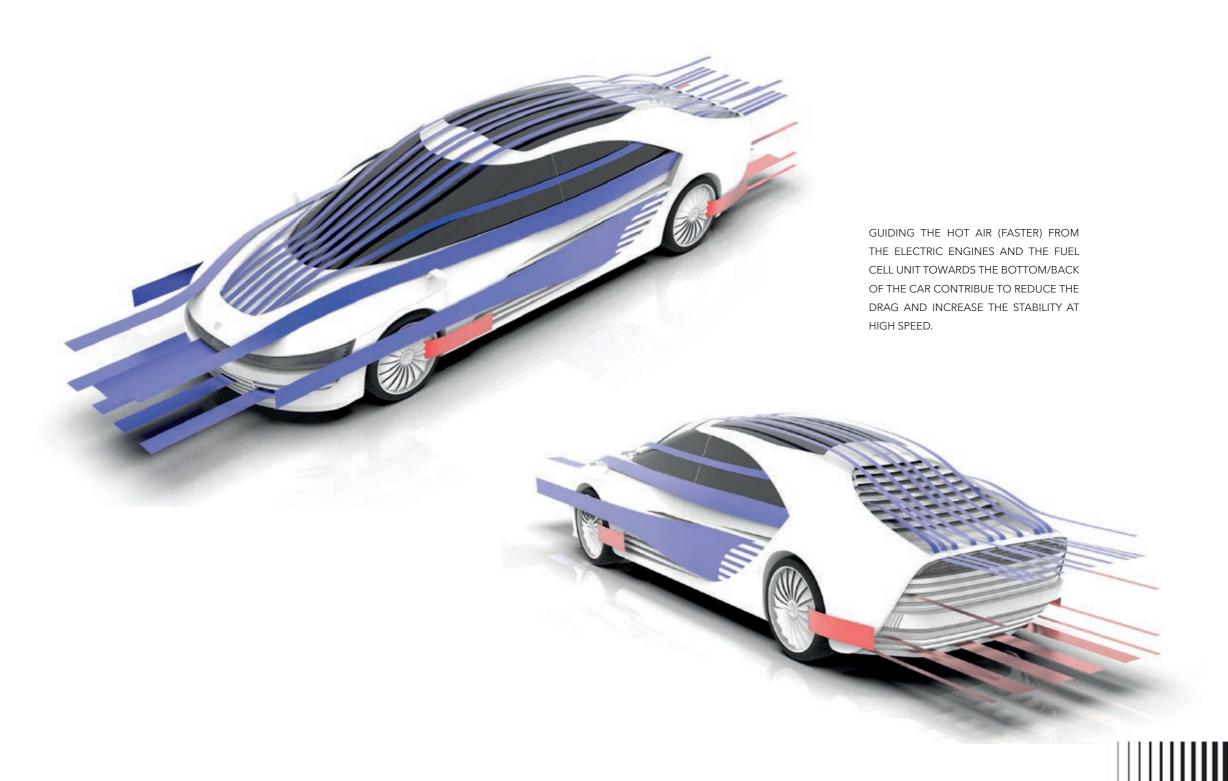


SEDAN

AS EXPLAINED IN A VIDEO FROM ENGINEER JULIAN EDGAR IN HIS YOUTUBE CHANNEL, IN THE AIR TUNNEL, IT BECOMES EVIDENT THAT SEDANS AND FASTBACKS GENERATE LESS TURBULENCE THAN HATCHBACKS.

CONCLUSION

When adding the efficiency and sustainability objectives with the brand's aerodynamics heritage and the lower height allowed by the fuel cell package, it becomes clear that the Saab Odin has to be a sedan or a fastback. Or maybe a mix of the two.





INTERIOR INSPIRATIONS. PROTECTION PEACEFUL

HYGGE HOME SWEET HOME

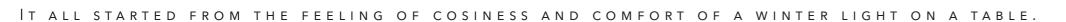












THE WINDOW LOUVERS PARTIALLY OBSTRUCTED THE SUNLIGHT, CREATING A CONTRAST BETWEEN THE WARMTH AND HOPE OF THE LIGHT AND THE COLDNESS OF THE SHADE.



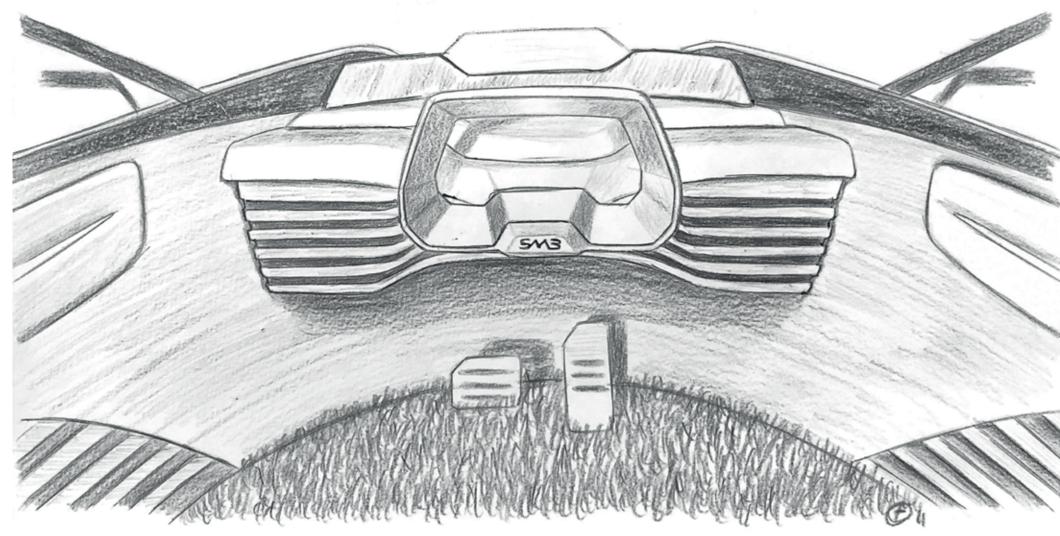


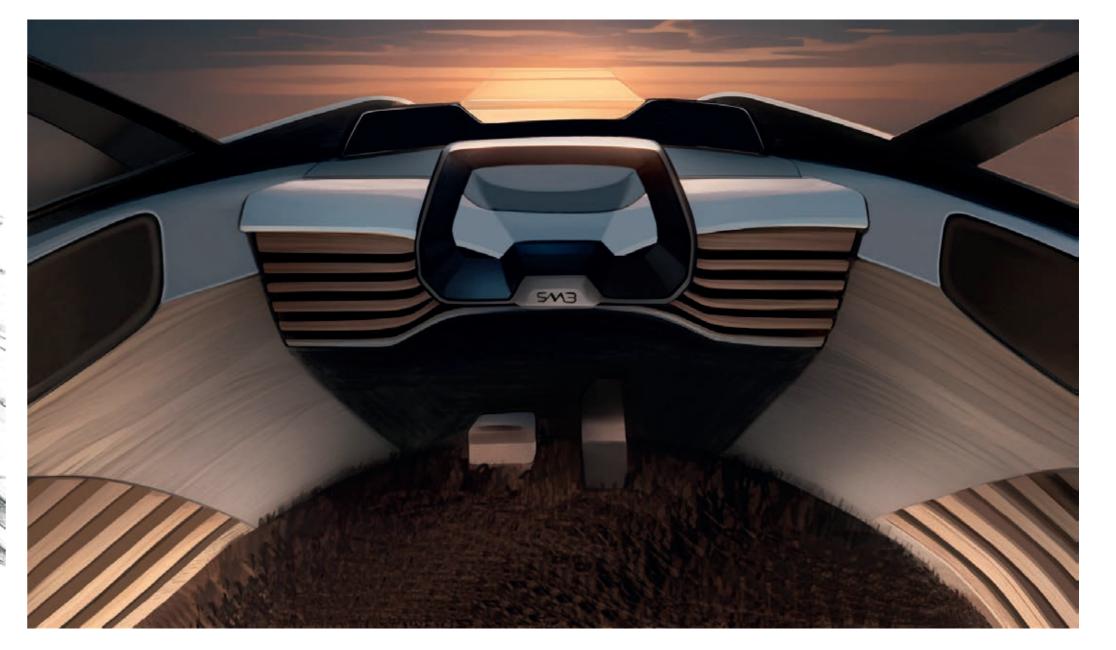
INTERIOR RESEARCH.

032_



INTERIOR RESEARCH.

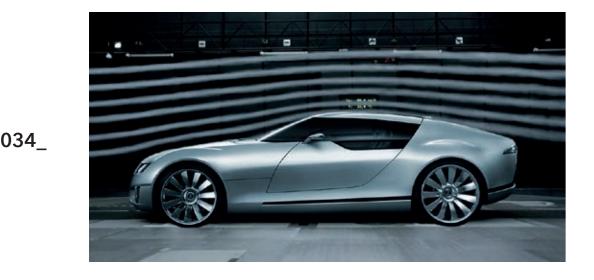








EXTERIOR INSPIRATIONS.





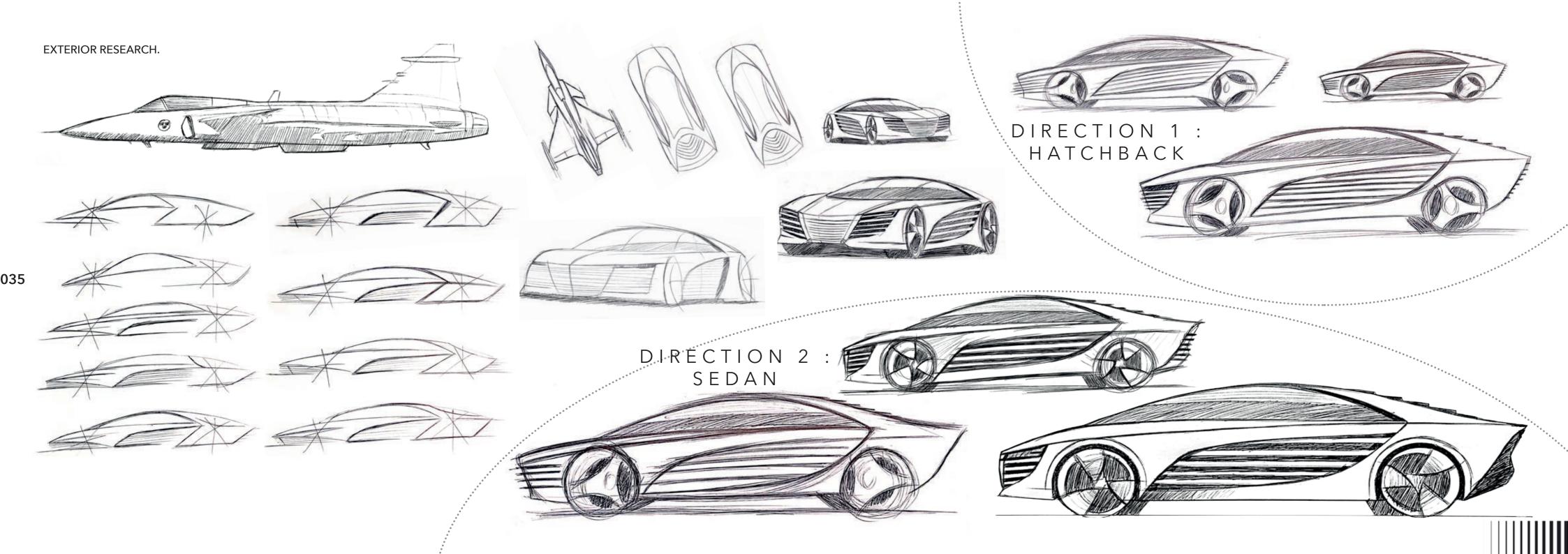


The louver shades that inspired the interior made me think about the laminar flow in a wind tunnel. This allowed to create a connection between the interior and the exterior.

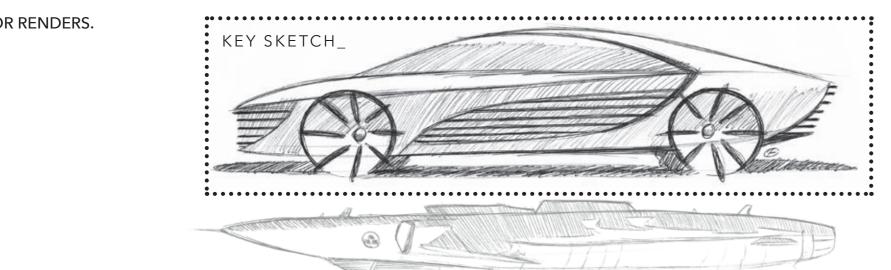


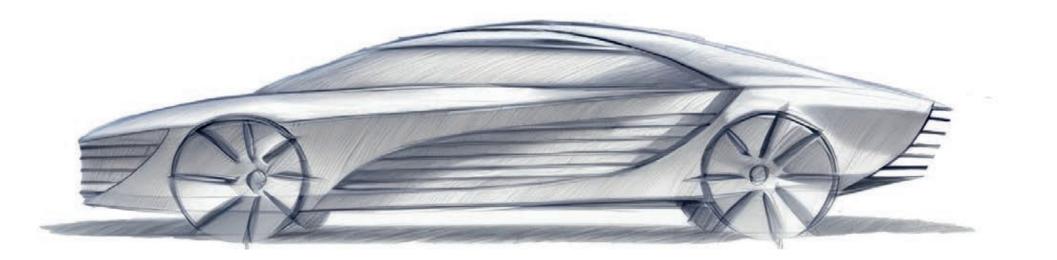




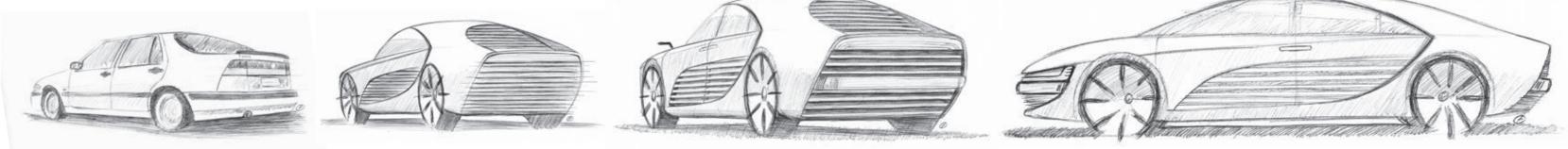


EXTERIOR RENDERS.



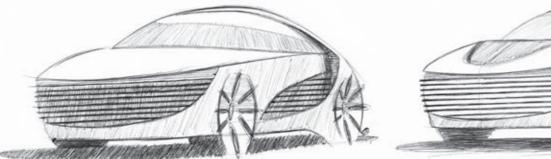


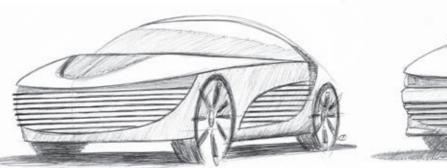


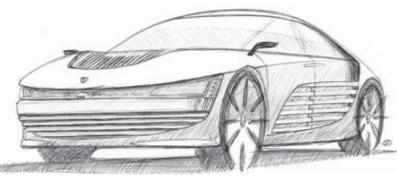


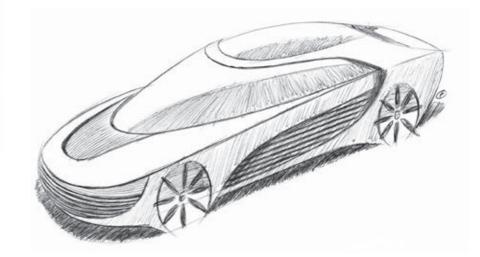








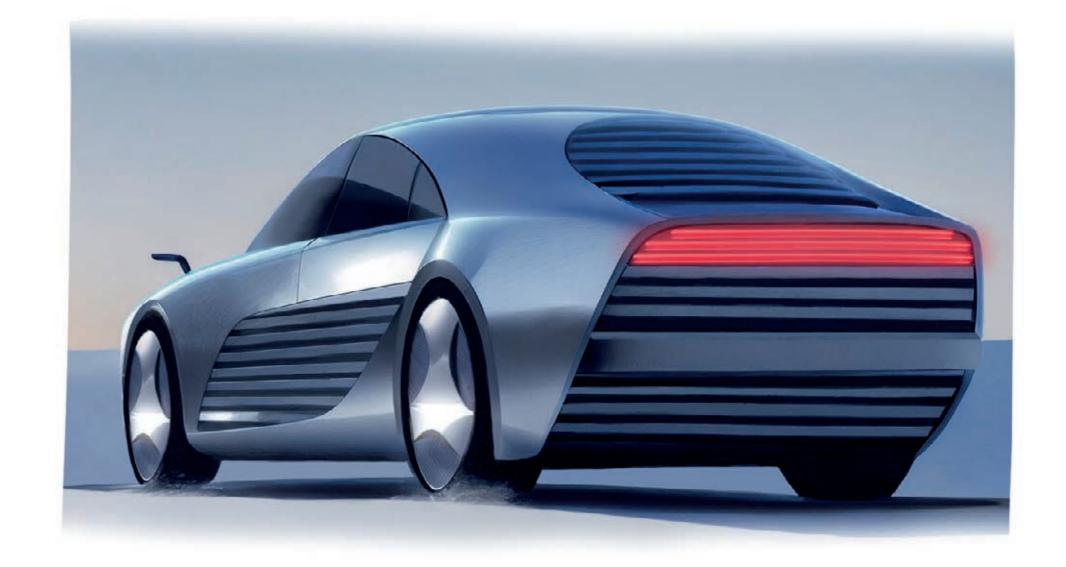






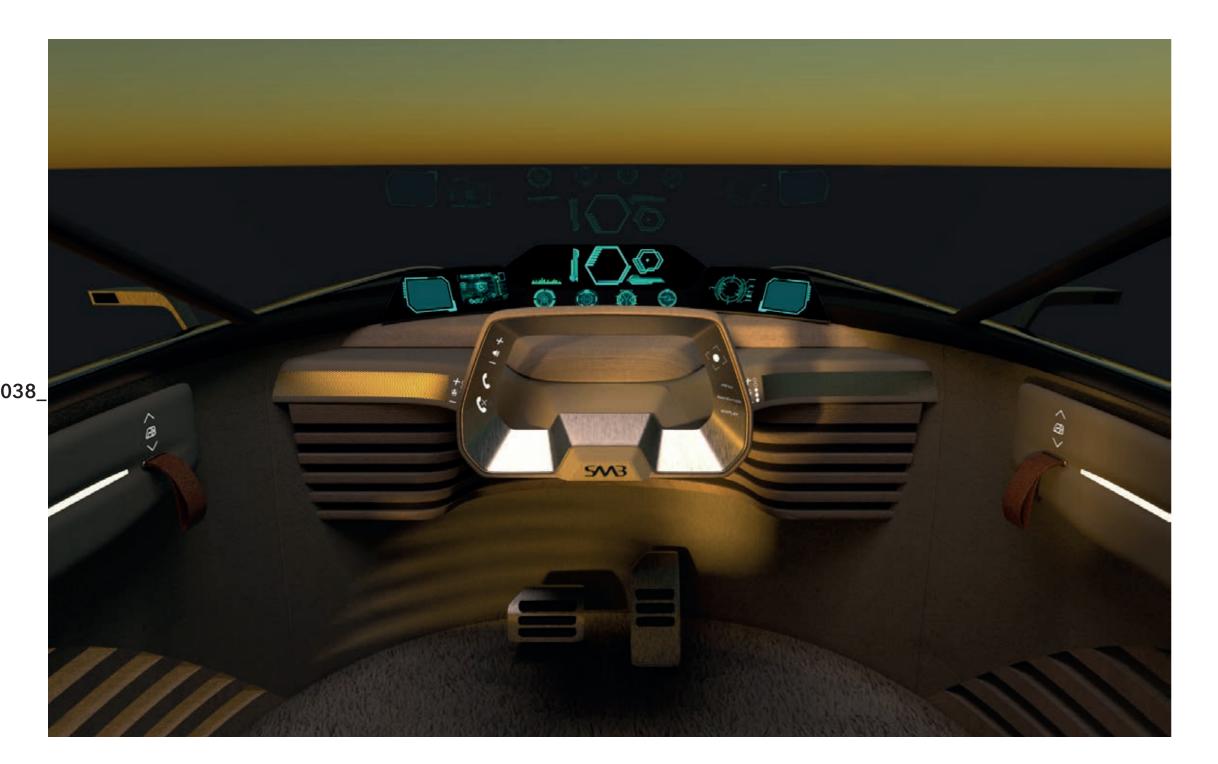
EXTERIOR RENDER.





037_





THE INTERIOR'S ARCHITECTURE IS INSPIRED BY THE JET FIGHTER SAAB GRIPEN, WITH THE PASSENGERS ARRANGED IN A 1-2-2 POSITION.

THE DRIVER IS PLACED IN THE CENTER, WHICH IMPROVES THE CAR'S HANDLING AND PROVIDES A

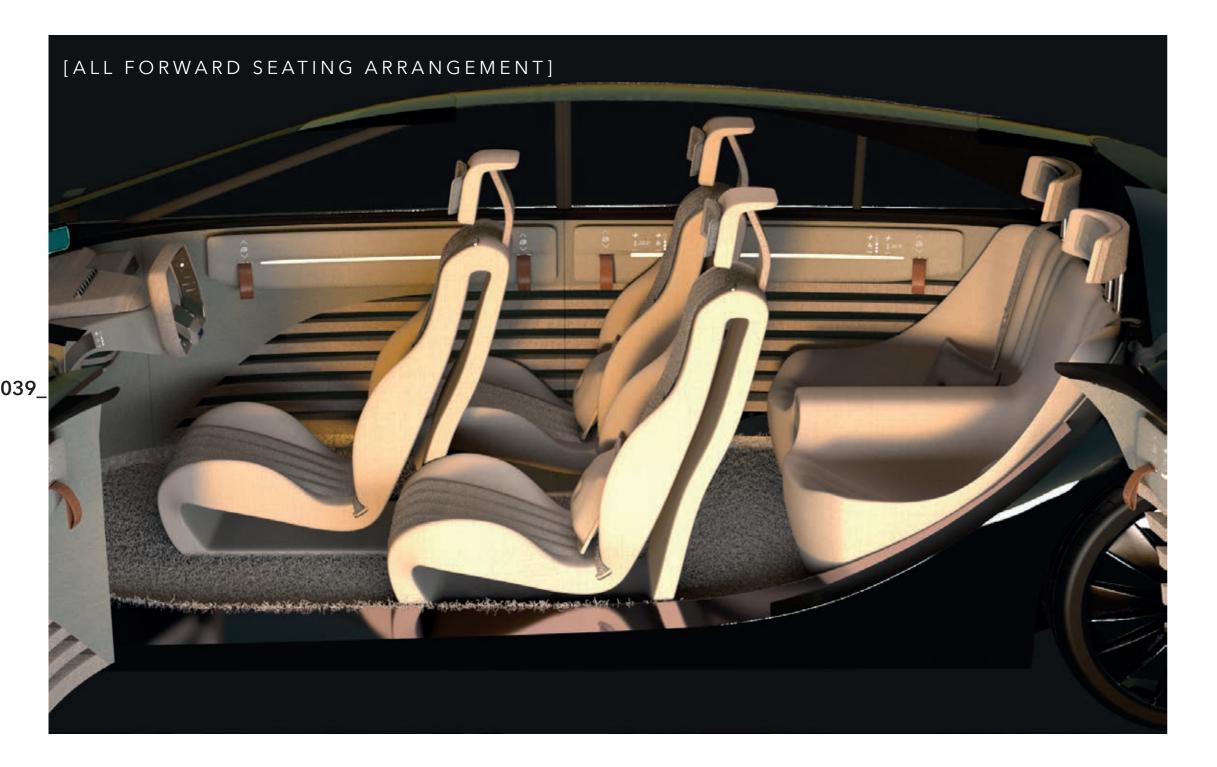
UNIQUE DRIVING EXPERIENCE.

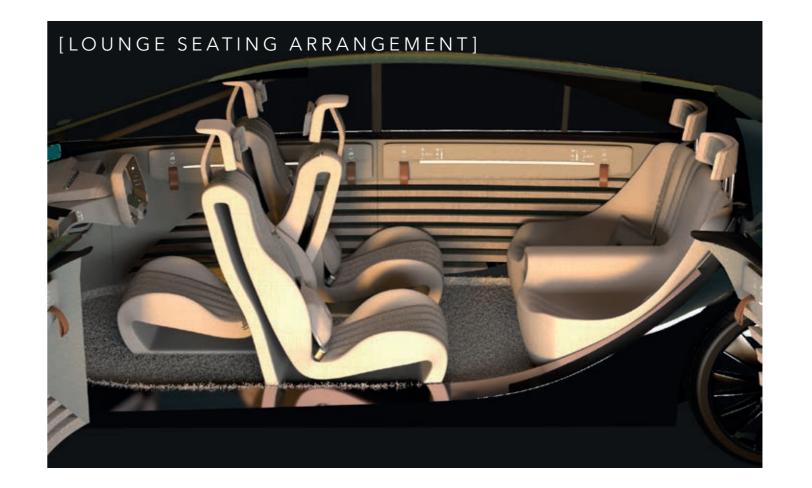


COMMANDS AND INSTRUMENTS ARE ORGANIZED TO PRESERVE THE SE-RENE ATMOSPHERE OF THE COCKPIT AND KEEP THE DRIVER FOCUSED ON THE DRINVING. LIKE IN A PLANE, THE MOST IMPORTANT INFORMA-TION ARE PROJECTED ON THE HEADUP DISPLAY.

THE LARGE WINDOWS ALLOW A PANORAMIC AND UNOBSTRUCTED VIEW OF THE ROAD AHEAD.







THE COCKPIT DESIGN IS CONCEPTUALIZED AS A HEALING AND RELAXING ENVIRONMENT, CURATED TO ENHANCE THE JOURNEY EXPERIENCE.

THE LARGE WINDOWS ARE THOUGHTFULLY DESIGNED IN TANDEM WITH LOUVERS TO CREATE A CAPTIVATING PLAY OF NATURAL LIGHT AND SHADOWS, IMBUING THE SPACE WITH A SERENE AND TRANQUIL AMBIANCE.

THE USE OF NATURAL MATERIALS AND A SOFT COLOR PALETTE FURTHER ADDS TO THE PURITY, PEACE, AND QUIETNESS OF THE SPACE, PROVIDING AN OASIS TO DISCONNECT FROM THE MODERN TURMOILS AND RECONNECT WITH ONESELF AND NATURE.

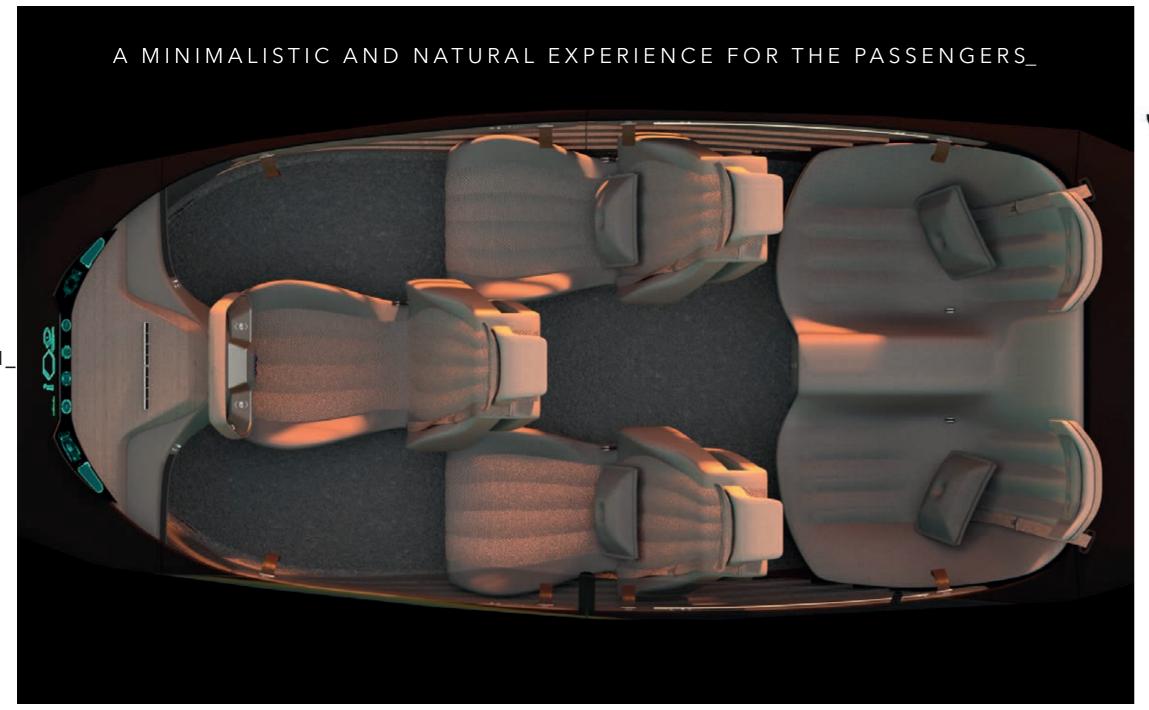


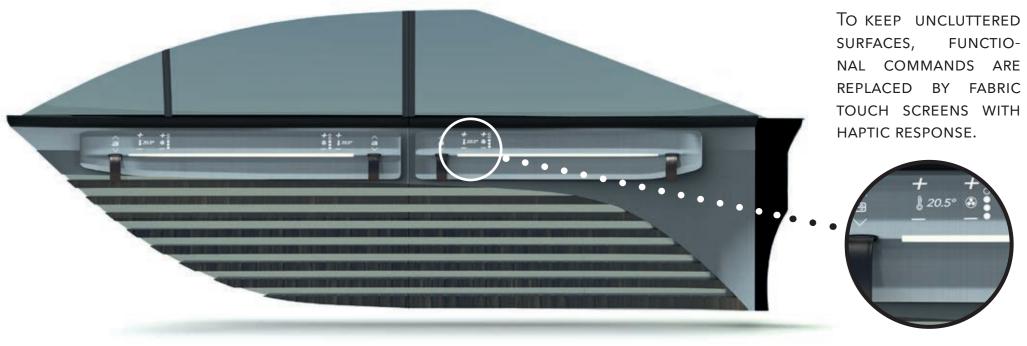




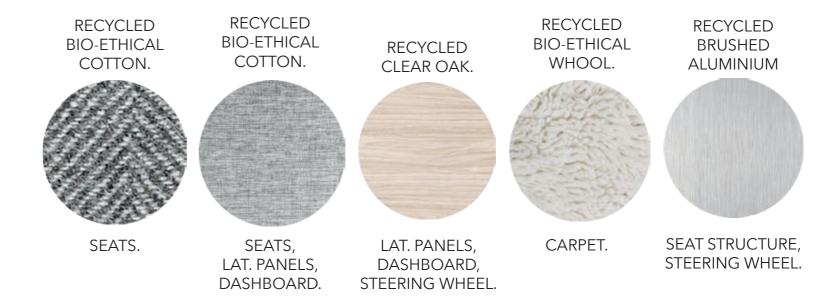
INSPIRED BY FURNITURE, THE SEATS CONTRIBUTE TO THE LOUNGE ATMOSPHERE WHILE PRO-VIDING GREAT COMFORT DURING LONG DISTANCE TRAVELS.



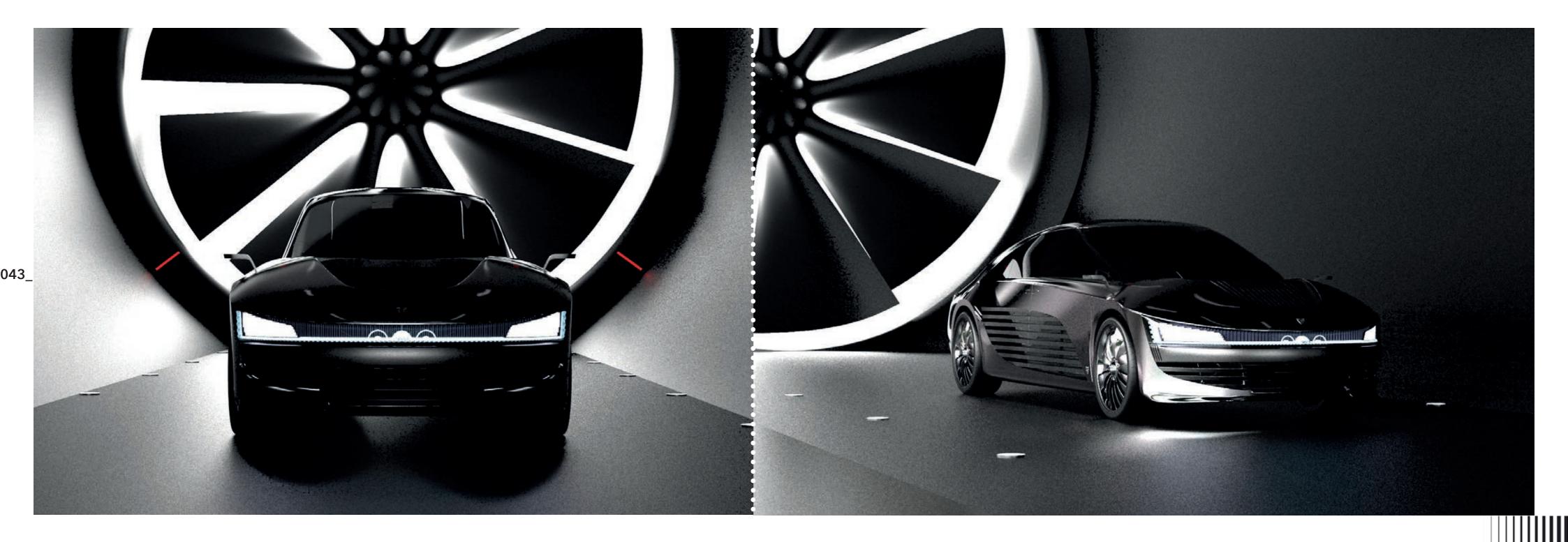




LOCALLY SOURCED, CIRCULAR AND SOCIALLY SUSTAINABLE MATERIALS_

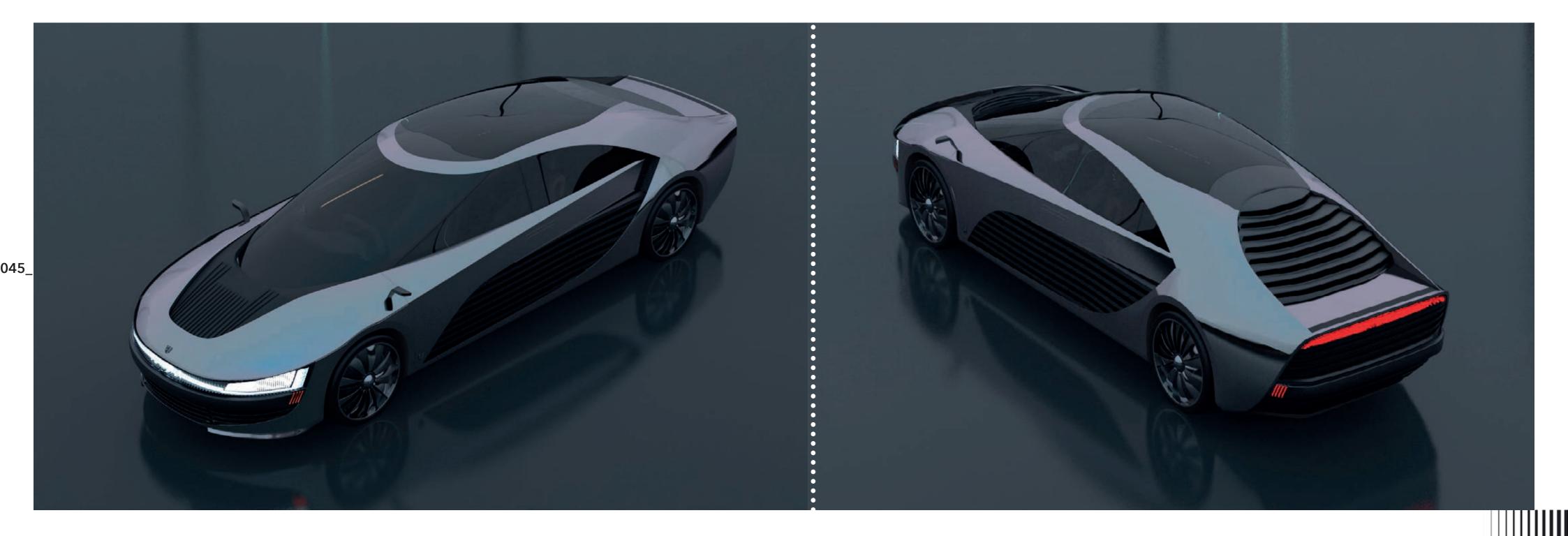


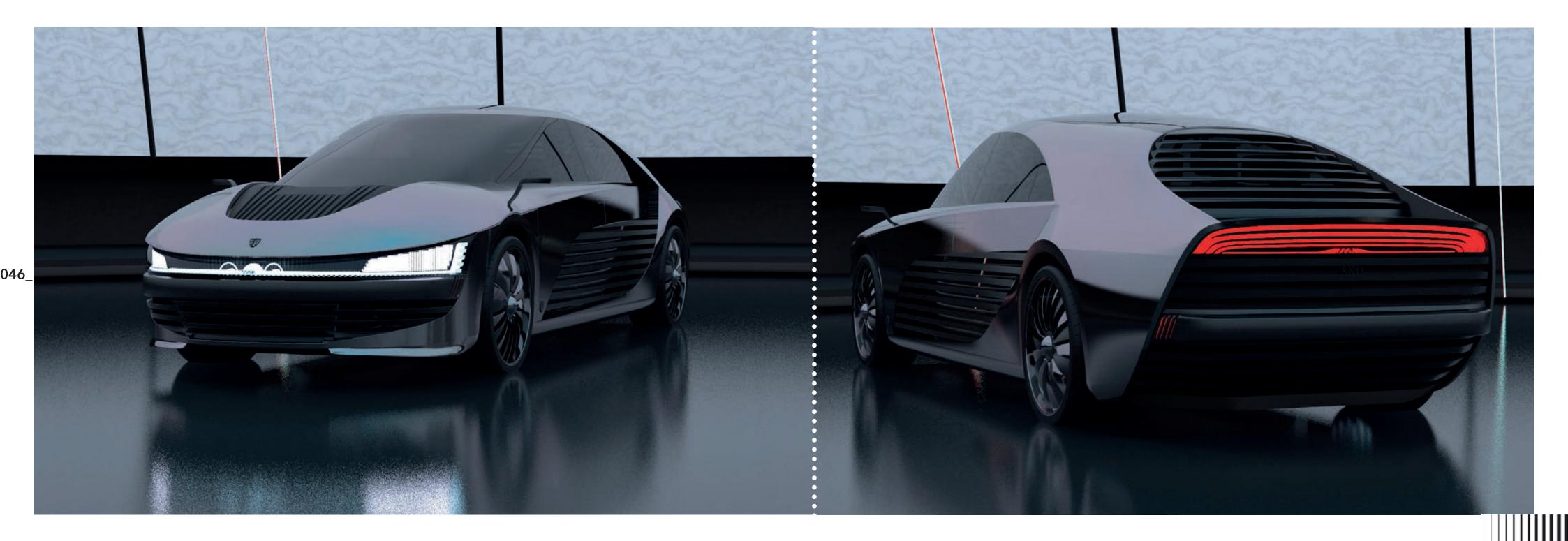












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