



A Balancing Act: Designing playgrounds for WOW factor and play value

Agenda

1. Why are play ground sites important?
 - What does the research say?
2. Importance of design
 - Play value, what is it ?
3. How to attract, retain and return children to play sites?
 - Wow, Stay and Develop
4. The evolution of custom / landmark play structures
5. How to design a great play spaces/structures?
 - Case studies
6. Sustainable Custom Solutions
7. Conclusions
8. Questions



1.

Why are play sites important?
- What does industry research say? -



Global trends point to an unhealthier population

UN and WHO have found:

- Urbanisation is increasing (56% today – 66% by 2050)
- Populations are getting older and older (13.5% +60 today – 21.4% in 2050)
- **Physical inactivity is a leading cause of lifestyle diseases (increases risk of 20-30%)**



WHO Recommendations



Under 1 year:
min. 30 minutes a day

1 to 2 years:
min. 180 minutes a day

3 to 4 years:
min. 180 minutes a day,
at least 60 min. Moderate
to vigorous

5 to 18 years:
min. 60 minutes a day
moderate to vigorous

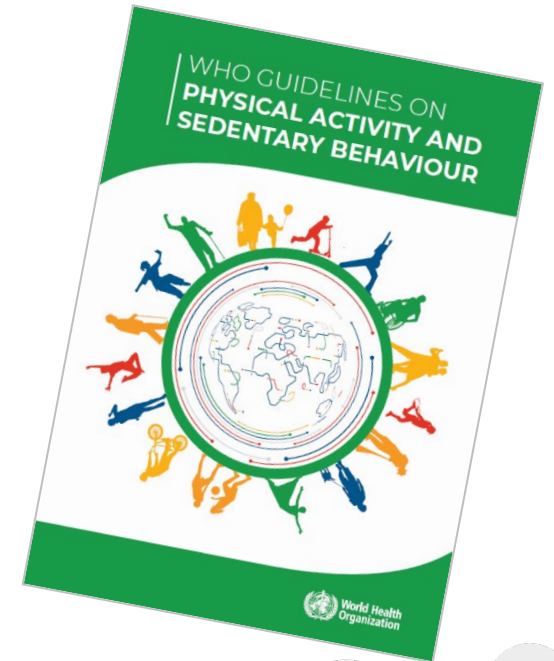
*Global Recommendations on Physical Activity for
Health, World Health Organisation 2010, NHS –
National Health Services (UK)*

PA Levels and Recommendations



WHO DEFINITION OF PHYSICAL ACTIVITY:

Play, games, sport, planned exercise, transportation, or household chores.



5 to 17 YEARS TRESHOLDS:

- 60 minutes a day moderate- to vigorous-intensity physical activity
- At least 3 days a week vigorous-intensity aerobic activities, should be incorporated.

THE ACTIVITIES SHOULD TRAIN:

- Motor skills - ABC: agility, balance and coordination
- Muscles (Arms, Legs, Core)
- Bone density
- Aerobic fitness

Source: WHO Guidelines on Physical activity and Sedentary behaviour, World Health Organisation 2020





<https://www.cdc.gov/healthyschools/physicalactivity/facts.htm>



2.

Play Value – What is it?

Fundamental Play Benefit Scheme

Age / Benefit	PHYSICAL (WHO, DBU, IA & more) 	SOCIAL/ EMOTIONAL (UNICEF, DPU & more) 	COGNITIVE (Piaget, Eriksson & more) 	CREATIVE (Chichszentmihaly & more) 
1-3 years Sensory motor play	Motor skills: Sensory motor stimulation; Cross-body coordination; Bone: Weight bearing activity	Parallel play – together: Pre-language cooperation	Sensory motor & pre-operational : Understand basic symbolic play (role play), causal relations , beginning language Role Play: Imaginative play, few words	Basic: Sand play: fill and empty bucket Ball games: Hold and throw ball
3-6 years Role & construction play	Motor skills: Sensory motor stimulation; cross-body coordination Bone: Weight bearing activity	Socio-dramatic play: Elaborate role play Interact with peers: Conversation, negotiation	Pre-operational : Language mastery increases, imagination, role play accordingly	Semi-basic: Sand play: light construction (eg. cakes) Ball games: Grip, throw and kick ball
6-9 years - Rules & construction play	Motor skills: Agility, Balance and Coordination Bone: Weight bearing activity Cardio: speed Muscle: Arms push/pull; legs push; core strength	Team work: Cooperate, compromise Competition: Positive competition, Winning and losing	Concrete operations: Understanding rules, Logical thinking (explain causal relations)	Semi-elaborate: Sand play: construction Ball games: More precise kicking/throwing/catching
9-12 years Rules play & team sports	Motor skills: Agility, Balance and Coordination Cardio: speed, endurance Muscle: Strength: Arms push/pull; legs push; core strength; speed, endurance	Sharing Listen, give and take Competition Measuring oneself against others; winning and losing	Concrete operations: Logical thinking, light strategies	Elaborate: Sand play: elaborate constructions Ball games: Precise kicking/throwing/catching
12-16 years Team & individual sports	Cardio & Muscle: Strength, speed, endurance Motor skills, Bone	Empathy Tolerance of differences	Formal operations: Bending rules; ethical judgments	Make own rules, construction techniques, ball game techniques



Play Value | Physical



Play Value | Social & Emotional



Play Value | Cognitive



Play Value | Creative



Bringing communities together with outdoor playgrounds and fitness spaces



KOMPAN GALAXY –
Teenager activation

KOMPAN Fitness & Sport - Physical and
Social activity for all ages and abilities

KOMPAN– Vitality and Play for
all ages

3.



Attracting, Retaining, Returning
- Wow, Stay and Develop -

Wow, Stay, Develop

The key to creating a fantastic playground

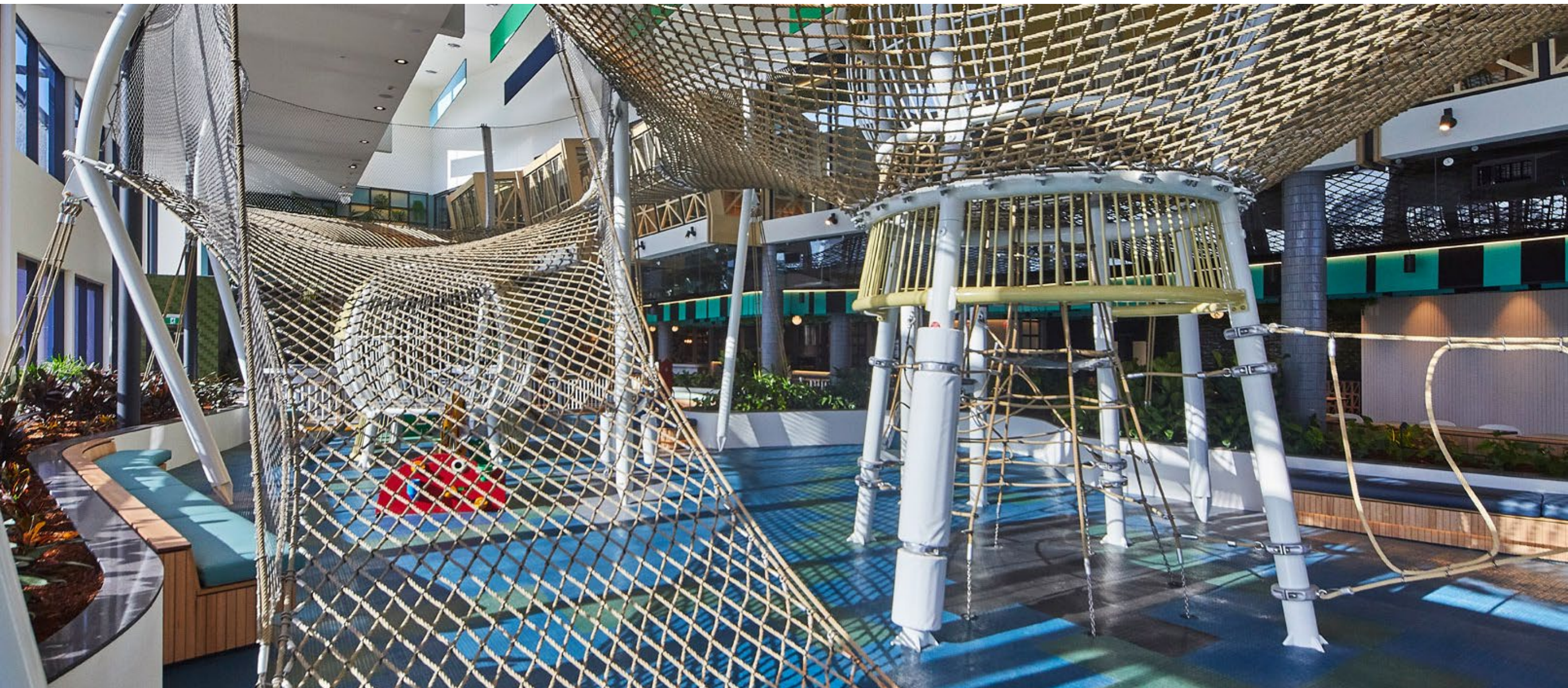


Photo Credit: Stockland



Wow!

Play the KOMPAN Way



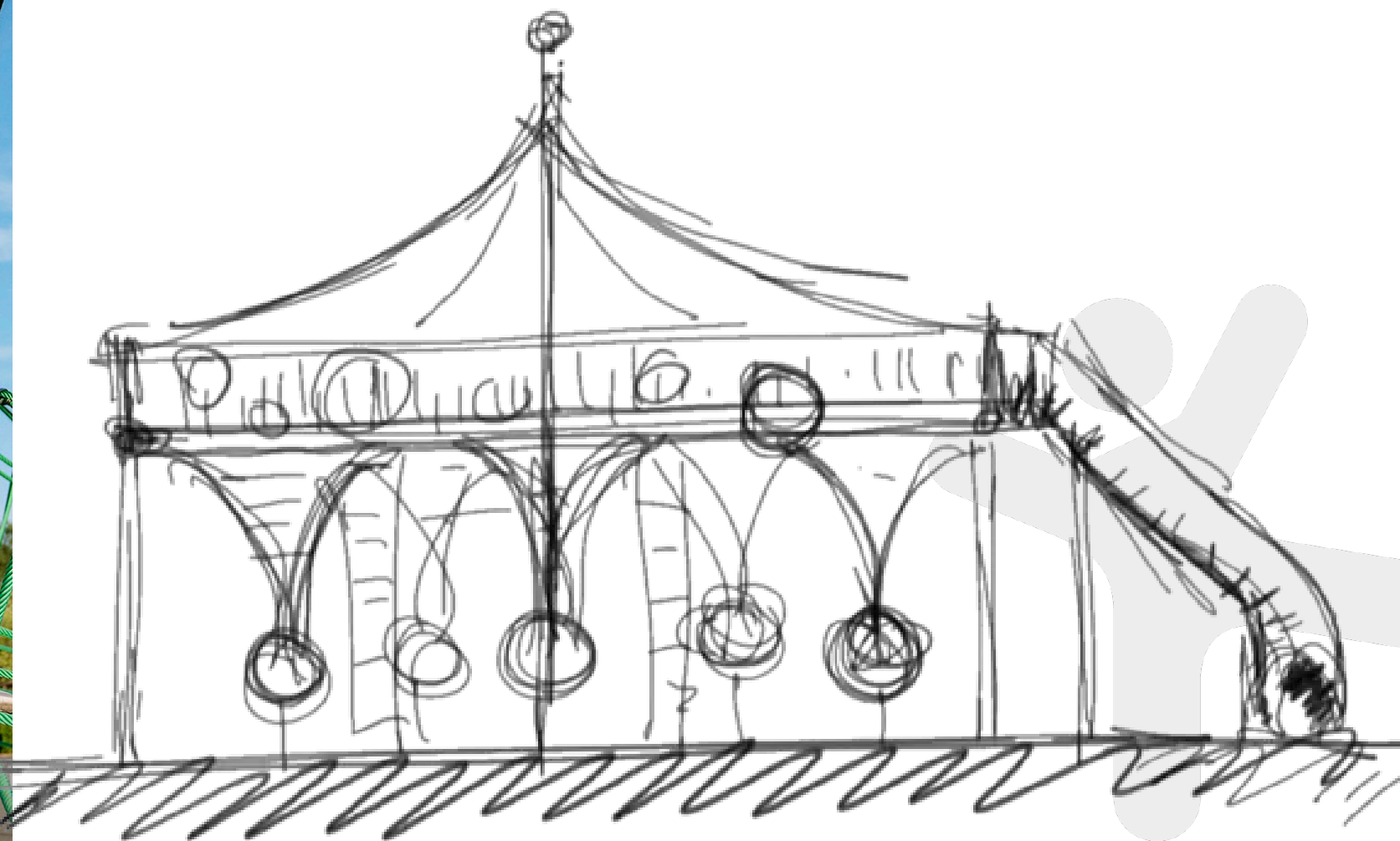
Stay

Play the KOMPAN Way



Develop

Play the KOMPAN Way



4.

Photo Credit: <https://metrorecreation.com/history-of-playgrounds/>

The Evolution of Play Structures



Evolution of Playgrounds



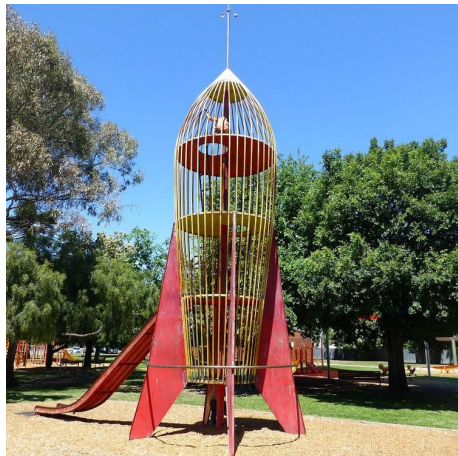
Jungle Gyms



Freestanding slides



Elevated Play



Themed Play



Merry-Go-Round

Standing the test of time:

- Appetite for risk
- Elevated play
- A challenging climb
- The reward and thrill of a slide
- Themed play
- Dynamic play > spinning, swinging...
- Use of steel material

Photo Credit

- rarehistoricalphotos.com
- : <https://www.playcore.com/news/history-of-playground-surfacing>
- [Panoramio](https://www.panoramio.com)
- <https://i95rock.com/old-school-playground-equipment-that-might-have-killed-you/>

Recent Pasts | World's Most Iconic Playgrounds



Slight shift:

- Diversified materials
- Enclosed elevated play
- Introduction of Playground Standards which does change the measure of risk.
- Increase in indoor play structures



Photo Credit

- <https://www.nationalgeographic.com/travel/article/best-playgrounds-around-world-family-travel>
- <https://www.seattlemet.com/travel-and-outdoors/best-playgrounds-and-parks-in-and-near-seattle>

5.

How to design a great play space?
- Case Studies -

Case Study | Corocord: Rope & Steel

Client Brief:

- Fierce, cranky dinosaur
- Not a cute and cuddling dinosaur.
- Durable materials that can withstand high frequency use and offer long term warranties.
- Iconic and stand alone.
- Challenging and all ages



Case Study | Corocord: Rope & Steel



Case Study | Play Values



Equally present on all levels:

- Active play
- Engaging play. I.e. Sensory, tactile, cause and effect
- Challenge
- Reward

Why is this important?

- Age and ability appropriate challenges
- Diversity

Upper Level

Middle Level

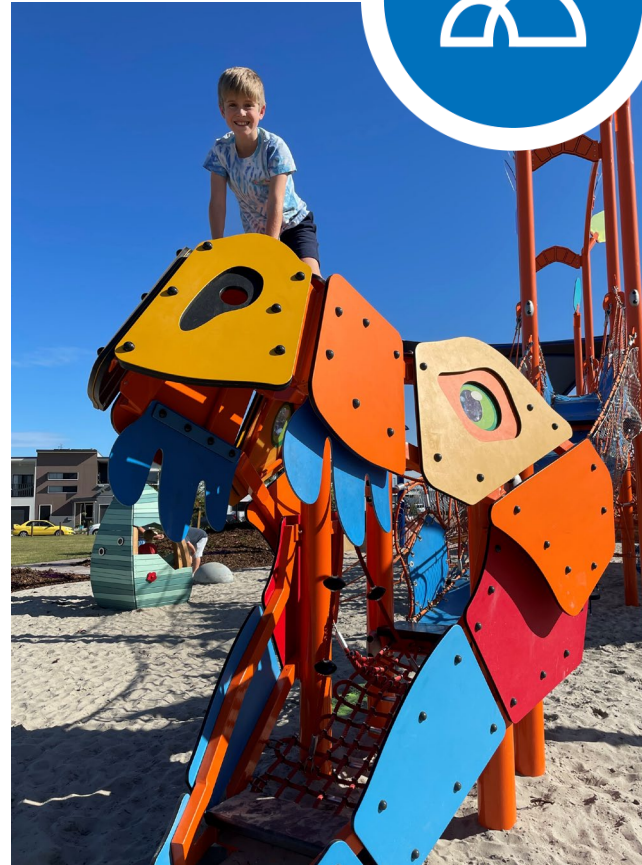
Low Level

Case Study | Play Values



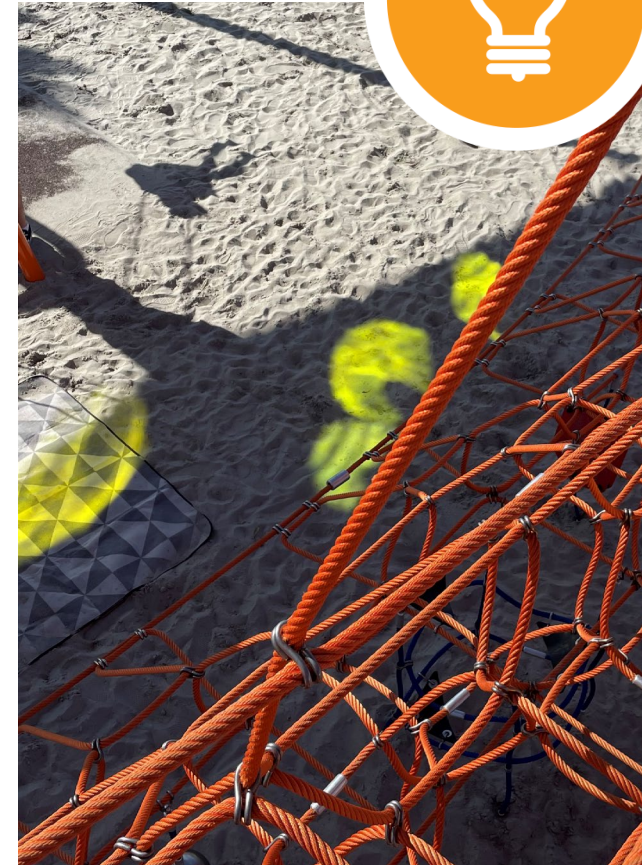
Physical:

Net climb with membrane platforms. Pause and hang points.



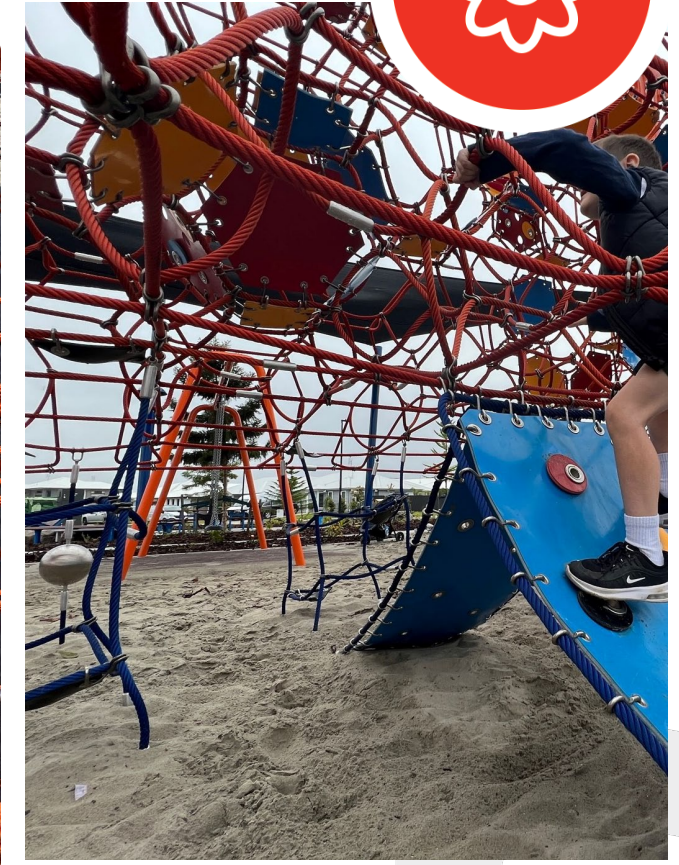
Social & Emotional:

Destination, look out point, imagination play.



Cognitive:

Dichroic panels cast colour shadows.



Creative:

Stainless steel sound shaker

Case Study | Development Benefits





Case Study | Moments: HDPE & Steel

Case Study | Moments: Whole Solution

Client Brief:

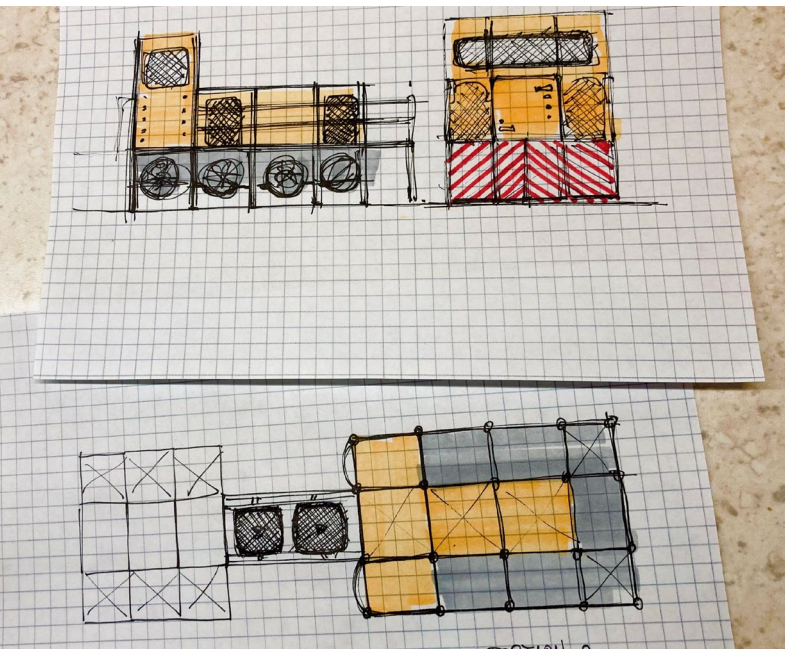
- Main highway is being re-directed away from township.
- Entice tourists = stimulate local economy
- Updated playground to support happier and healthier community.
- Represent iconic local history and farming industries.
- Themed play, inclusive, all ages.

Outcome:

- Multiple custom and themed units with strong narrative
- Themed rubber design that represents the township's landscape as abstract representation of land use.
- Cane Train, Sugar Mill and Tractor



Case Study | Moments: Real>Sketch>Playful Solution



Case Study | Moments: Play Values



Case Study | Moments: Play Values



Physical:

Multiple sliding > spatial awareness, sense of balance and core muscles



Social & Emotional:

Balcony > invites meeting and interaction across levels



Cognitive:

Sliding > determining space, speed and distance.



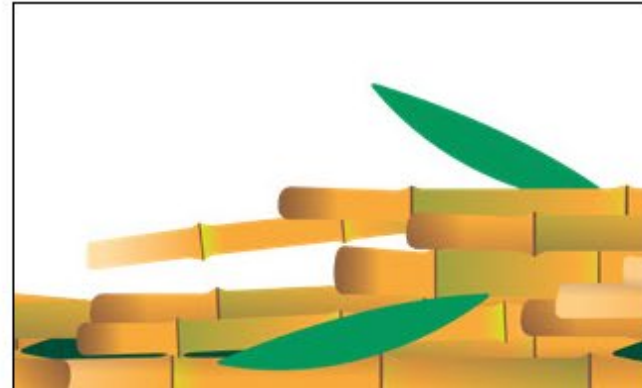
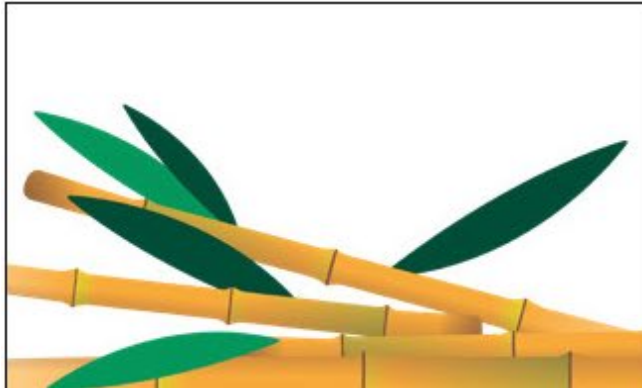
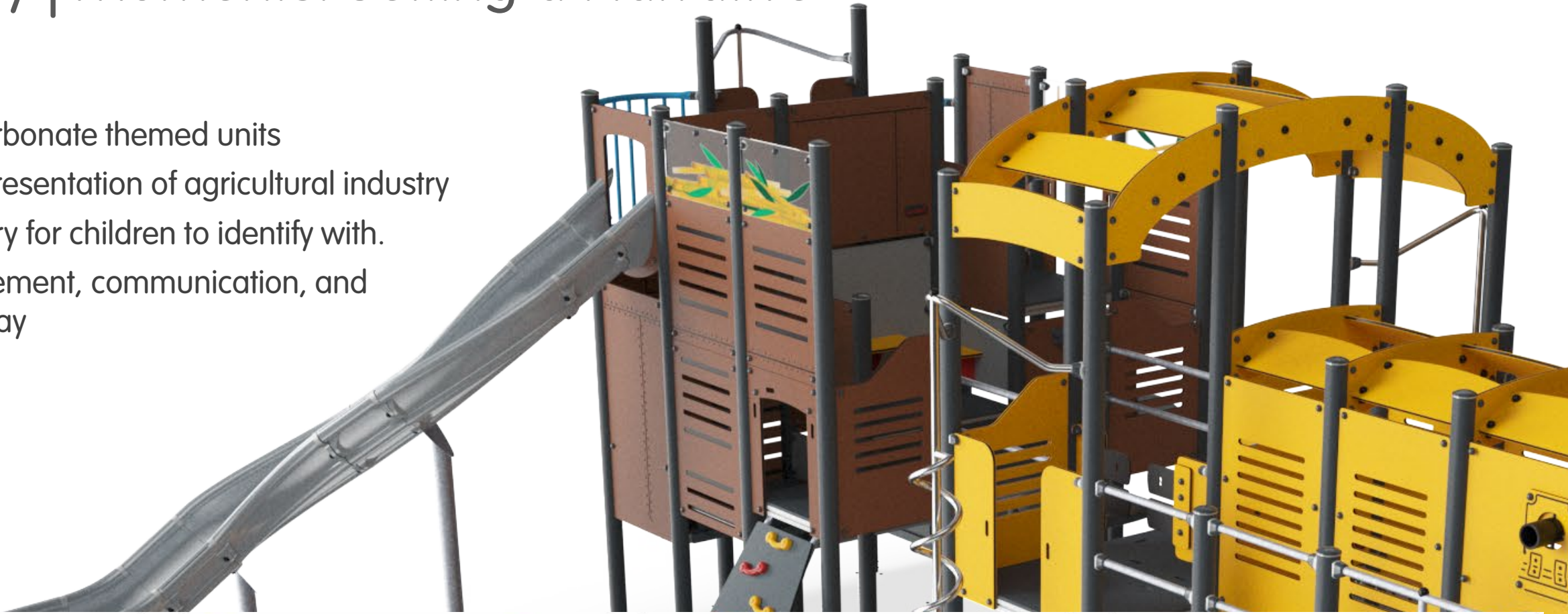
Creative:

Drivers Cabin > invite dramatic play and performance

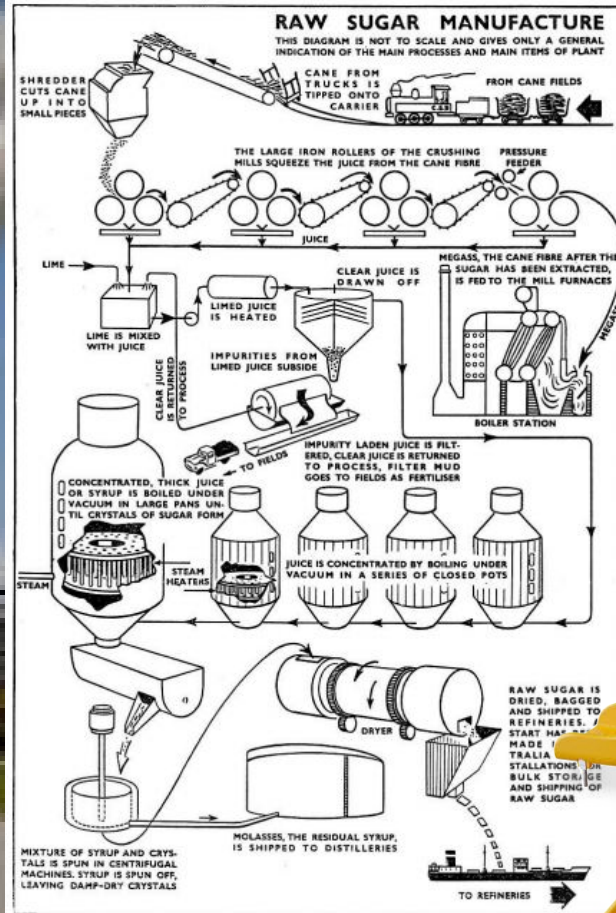
Case Study | Moments: Setting a Narrative

Literal theming

- Printed polycarbonate themed units
- Respectful representation of agricultural industry
- Narrates a story for children to identify with.
- Evokes engagement, communication, and imagination play



Case Study | Moments: HDPE & Steel



Case Study | Moments: HDPE & Steel



Banister bars

Physical: Supports coordination, arm and core muscles. Landing strengthens bone density
Social-emotional: turn-taking and risk-taking.



Tower net

Physical: The children have a fast access up the horizontal rungs, and a slower climb up the sloping rungs. The net can be climbed from both sides.

Social-emotional: The two-sided net allows for social interaction. The spaciousness invites socialising.

Cognitive: Logical thinking and planning when planning how best to enter the platform from the net.



Timer

Social-emotional: teams can have a button to measure rounds, wins etc. The button support cooperation and teamwork.

Cognitive: counting and registering support thinking skills such as logical thinking and sequencing.

Creative: children can leave their mark, placing the timer in different positions.



Balcony

Social-emotional: The balcony invites meetings and interaction with people on ground level.

Cognitive: Invites dramatic play and performance, which stimulates language development.



Slide

Physical: develops spatial awareness, sense of balance and trains core muscles when sitting upright going down.

Social-emotional: empathy stimulated by turn-taking.

Cognitive: young children develop their understanding of space, speed and distances when sliding down.



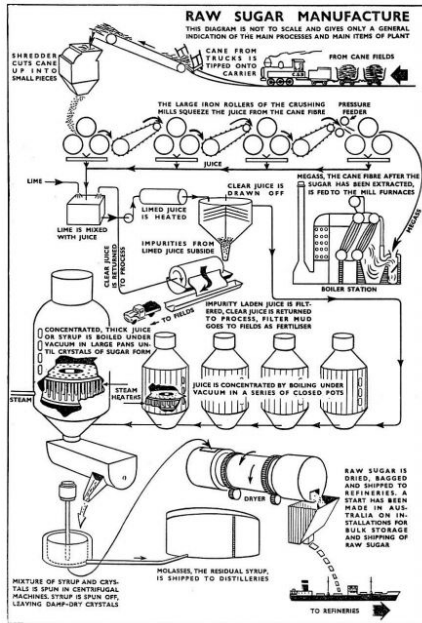
Rock climber

Physical: Supports cross coordination and leg, arm and hand strength.

Social-emotional: The inclination makes climbing feel secure, especially for younger children.



Case Study | Moments: HDPE & Steel



Literal theming

- Printed polycarbonate themed units
- Illustrations of the manufacturing process
- Narrates a story for children to identify with.
- Evokes engagement, communication, and imagination play



Case Study | Moments: Setting a Narrative





Case Study | Robinia Sculptures

Case Study | International Playgrounds | Sweden



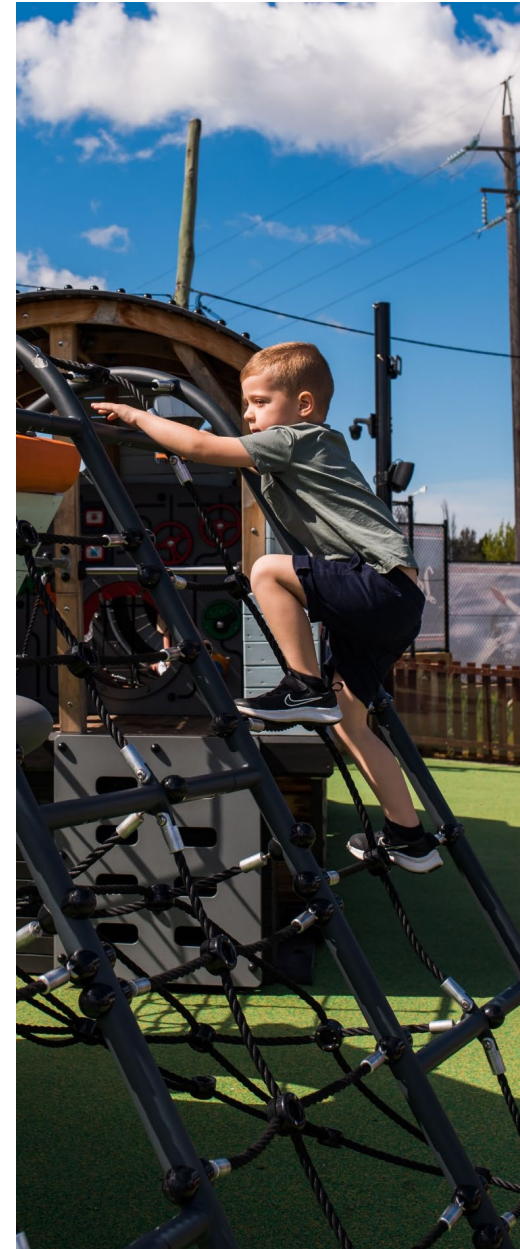
Case Study | International Playgrounds | France



Case Study | International Playgrounds | Australia



Case Study | International Playgrounds | Australia



6.



Sustainable Custom Solutions

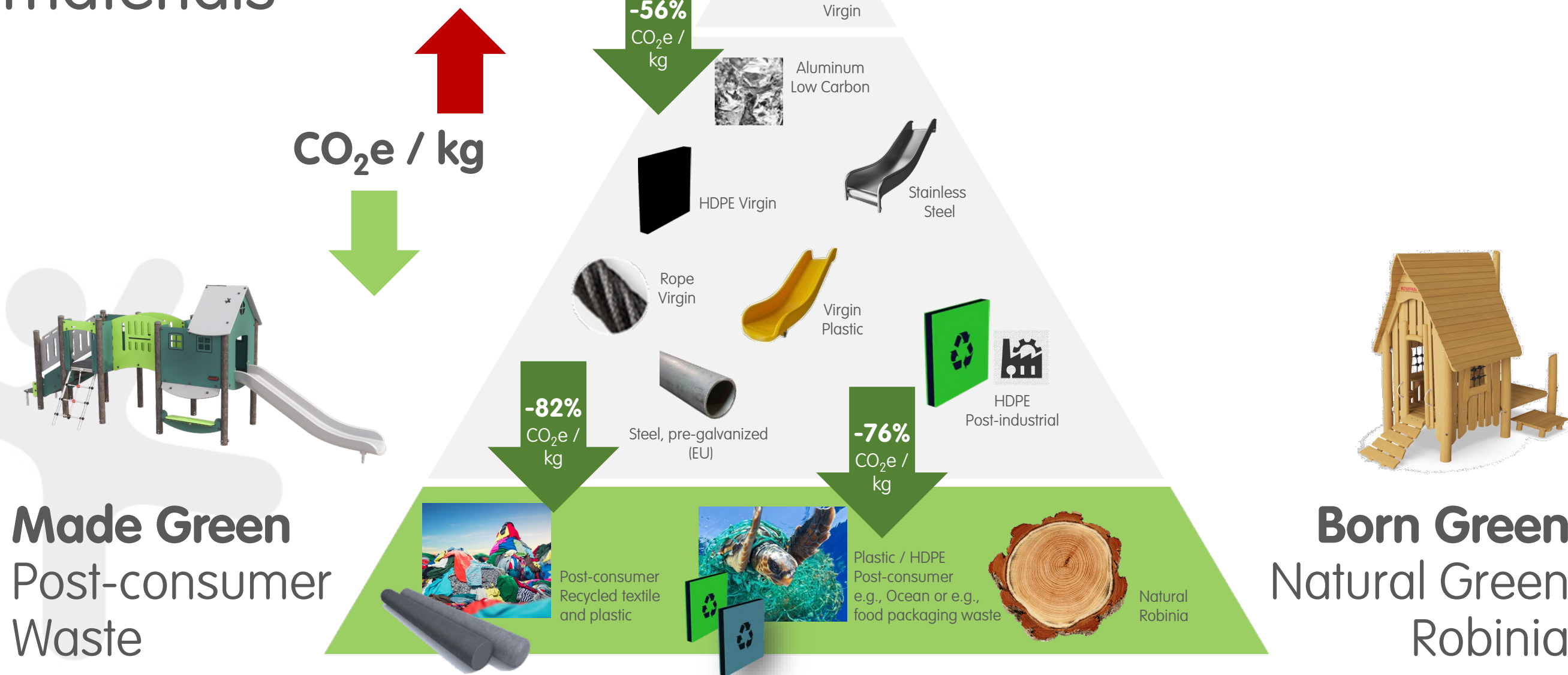
Sustainable Custom Design

What we know:

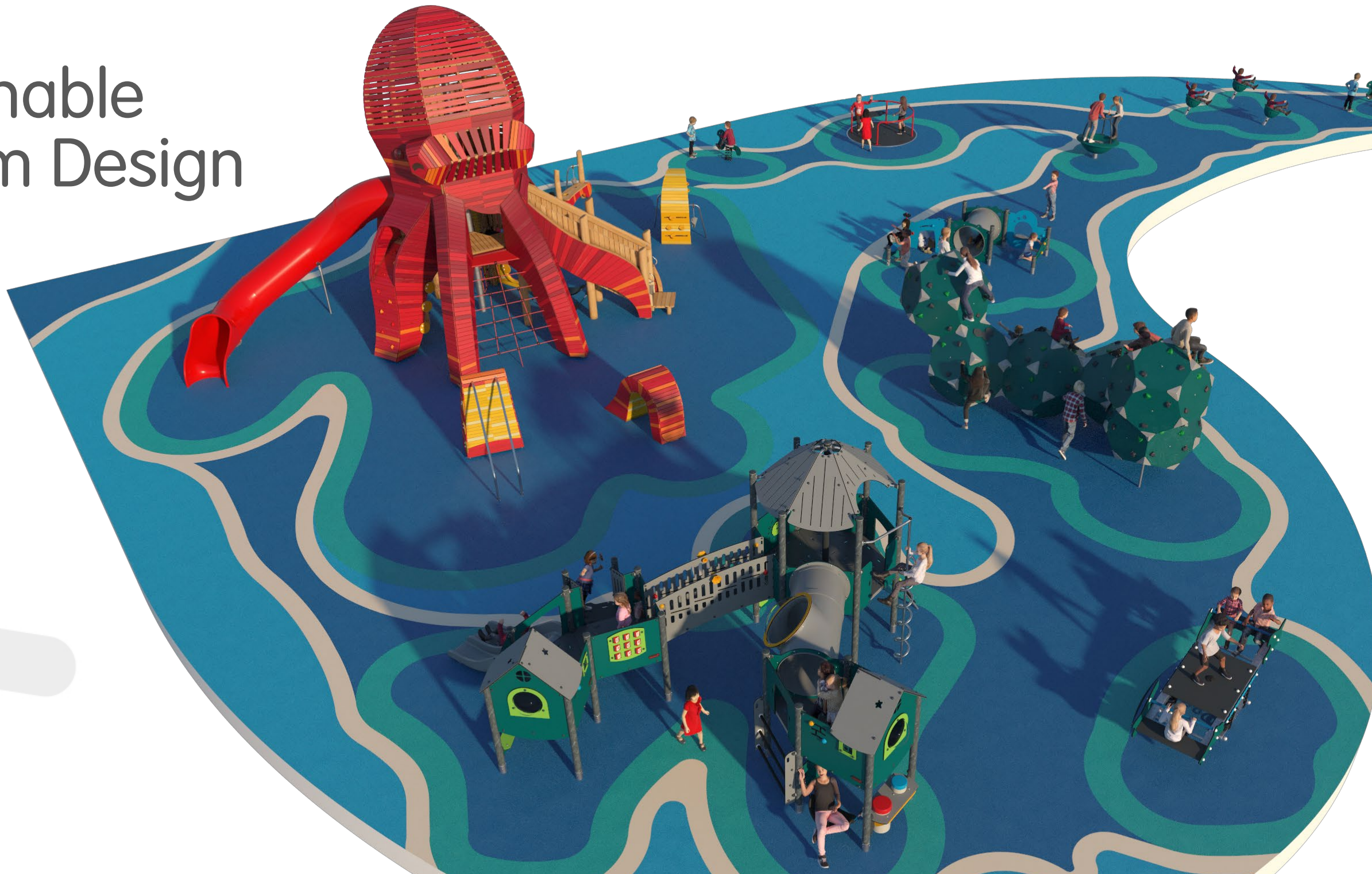
- With current trends, we need to alter our everyday approach to design.
- Our new GreenLine initiatives and materials
- Measured and certified validation of carbon emissions.



Biggest impact on our CO₂e is Raw materials



Sustainable Custom Design



7.



Conclusions

Conclusion

Why?

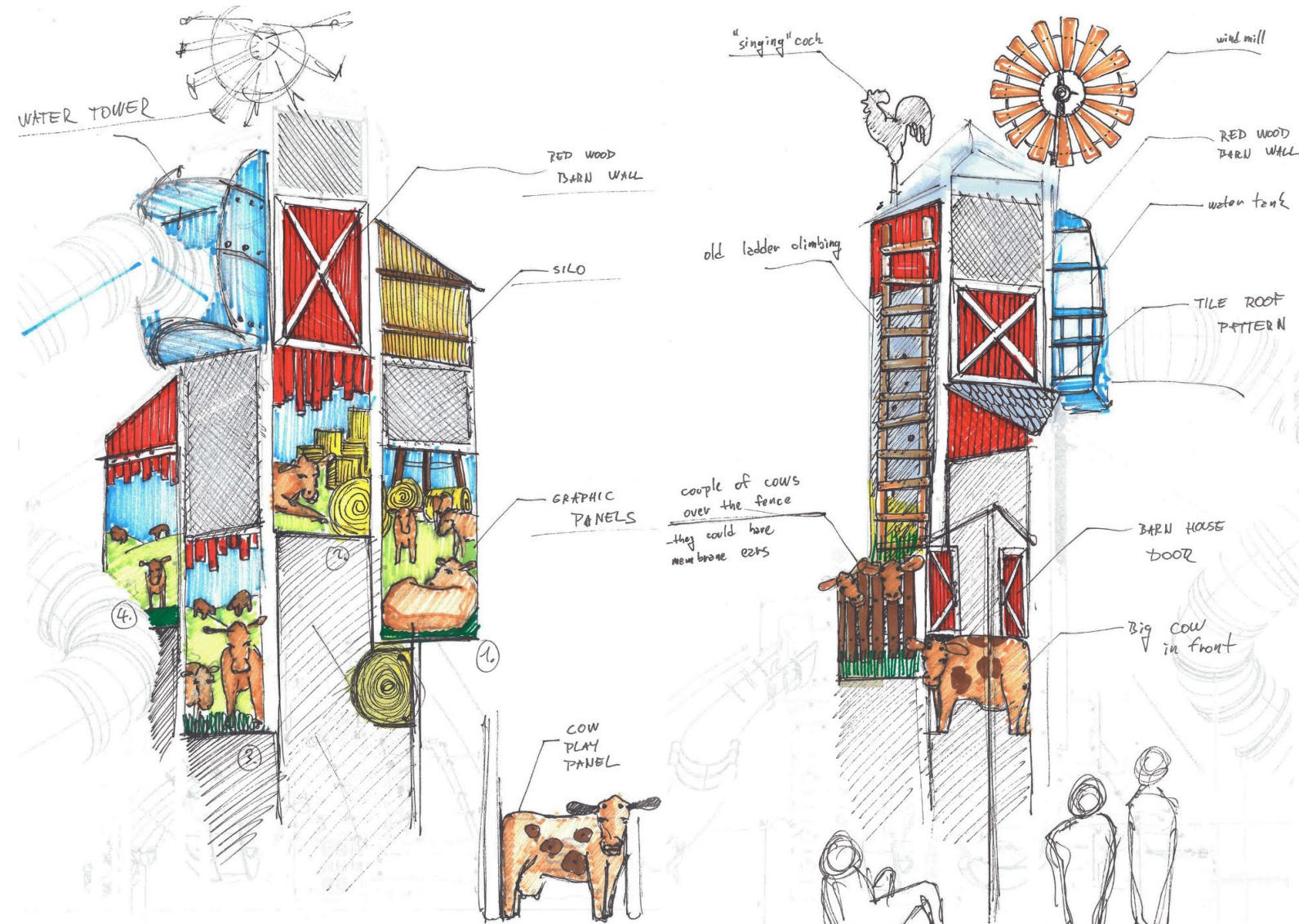
- Physical inactivity is the leading cause of lifestyle diseases. Children need a minimum 60 minutes a day.

How?

- Develop effective play spaces that encourage vigorous physical activity, packed with play value to support our children's health and wellbeing. i.e. physical, social, emotional, cognitive and creative skills.
- Custom play with the 'wow' factor, the want to 'stay' and the natural progression to 'develop'

When designing custom playgrounds?

- Remember the end user
- Provide play values on low, middle and upper levels
- Form follows function
- Architectural aesthetics can be achieved with compliance and warranty.



Continued Professional Development



Should you wish to learn more, please refer to our vast research assets.

KOMPAN Play Institute generated White Papers:

- Unique Play Designs – Increased Play Duration
- 6 Tips to Dramatic Play Solutions

Webinar Series:

- Tomorrow, Wednesday 16th November
- Designing unique playgrounds that match your story and your scene.
- To register:

<https://www.kompan.com/en/au/research/webinars>

8.

Questions





KOMPAN[®]
Let's play

