SESSION 1 - 12 SEPTEMBER 2019

PROBLEMS

- Public Perception
- Social License
- Trust
 - Lifecycle
 - o Plant
 - Harvest
 - o Locking Carbon Away
 - Sacramento Tree Foundation
 - Carbon Grants Sequester
 - o Non-profit
 - o Price point/under-cut
 - Long Term Establishment
 - Making use of different funds/groups
 - Education/Lifecycle -
 - Is there a problem with 'death'?
- End of Life
- Ways to Address and Engage Climate Change

- Scalability
 - Types of timber
 - Valuable
 - \$ Veneers substrate health
 - o Solid Timber
 - Place for urban sawmill/size within town zoning
 - Less of fashion timbers
 - o Underutilised/over supply, wrong type of timber
 - o Dry stable become @ product/market cost.

BARRIERS

- Risk/Codes
 - Food trees. Rules, safety/sight lines
 - Safety. Types of tree/crime visibility
 - WHS
 - Community involvement
 - Council State Government Universities
- Cutting trees to encourage growth
- Weak growth
- Risk/Codes
 - Community Involvement
 - WHS
 - Food Trees

- o Rules Safety/Sight Lines
- Safety
 - o Types of Tree/Crime Visibility
- Types of Timber

SOLUTIONS

- \$\$\$
- Public Perception
 - Quantify fire
 - Carbon
 - o How/rate of sequesting
 - Fires
- Harnessing New and Old Groups
 - Council, State Government, Universities
 - Landcare?
 - Greening Australia?
 - o School Education
 - Peri-Urban

CONSERVING OR CONSERVATISM

- How is public space used/planting safety crime
 - Conform to a plan?
 - Volunteering
 - Putting them back/how to store
 - o Re-standing trees, nature more than artificial
 - Is there a step before milling hollows habitats as well as products.
 Some selling it green instead of dry/stable wood.
 - "Urban Wood" free logs. Perception of cost/cost of processing.
 - Oversupply
 - o Affordability
 - o Valuable tree
 - o Policy to the electorate

URBAN TREE CANOPIES

- Want benefits not impacts
 - Maintenance
 - Social pressures around trees
 - Wildfire/bushfire (2003) 4 Lives
 - o Burn off
 - o Regeneration
- Tension
 - Planning Rules/Codes
 - Permission
 - Developers
 - Funding
 - o Poisoning and removing trees illegally

- Artificial hollows
 - Lop it back
 - Cut hollows

MODELS OF AUCTIONING/TENDERING

- Circular economy
 - What to do about Government log dumps?
 - Saw log mulch/firewood
 - Trees coming from private to public land
- Social investment/buy in
 - Sustainable
 - Innovative
 - Industry
 - o Bio-char
 - o Bio-diesel
 - o Pellets
 - Community use
 - Schools
 - o Re-use
 - o Habitat trees (Bierra Hill)
 - Street furniture
- High Value with Universities
 - Research investment required e.g. bio-diesel, bio-char

WHAT ARE THE PROBLEMS?

- Development reducing urban forest canopy
 - 50% urban canopy on private land
- How to connect all stakeholders
 - Lack of cohesive government policy to direct
 - Urban forest strategy
- No system in place to sell/market time from urban forest
 - Chain of provenance
 - o Timber returning to the location of removal e.g. furniture.
- Limited business in place to utilise timber
 - Understanding potential market. How much timber utilised in ACT.
- Education of community
 - Including schools
 - Multigenerational resource
 - Custodianship
- Connection to artisans/suppliers/Government/processors
- Managing urban forest with competing values

WHO ARE THE KEY STAKEHOLDERS?

- Indigenous community traditional uses
- Government TCCS, EPSDD, DoE, Icon, CMTEDD
- School, CIT, University
- Suburban community/resident's association
- Industry
- Artisans/artists/woodcraft guilds
- Business
- NFP

PROBLEMS

- How urban forest resources are used?
- Greater options for the whole life cycle of an urban forest resource
- Tree assessment that considers future use
- Balancing the diverse community views
- The best practice resource use list is long, varied and needs co-ordination
- Logs

- Environment
- Art & Craft
 - Carbon Seq
- Hands on
 - o Nature Play
- More can do options and opportunities
- Understanding what users need/what proportion of the resource

PROBLEMS

- Scale of the Problems
- Volume
 - To be removed
 - Storage
 - Milling/curing
 - To be planted
- Lack of Protocols (enforceable)
 - Inadequate regulation for development
- Communication of problems
- Cost
 - Perceived vs. actual
- Risk vs. consequence

- Pesticide/chemical use
 - Reuse issues
 - Diseases
- Species and changes of species overtime
- Lack of Information/education on the -WHY-
- Agreement on reuse?
- Communications
 - Stories
 - Not communicating as not ready for response/requests (possible solution 'pilot project')
 - Between government departments
 - -
- People
 - Support
 - Social buy-in
 - Misinterpretation
 - Enthusiasm (+/-)
 - Consultation
- Strategy alignment
 - Planting vs reuse priority
- Demand vs cost effectiveness
- Climate
 - Of Canberra and changes
- Space

- What can you grow?
- Not treated as a system
 - Historically reactive
 - Lack of planning
 - Culturally

MYRTLE

- Towards a circular economy for street trees
 - How to create a bidding/auction/tendering mechanism for tree removal.
 - A related but much bigger challenge: how to communicate the Government's intention/ethnic in removing the tree.
- Developing a resource pathway of a tree life/death cycle and the value chain along it
- Develop a communication strategy along each step
 - Role of art and artists in the communication
 - Case study e.g. carving out a habitat
 - Losing and commemorating a "companion tree"
- Strategic approach required that's different for street trees, private/public gardens etc.
- Milling at tree week
- Bio-diesel from trees

Qiqi Fend - Session 1 - Notes - 12/09/19

PROBLEMS

- Sea level rise in Singapore
- Lack of knowledge or urban forest
- Slow market
- High cost
- Trees are not treated as a system
- Need information/education
- Everyone share their ideas and experiences
 - Melbourne (need strong policy)
 - Singapore (now need more focus on community. It is in the third phase "city in nature")
 - They talk about many wood products e.g. toothbrush
 - Plastic tree

Yifan - Session 1 - Notes

(Break out group discussion (Luke, Bark(?), David, Myles)

PROBLEMS

- How urban forests resources are used. Greater options for the whole life cycle of urban forest resources.
- Tree assessment that considers future use.

(Planning has to take a role)

 [EDUCATION] → in the whole process→educational function→urban wood.

- Trees died and became dangerous/unhealthy→cut them down→and what's the next step? Chips→firewood? What are more options? What can we do?
- Balancing the diverse community views
- Categorising the trees/wood timber
 - Different parts of logs could be different uses
- Government authorised utilisation of tree removal/dead trees cut.
- Are there any industries in Canberra to deal with the urban wood (dead trees removal)
- Logs
 - o Environmental use)
 - o Art and craft) Carbon seq
 - Nature play (hands on)
- The practice resource use
 - What more can we do?
 - Opportunities and options?
 - o Understanding the public's demands?
 - O Users need what?

[Once a tree reaches its life span – need co-ordination/communication \rightarrow do more. More possibilities.

Chris Braek - Session 1 - notes 12/09/19

- Walter & Marion Griffin's urban forest plan
- Charles Weston set about developing a garden city
- Lindsay Pryor active management and experimentation
- Canberra = Weston's exotics and Pryor's experimentation
- 60-70s → more indigenous species planted
- $20-50s \rightarrow \text{exotic species planted}$
- The problem with being alive is that you die
- Surely though, they don't die but they can be killed
- What Pryor called 'thinning' it isn't actually dead
- Trees in the city are supposed to look attractive → trees role in urban areas
- Monoculture, single use planting areas CBR
- Green infrastructure delivering many benefits proportional to canopy areas
- Trees are dynamic but mortal
- How many trees are useful and safe?
- Millennium Drought
 - DISMUT 2000
 - DISMUT recalibration 2005
 - Rapid Audit ULE (useful life expectancy) 2011
 - Rapid Audit ULE #2 2015
 - Hotter and harsher
 - Lots of dead and dicey trees not serving their purpose

Chris Steel – Minister for City Services – notes – 12/09/19

- Stewardship of Canberra's urban forest
- 766,000 trees on public land
- Responsible for roads and active travel
- 20,962 declining trees
- 200,000 end of useful life in 40 years
- 500,000 people by 2030 in CBR
- Growing city strategy focussed on urban intensification and reduction in sprawl
- Major infrastructure investments to support densification
- Updating plans by climate analogy for species selection (?)
- Benefit and cost of all the trees planted over the last 100 years
- How to balance 'coming of age' city while retaining the 'bush capital'
- Strict tree protection act polarising piece of legislation
- Trees look good and we want to showcase this
- Monoculture??
- Community challenges in trees coming to the of their life
- Using tree life to justify clearance for infrastructure
- Using diseased trees?? the wrong way for the light rail
- ACT many competing priorities
- 'Better Suburbs' statement 2030
- Renew and enhance CBR's tree canopy
- Initial 17,338 trees additional maintenance of activity trees
- Community planting and education
- Urban forest strategy

Geoff Roberts - Mullion Group - 12/09/19

- Flint Pro
- Enterprise solution to land analysis
- Modelling of environmental variables at? spatial and temporal resolution
- Modelling framework
- Shows carbon? lapse
- Quantity carbon in the urban environment, forests and plantations
- Operation using the science this tool can help

Session 1 Questions

- Talked about trees but not about why they replant themselves –
 regenerate naturally in parks?
- Complicated for community to do work in public spaces community engagement important in urban forest strategy – Chris Steel – funding available for community groups.
- Paradox in governance in CBR
- Co-ordinating between government and developers
 - Geocon smashing the bush capital and the Government promoting the bush capital
 - High-rise pro/against
 - UTAS Harnessing exclusively organisations that connect with the community now
 - Lots of expertise and volunteers to draw on
 - Difficult at urban street scape level
 - not efficient
 - o need to involve community
 - o managing people's enthusiasm
 - o organisations experienced in managing volunteers

- Millennium drought, water and to manage trees
 - Are water managers involved in tree management in CBR
 - Campaign to encourage people to look after their trees
 - Water allocation for watering trees
 - o Water is expensive
 - Community encouraged to look after their trees
 - Hotter, drier climate
- Tree protection act negative effect from ACT grant planting trees (tree canopy size)
 - Yes
 - Tree preservation order
- Urban forest belongs to the people
- Source through community supports for urban forest maintenance
 - Looking into it
 - Interested in it (Chris Steel)
 - Social licence

Break Out - Session 1

- Focus Questions
 - 1. What are the problems to be addressed and solved? Bend your mind to the people element.
 - 2. Who are the key stakeholders (institution/individuals) in resolving the problems?
 - 3. How do you know what you think you know? Where is your information coming from? Do we know enough about trees to plant and in what conditions?

OAR

- Climate change not addressed adequately
 - 5-10 year draining down carbon
 - Planting trees
 - Trees by sequester carbon logical move
 - Money \$\$\$
 - Public perceptions (social element)
 - Sacramento Tree Foundation
 - Have been planting and delivering trees to the public
 - Strong rep but still participating issue with harvesting TRUST
 - Community beginnings (tree movement)
 - Rural focus rather than urban
 - Urban heat?
 - Plant tree species that can be used for furniture (e.g. silky oak)
 - Educate community, know about the life cycle of the tree
 - Harnessing different levels of enthusiasm
 - Energise kids and get the parents along
 - Gardening Australia focus on youth and education
 - Harnessing existing educational links
 - City Government
 - ACT planning grant, government appointment from planning
 - Lots of hoops to jump through 'diabolical' hard for community group – huge burden.
 - Sacramento
 - City codes
 - Codes move slower than property auctions/development
 - Barriers with government
 - Crime prevention through environmental design
 - Takes out structural layers of planting
 - Impacts on planting places due to restrictions

- No social space disconnect from society
- Redfern Sydney
- Better to have some party
- More community interactions
- Allowing green space, not just buildings
- Changing the way we value social and environmental contributions
 - Planning rules
- Hard to get permission to even do the small things
- Green suburbs worth more than dead suburbs
- Want the benefits, not imports
- Stringent tree protection control planning (Syd)
 - Very strict
 - Dense urban area
 - Social pressure for change to control planning
 - The policy is now
 - Tree protection gone bad
- Council's cutting down trees
 - Sunshine Coast Council
 - Conventionism doing things how we've always done them
- How to make forests pay for themselves
- Urban forests evoke fear
 - Bushfire fear in CBR
 - Prescribed burning fear
 - Bushfire and maintaining green space
 - Exposure to a near miss
- Public perception and opinion
 - Look at science and evidence and inform people
 - Risk is quantifiable

- Carbon sequestering plateau
 - Rate, species, age, decay
 - Effective point and juvenile trees
- Branch management coppicing
- Life cycle of trees
 - Not appreciated enough
 - Social licence issue
- Disconnect in urban areas with nature
 - Making the connection between your table and a tree
 - Educating people on the benefits of trees after death
- Timber as a resource rather than for fashion timber products
- Higher arborist costs
- Timber product saleability
 - Cost
 -?
 - Want
- Customers willing to pay for a wood product
- Sacramento
 - Urban sawmill business x7
 - Procuring takes a long time
 - Demand and finding a market
 - Move wood coming out of urban areas
 - Free logs all day long from tree removal
 - Processing wood into a functional format

- Underutilised wood types
Urban wood
- Selling for what they can get

Educating consumers on products

Sitting on product

Over valuing wood products

- Perception issues
- Adaptive reuse of materials
 - Before milling, restoration
 - Demand from the non?
 - Demand for hollows
 - Put back
- Artificial hollows in parks
 - Work with ecology
 - Species of hollows (size, height, etc.)
- Go to the loggers
- Take from the source and give back to the environment
- Convince people it is worth something
- · Liability of carbon wood procuring
- Low carbon wood for fire wood
- Saw dust for compost

ANU SCHOOL OF ART & DESIGN FURNITURE WORKSHOP - 12/09/19

- The ACT witness tree project
- Witness trees long standing trees that witnessed the long history
- Tree removals
 - Yields lowest quality product
 - Chips
- Misconception about the life cycle of trees

Gordon Smith - 12/09/19

- Nails in urban trees
 - Signs

David MacClaren

• Bungendore Woodworks Gallery

Elmi - Arboretum, School Teacher - (N......) 12/09/19

Sacramento group, 200,000 stored metric tonnes of carbon Forestry plantation with ACT – honest system to build 5000 homes

PROBLEMS

- 1. What are problems to be addressed and solved?
 - 50 private land/ 50 forestry canopy.
 - Reducing tree canopies in urban environment WHEREAS a lot of uses.
 - More awareness of forestries and its needs and uses but this is not there in urban forestry.
 - No system in place to utilise use of wood forestry are grown to harvest there is a system/contract/license but no system in place to harvest urban forest.
 - No process in regards to urban forest honest system or no process to encourage community interest – how to get public and government to focus on that this is a problem – as in what do Canberrans respect about Canberra and is that being addressed?
 - No clear vision what, where, how, in regards to urban forest.
 - No development policies in terms of green space –NEEDS TO BE ADDRESSED.
 - Need awareness of management for ALL FOREST types.
 - IKEA problem expensive to build furniture out of quality wood –
 expensive to buy wood potential for economics to work but there needs
 to be incentives accessibility to wood, better marketing.
 - Need more businesses to use harvested wood to make it more affordable.

- Not enough interest to use harvested wood AS WELL AS no process to see/use the wood
 - NO SYSTEM IN PLACE
 - o Too expensive and fiddly at the moment

PROBLEM

- Need a system to be developed to buy and use harvested wood
 - License to someone to manage this function
 - To harvest dead/fallen trees in URBAN environment.

PROBLEM

- Harvesting dead trees in urban environment public perception not wanting trees to be cut down AND then don't want government to cut down tree TO SELL
 - But actually use harvested trees to drive value created a market for resources
 - To create market need more businesses who have capacity to use wood AND licences/system to harvest the urban trees.
 - creation of market for harvested trees

PROBLEM

• No system to harvest urban trees.

PROBLEM

- Limited education of committee in valuing resources of urban trees and possibilities.
 - SOLUTION: Schools would also want to use timber resource.

PROBLEM

• Trees are not valued – hard to sell as an asset.

PROBLEM

- Some trees have heritage.
 - SOLUTION: Sell the heritage of that tree rather than just protection, i.e. buy wood from a tree in Manuka to continue the heritage.

PROBLEM

- Lack of businesses to use harvested woods timber = expensive; product
 expensive.
- Lack of community interest

PROBLEM

- Trying to value trees is hard when you have a lot of trees. Quantative data problems, i.e. mapping.
- By quantifying an asset point to tree makes it visible to Government but not there.

PROBLEM

- Environment conservation and development part of the same directorate.
- Do we know how much timber is utilised by harvest (both forest and urban) as in how many businesses exist to use this timber? Should interest be revitalised?

PROBLEM

- We are not aware of the market that exists to utilise timber i.e. understand potential market.
- What are the potential resources if tree's life span is ending in 30-40 years?

STAKEHOLDERS

- Indigenous knowledge traditional uses of the plants
- Know that development is aware of these issues
- Suburb community?
- Artists/crafters/guilds

PROBLEM

- No national valuation of trees between states. How do we determine value?
 - SOLUTION: Sacramento trees are public assets they have been valued.

PROBLEM

• Data points for each tree (2) in order to value and manage.

PROBLEM

- It is hard to value trees and there is no national system for valuation.
 - Different citizen perspectives on trees

PROBLEMS

- Conflicting perspectives incentive to cut tree
 - Money

ASHLEY ERIKSMOEN - SESSION 1 - 12/09/19

Elisa – hashtags

DISMUT – decision – manage urban trees inventory

Chris Steel - ACT Legislative Minister

- Thousands of years of responsible natural resource management by Indigenous population.
- At least 20k vacant tree sites. About 365k trees of the 766k require maintenance.
 - ~ 200k will reach end-of-useful life in next 30-40 years
 - ~ 42kk people in Canberra; 500k by 2040(?)
- "Urban Regeneration" rather than "urban renewal".
- 2018 63 days over 36 degrees \rightarrow unprecedented is the new normal.
- We are experiencing both the benefit and the cost of a 100 year mature forest.
- Trees are polarising → fear of bushfire → trees are protected, takes away rights of property holders to remove their own trees.

THE MANUKA LONDON PLANE TREE – potential project?

 Community is sceptical of Government's ability to manage trees. Lots of work ahead to engage the community and build trust.

- As they expand light rail, they will encounter more heritage trees and need to look at how to retain that heritage.
- Going to plant 17,330 trees by 2030.
- Old neighbourhoods have over 20% canopy cover, whereas new neighbourhoods such as Wright only have 1% cover.
- Urban forest strategy needs to be informed. We have more trees and more people than Melbourne.

Geoff Roberts - Mullion Group

- Flint Pro software
- Carbon sequestration important; critical to going carbon neutral
- Modelling software uses satellite imagery LIDAR, aerial etc. to calculate carbon stock.
- The urban forests of the ACT are a really important part of the carbon sink.
- The software can model carbon, but can also measure timber.
- Community engagement needs to become a lot more supported, community involved with planting and maintaining.
- Adopt a park program will provide some funding.

- In Germany, cities tie development of green infrastructure to development of urban areas.
- How to harness/manage enthusiasm.
- Community ownership of the trees on verges needs to be promoted, need water.
- Tree preservation order has a perverse aspect.
- The question of "the social licence" who gets the timber?

• Pollinator corridors

- Why are we cutting down local woods into firewood and then importing those species back from Europe/North America? Makes no sense!
- Commercial buyers only buy select grade, clean timber. However, market is changing and will bear an imperfect timber to the source narrative.
- People will pay to be environmentally sound. Sources: private yards; institutions; the Government.

GORDON SMITH - 12/09/19

- Gordon gives off-cuts to the schools and the kids really appreciate having access to good hardwood timbers; they understand they have opportunity to use a quality resource.
- The bespoke pieces will stay out of landfill; pass down the heritage.
- Gordon told story of Radiata Pine, pine nuts and cradle.

DAVID MacLAREN

- Built his gallery from green Jarrah, coated in microcrystalline wax.
- Can add acrylic colour to the microcrystalline wax and it holds up really well.
- "If tables have feet they ought to have shoes" David MacLaren.

SESSION 1

- ACT Tree Week
 - Getting people to love trees
- Urban forest
 - Funding
 - 200,000 trees coming down
 - \$2000-5000 per cubic metre
 - Fell properly and managed properly
- Current uses
 - Chipped (diseased fungal)
 - Mulch
 - Totems for habitat trees
 - Barra Hill (Molonglo)
- Need to saw it; crane truck
- Building a self-sustaining industry circular economy
 - Cost absorbed by companies
- Public auction
 - Public liability
 - o People just come and cut it down
 - Administration nightmare
 - o People have different value on different trees
- Education
 - No education: People oppose, Government make money from auction
 - Education: People see the production out of logged tree

- Model
- Language; how you communicate
- Urban Forest Renewal Strategy (Previous)
 - Didn't work
 - Communication company hired now
 - o Get everyone involved
 - o I love trees, but ...
 - People love trees for their good
 - One tree is doing bad (leaf, PV), people will hate tree.
- Public sculpture
- Singapore's significant tree register
- Artist could help with communication.
- Is a tree dead?
 - No.
 - Habitat
- Different strategy for park/street tree.
- Had to bring down habitat tree
 - Mill in backyard
 - Take to kiln
 - Make front door in new house
- Pelletise
 - Efficient
 - Environment friendly
- What we should be doing now for the future workdown: highest value (saw log).