

Hon Sophia Moermond; Hon Jackie Jarvis; Hon Dr Steve Thomas; Hon Dr Brian Walker; Hon Lorna Harper;
Hon Pierre Yang; Hon Dan Caddy

INDUSTRIAL HEMP

Motion

HON SOPHIA MOERMOND (South West) [10.05 am] — without notice: I move —

That the Western Australian Government —

- (a) embrace the hemp industry and its stakeholders;
- (b) ramp up support for the hemp industry to expand and meet production and income targets set by the federal government through AgriFutures;
- (c) assess the feasibility of subsidising hemp processing facilities and incentivising wholesale buyers in the construction industry to use hempcrete as a building material;
- (d) study the recommendations of the AgriFutures research development and economic plan for industrial hemp with a view to taking steps to support the implementation of these recommendations, as feasible.

The PRESIDENT: Honourable member, there is a little bit more on the business program both at the beginning and the end. Would you like me to read the motion that the house will consider or you can read it? You may be best off reading out the one that is on the business program or would you like me to read it?

Hon SOPHIA MOERMOND: Do you want me to just read the whole thing again?

The PRESIDENT: You need to read out the motion that you are going to move and you have given notice of this motion that is on the business program, so you need to read all that in the way that it is printed—or would you like me to?

Hon SOPHIA MOERMOND: Yes; sorry.

The PRESIDENT: Hon Sophia Moermond has moved without notice —

That, noting the great potential of industrial hemp to contribute to the Western Australian economy, this house urges the Western Australian government to —

- (a) embrace the hemp industry and its stakeholders;
- (b) ramp up support for the hemp industry to expand and meet production and income targets set by the federal government through AgriFutures;
- (c) assess the feasibility of subsidising hemp processing facilities and incentivising wholesale buyers in the construction industry to use hempcrete as a building material;
- (d) study the recommendations of the AgriFutures research development and extension plan for industrial hemp with a view to taking steps to support the implementation of these recommendations, as feasible; and
- (e) acknowledge the agricultural benefit of hemp regarding carbon credits and carbon sequestration.

Hon SOPHIA MOERMOND: I note that industrial hemp is an emerging industry that is gaining increasing attention in Australian agriculture as well as internationally because it has the potential to address several challenges facing the WA economy and global economies as well. Recent research by AgriFutures shows the clear steps required to expand the industry. I was delighted to see the government recognise in its response to the Select Committee into Cannabis and Hemp that we need to ensure that the legislation regulating the hemp industry is fit for purpose, remove obstacles, make it easier for people to enter the business plus provide financial support for the burgeoning industry. No doubt members opposite are rolling their eyes that I am going to speak about hemp again, but this is my opportunity to —

Hon Stephen Dawson: We're not.

Hon SOPHIA MOERMOND: You are not. That is really good to see. I am excited.

Hon Darren West: We're enthusiastically waiting for what comes next.

Hon SOPHIA MOERMOND: Great. Wonderful. I have to say that this opportunity is my chance for a half-hour infomercial on hemp, and I have a captive audience, which is fantastic.

Some members may be surprised to learn that there are already quite a few hemp businesses in Western Australia. They are producing everything from skin care products, food products, seed products, hemp oil and building materials. Unfortunately, no clothing is produced as yet, mainly because we simply do not have the facilities to process the fibre. Most of the hemp fibre and clothing products come from India and China. Although Legalise

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Cannabis Western Australia is a single-issue party, the federal party, initially known as the HEMP Party, stood for Help End Marijuana Prohibition. Hemp was part of that platform. Support for single-issue parties is growing, as we saw at the recent Rockingham by-election. One-third of all votes went to other parties, not Labor, the Liberals or the Nationals WA. That was the highest in 20 years. In Victoria and New South Wales, the crossbenches of the Legislative Councils hold the balance of power. Hopefully, we will achieve that here after the next election. We champion the hemp industry not because we are dreamy stoners, necessarily, who think that a niche industry is the answer to all the world's problems, although, to be honest, I secretly believe that because I have seen so much information from around the globe showing the potential of hemp and how it can help with a whole range of environmental and economic problems that we are faced with.

Current regulations are making it difficult for people to enter the industry, in particular the rules around THC levels. Cannabis and hemp are the same plant, it is just that one has a low THC level and the other does not. You could smoke a whole field of hemp if you wanted to and would end up with a cough, and that would be about it. Another factor that is inhibiting the growth of the hemp industry here is that the growers here are not allowed to extract CBD from the plant. CBD is the non-psychoactive component that is becoming increasingly popular as a health supplement. Extracting that would create a valuable income stream for farmers that would obviously allow for further investment for them and make their business more economically viable. When I was in the UK recently, I saw products like CBD chocolate, which was quite delicious. There are also CBD food supplements. Hemp seeds are coming out everywhere as food supplements. We are seeing it in things like muesli. The useful thing about CBD, or the seeds associated with the cannabis plant, is that it is one of the few land sources of omega-3. Omega-3 is great as an anti-inflammatory in particular and is needed for decent sleep, decent brain function and good joint mobility.

The hemp industry holds a lot of potential, and by loosening some of the regulations we would have the opportunity to become a major player in the global market. I would love to see that for WA. We have plenty of space and a bunch of incredibly dedicated and enthusiastic entrepreneurs in Western Australia. Although the government has provided some support for the hemp industry, we would love to see more. Right now, one of the things we are facing in WA is the need to diversify our economy. Different industries in WA need to move away from mining at some stage and we must acknowledge that the farming industry in WA is going to change, especially when we take into account the phasing-out of the live sheep trade. WA can focus on the environment in particular. Hemp is useful for making materials like bioplastics. They would be fully compostable and after they have been used, they would not need to be sorted into any particular bin; they could be put in a compost bin outside. I know that change can bring periods of uncertainty for people, particularly for those in the farming industry at the moment, but with strong leadership and solid prospects on the horizon, that change could become a lot easier. We can provide security for people at the end of that period of change that will hopefully buoy their enthusiasm slightly and simply make for a happier population overall. That means we would go through a period of change, but when there are good things at the end of that change, people tend to be more comfortable with the change as it goes on.

During a recent sitting, the Liberals and Nationals told us that we should not have broken up the native timber industry because it was deemed sustainable and that the Labor Party banned native forest logging for political reasons. Hon Jackie Jarvis reminded us that we need to preserve our native forests for ecological reasons, which ultimately affects the economy. I refer in particular to rainfall, the water table and the biological diversity necessary for pollination and so on. This had to change and the hemp industry can provide an alternative to the timber industry. It will take a bit of processing. The herb of the plant and some of the fibre can be get soaked into very low volatile organic compound glues and pressed together into beams or into a type of fibre board that can be used for cabinetry and housing. Basically, we have the technology to make a whole house out of hemp, bar the glass and metal bits. That would mean WA would need to import less. We would become more economically sustainable and less reliant on products from over east in particular. As Paul Kelly sang, *From Little Things Big Things Grow*. If we want to achieve WA's economic transformation and diversification to meet important goals for the present and future such as creating a sustainable economy that is prosperous, humane and environmentally friendly, we will have to support some of these little things in the hope that they will grow bigger. I am fairly certain that hemp has that potential and can certainly help create a very large industry here. I was pleased to hear that the government has extensive programs around supporting economic diversification based on the Diversify WA economic development framework, including boosting primary industry trade through the provision of \$70 million for value-added investment business grants as well as the Access Asia business grants and other initiatives. I only ask the government to consider taking the hemp industry more seriously in its plans for the economic diversification and transformation of the economy to achieve a more sustainable and humane economy.

Hemp can be used to make a variety of commercial and industrial products, including rope. The rope and sails of the old sailing ships were made from hemp. They were mildew resistant and very, very strong. Hemp is used in textiles and clothing, and hemp shoes are being produced, including the upper layer and the sole, and they last a long time. Paper is another product that can be made from hemp. I have hemp paper business cards now, which are, obviously, compostable and have natural dyes on them. Insulation is another component that can be made from hemp, particularly

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the fibre, which is referred to as hemp wool. I have heard from people in the industry who have been trying to get that off the ground that WA is ahead of its time with that idea. The benefits of hemp wool are that it is mildew resistant, it is natural and compostable, and it has great thermal properties. Hemp can also be used for biofuel, particularly biodiesel, so that would mean that we could grow hemp and have less reliance upon oil as a whole; bioplastics would also mean less reliance on oil. I realise this would need some adjustment; it is not exactly the same as some of the products we rely upon now, but the technology is definitely catching up and making hemp more accessible for industry.

Hemp currently has wide applications in the construction sector. Globally, eight per cent of carbon emissions come from cement, but hempcrete, which is a mixture of hemp and lime, sequesters carbon throughout its life cycle, including after it has been used to build a house. Native timber was central to supply chains in WA for structural timber in the construction industry, but the softwood plantation industry does not easily replace it. Hemp wood can replace that. In the Netherlands it is quite popular; that country has progressed a long way with it and more and more houses are being built there from hempcrete and hemp wood, and the Netherlands government is very supportive of it. There is also a project underway in a country in Africa in which hempcrete is being used for social housing. There was quite a large order for social housing—I think 100 000 houses—made out of hemp. They were small but effective, providing homes for people. Interestingly enough, hemp wood is 20 per cent stronger than oak. I could not find the data on jarrah, so I am not sure how the two woods compare, but, obviously, oak is the primary wood used in Europe for construction, and it is seen as one of the strongest woods available.

I was disappointed to find out that in WA the large retailers of building materials are being told by suppliers not to stock hempcrete, and that if they do so, they will have reduced discounts on some of the products they purchase from suppliers. I do not believe it is the place of companies to reduce choices for the consumer by blackmailing retailers. I think that is something that is really quite wrong with our society. Consumers should have that choice, and people are making those choices. It should be normal to go to your local hardware store or building supplier and be able to choose hempcrete. Retailers should not be made to suffer economically for that.

I turn now to our plan for phasing out plastics. Hemp has a high cellulose content, which means it is really suitable for packaging. That will be great, and I suspect that within 10 years a lot of the plastic packaging products we see now in our retail chains will have been replaced with bioplastics. Hemp, because it is such a fast-growing plant, could play a major role in that. The common plastics that we and the environment are still dealing with currently are oil-based and create problems in terms of not breaking down, but they also create xenoestrogens, which are toxic compounds. They are also known as endocrine disruptors, which means that they interfere with the hormonal system. We are starting to see more symptoms related to that, with people in our society having excess oestrogen. We see that in early puberty with girls, in particular; they used to get their period aged about 13 or 14, but now it is more common to see girls of eight or nine starting their period, and one of the factors causing that is an increase in xenoestrogens in our environment due to plastics, in particular. We are also seeing increasing cases of infertility in both men and women, and that too is associated with the xenoestrogens that have now become part of our food chain. They are very hard to avoid.

Hemp is a fast-growing biomass. It rapidly sequesters carbon at an estimated rate of 22 tonnes a hectare each growing season. Growing hemp has the potential to earn income for farmers through the Australian Carbon Credit Unit Scheme, formerly known as the Emissions Reduction Fund. Up to this time it has been very data-intensive for farmers to demonstrate carbon sequestration through the program, but this should become easier in the future, enabling hemp farmers to earn a diversified income source.

Hemp stalks can also be burnt to make biochar, a material for products that use solid forms of carbon for water and air filters, through to high-tech applications such as batteries and fuel cells. This could be integrated into existing processing infrastructures, unlike construction products and textiles that will require new supply chains and contracts to be established.

I would like to close by saying that hemp could offer a good potential livelihood for farmers and that there is a huge range of products that hemp can provide, from food to cloth to building materials, to help improve the environment through a reduction in xenoestrogens and carbon sequestration. I will leave my contribution there for now and give my colleagues an opportunity to speak. Thank you.

HON JACKIE JARVIS (South West — Minister for Agriculture and Food) [10.26 am]: I thank the honourable member for bringing this excellent motion to the house. I am delighted to talk about all the ways in which the WA government is embracing the hemp industry and its stakeholders, and the support it gives to the sector. I have so many notes about all the different things we do. The motion is quite broad-ranging, and I am thrilled to say that the WA government is involved with hemp in a broad range of ways.

Since 2019 the Department of Primary Industries and Regional Development has invested more than \$3.5 million in industrial hemp research, development and industry grants. That has generated a further \$1.5 million of private investment through co-contributions. We are incredibly thrilled to have been part of this support for emerging

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industries. For as long as it has been around—more than 100 years—the Department of Primary Industries and Regional Development has always embraced the idea of supporting farming communities to trial new crops and new varieties and to look at new things—some with great success, others with not such great success. Industrial hemp projects within DPIRD have been well thought-out and well-supported.

In June this year I received a briefing on the industrial hemp projects and demonstration sites that were happening in Western Australia. I have in front of me a media release from 26 June 2023 titled, “Industrial hemp field day demonstrates crop potential in the tropics”. The Department of Primary Industries and Regional Development has been running field trials at the Frank Wise Horticulture Research Institute, otherwise known as the Kununurra DPIRD site. Members who have been around for a few years will know that my predecessor, Hon Alannah MacTiernan, revitalised the Frank Wise Horticulture Research Institute up in Kununurra to make it a hub of horticultural research. The trial carried out at the Frank Wise Institute was co-funded by AgriFutures Australia; Hon Sophia Moermond spoke about AgriFutures Australia and its strategic research and development plan. I can assure members that the Western Australian government is working very closely with AgriFutures.

AgriFutures is an organisation very close to my heart; it runs the Rural Women’s Award, and as a Rural Women’s Award alumnus, I have a very close connection to AgriFutures. More importantly, it runs an emerging industries program. It looks at a range of small and emerging industries that have the potential to support agriculture in Australia. AgriFutures is a commonwealth government organisation that receives commonwealth government funding, as well as grower contributions from a number of emerging industries. AgriFutures Australia released the *Australian industrial hemp strategic RD&E plan (2022–2027)*. Members will have heard me speak about AgriFutures recently in this place, because it will be holding the evokeAG conference here in Western Australia. I have no doubt that industrial hemp will feature prominently in the evokeAG conference in February.

I go back to the field days that were held earlier this year. Twelve varieties were evaluated at the Kununurra site in the second year of this three-year trial. The researchers acknowledged the potential to grow hemp in the tropics. For those not involved in agriculture, field days are a longstanding practice across lots of industries. People who are interested in growing a crop come to field days to see what varieties are available and find out about the growing methods and agronomy around them. The Kununurra trial sourced hemp seed varieties from Australia, France, Canada, China and Poland and selected lines that were particularly suited to a tropical environment. The trial planted 150 plants a square metre, sowing them in April, May and June. This was the first year that the Kununurra trial results showed that the time of sowing and variety used significantly effects the yield and plant establishment. The Department of Primary Industries and Regional Development has some of the most skilled agricultural scientists in the state who do these trials so that they can inform growers which varieties work, when to sow crops and what yield they can expect. The second-year crop was nearing maturity in June, standing at between 0.6 of a metre and 1.9 metres high. It was ready to be harvested in late July, depending on the maturity.

The trial in northern Western Australia was complemented by trials at the DPIRD site in Manjimup. If anybody has been to that site, it has a fantastic research station. Of course, that is where the Bravo and Pink Lady apples were developed. It is famous for developing apples, but it might soon be famous for developing hemp. That hemp trial evaluated 11 varieties that were sown at a different time, because we are obviously talking about the state’s southern food hub. The 11 varieties were sown in November and harvested in February and March. AgriFutures has acknowledged that DPIRD’s help and support has allowed it to consider how hemp crops grow in both our tropical and southern food bowl areas. AgriFutures Australia senior project manager Dr Olivia Reynolds said —

“The outcomes of the Industrial Hemp Variety Trial —

Conducted by DPIRD —

will help position Australia’s agriculture industry to take advantage of the opportunity to produce an environmentally sustainable, multi-purpose crop,” Dr Reynolds said.

With the global industrial hemp market projected to reach \$18.6 billion by 2027, Dr Reynolds said industrial hemp provided diverse opportunities for Australian agriculture.

“Industrial hemp is extremely versatile and can be used for everything from food to fabric and even fenceposts,” she said.

Anyone who has sat in this chamber will have heard from our colleagues on the crossbench about the amazing versatility of this fibre. As I said, following the trials in Kununurra and Manjimup there was not only the field day in Kununurra, but also a crop production field day in Bunbury in June this year, again, just to highlight the great versatility of this crop to people who might wish to grow it.

Industrial hemp is of course regulated in Western Australia. We are doing our best to ensure that we can make that regulatory system as smooth as possible. I also had the pleasure of serving on the Select Committee into Cannabis and Hemp. Unfortunately, I could not stay until the end, but together with Hon Dr Brian Walker, Hon Matthew

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Swinbourn and Hon Lorna Harper, I got the opportunity to see many industrial hemp facilities. We saw hemp growing in the field and being processed. It was a fantastic learning opportunity. We got to visit lots of facilities. The select committee made a number of recommendations. I think it was last week that I was able to stand here and table a response to those recommendations. I will not go too far into it, but I want to speak about some of those recommendations. Recommendation 14 of the Select Committee into Cannabis and Hemp states —

The Department of Primary Industry and Regional Development conduct a review of the *Industrial Hemp Act 2004* to ensure the legislation is fit for purpose and does not impose unjustified restrictions on the industry, taking into account the limited opportunity for industrial hemp to be misused or redirected.

I am pleased that the government response notes that this recommendation is supported in principle. In response to industry demand and encouraging research findings, the WA government chose to give agricultural industrial sectors an opportunity to grow industrial hemp. The Industrial Hemp Act 2004 and the Industrial Hemp Regulations 2004 enabled growers in Western Australia to grow industrial hemp for industrial uses. That legislation was designed to ensure that they could do so without falling foul of any acts designed to combat drug abuse. That act has been working well. It is currently fit for purpose in that it allows people to cultivate, harvest and process industrial hemp. However, it is recognised in the government's response that industry and consumer requirements have progressed since 2004, and a review of the act and regulations will be considered, taking into account other government legislative priorities.

The report identified some barriers to the expansion of industrial hemp, which the government acknowledges and will look to address as it can. The Department of Primary Industries and Regional Development has already initiated action on issues that can be dealt with through improved licensing processes and engagement and consultation with industry. Members who were on the committee know that DPIRD has quite a rigorous licensing system. To the department's credit, it stepped up pretty much straightaway and recognised that some of its processes were a little clunky. It is hard to believe that government agencies sometimes get stuck in bureaucracy, but the department acted very quickly to address areas in which the process for applying for permits and licences was a bit clunky. The Department of Primary Industries and Regional Development continues to review its industrial hemp policy and licensing arrangements to provide clarity and streamline the process. That includes a review of the testing regime, costs and the use of plant parts. The findings and recommendations from the select committee report will be a key consideration in moving this work forward. I think the process of having the select committee, chaired of course by Hon Dr Brian Walker, was worthwhile.

Recommendation 15 states —

The Department of Primary Industry and Regional Development should advocate for the Commonwealth Government to amend the *Narcotic Drugs Act 1967* and any other relevant legislation which will remove obstacles to the cultivation and commercial sale of industrial hemp under the *Industrial Hemp Act 2004*.

This recommendation is also supported by the government. This recommendation appeared to be largely driven by perceived opportunities for the extraction of CBD from the leaves and flowers of industrial hemp. It is understood that the commonwealth is already investigating ways to exempt the cultivation of hemp for CBD in conjunction with the commonwealth's current review of the Narcotic Drugs Act. Again, as part of that committee, we got the opportunity to meet with the Therapeutic Goods Administration and get a clearer understanding of where it was going on this. I remember the TGA being quite positive about the opportunities. An exemption for the cultivation of hemp for CBD by the commonwealth government would be required for an amendment to be made to the Western Australian legislation. We are working closely with the commonwealth. I am pleased to say that DPIRD is keeping abreast of any developments and opportunities and will provide input into any proposed exemptions or reviews as the commonwealth starts that review process.

Recommendation 16 states —

The Department of Primary Industry and Regional Development, and the Western Australian Government, continue to encourage and provide financial support for research of the industrial hemp industry.

This recommendation is, of course, supported. DPIRD continues to collaborate and co-invest. I have just spoken about the trials with AgriFutures; it is providing not only financial support but also agronomic advice. The government co-invests when high-impact research aligns with the strategic needs of industry and government.

A key focus is to support the growth of profitable and sustainable industries. The number of licences for industrial hemp has dropped slightly in Western Australia in recent years. This happens with all emerging industries, as people get into an industry and then find that it is perhaps not for them. It is an emerging industry. The industry will need to step up and support the work done by the government, as there has been significant investment by the government in industrial hemp processing. I have reams of papers here of funding into varietal trials through regional economic development or RED grants. In November 2018, MG Corporation in Kununurra was awarded \$47 000 to develop a commercial vision for East Kimberley industrial hemp. In May 2020, Vasse Valley Hemp Farm

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was awarded \$50 000 for upscaling value-adding hemp food production and the purchase of industrial-scale seed storage, cleaning, roasting and packaging equipment for the processing of hemp foods. I heard Hon Pierre Yang talk about the hemp seed he has in his cereal. In round 3 of the RED grants in September 2021, the Dam, an agri-tourism showcase, received \$53 000 for a restaurant, cellar door and smallgoods processing. In March 2022, the Hemp Squared manufacturing expansion project received \$100 000 to support manufacturing and expansion for building products. There is a separate industrial hemp grant scheme. Industry food standards received \$76 000, Manypeaks crop trial, \$37 000 and Ridgeview Building Company, \$99 000. The list goes on and on and I am running out of time, but there are quite literally pages outlining support we have given to industry.

These economic development grants and research trials depend on industry being able to step up and provide their own capital. The government provides a supportive environment, whether through legislation or economic development programs and grants, but it is important to remember that we need commercial operators to come forward with any emerging industry. I am not sure anybody is advocating that the government should have a government-owned hemp processing facility, though our friends on the cross bench may! We are absolutely supportive of the sector.

HON DR STEVE THOMAS (South West — Leader of the Opposition) [10.41 am]: It is a bit odd to find myself agreeing with the government, particularly on a Thursday morning. I will try to keep that to a minimum as it feels unreal.

However, we are here to discuss cannabis sativa, which has been around and in use for thousands of years. I am pleased to see that the Legalise Cannabis WA Party is focused on industrial hemp, but I have to give the government credit as it has been at least a partial supporter of the hemp industry. We are yet to see how much the current Minister for Agriculture and Food is dedicated to it, but Hon Alannah MacTiernan, the former responsible minister and member of this place, has been known to be a longstanding supporter of cannabis sativa. I give her some credit. She put investment in place for industrial hemp, but I think she took a relatively sensible approach to it.

Industrial hemp is an interesting plant. It is a rapidly growing plant that delivers a lot of cellulose. The problem with the industry is that much of what hemp does is repeatable with other species and other plants and other things. This is specifically the case for the cultivars that are low THC and low cannabinoid. If we want to grow cellulose for industrial purposes to be put into a whole range of products, it can be done with low THC versions of cannabis sativa and other plants as well. The issue is whether the industry is the only one that can deliver the outcomes proposed, and the answer is generally no. We have examples like fence posts. Yes, industrial hemp can be solidified and put into a fence post or a tree can be grown and put into a fence post. There are lots of other proponents. The issue with the industry in the industrial version of hemp is how the industry is developed to take over some of the roles of other commercial production. I am always careful when one thing is designed to be the solution for everything. Members may realise that I am something of a cynic, so when someone comes in and says, “This will solve everything,” I generally take a cynical approach.

The reality is that this industry can do many of the things that other things do. When we say the hemp industry will develop to be a multimillion dollar industry and do great things, that is true. In some circumstances, it will do it at the expense of existing industries. The pine plantation industry is a prime example. It was raised that oak is a construction timber in Europe, and that is true, and mostly out of native forests. The reality is that the main construction timber in Australia is pine. Replacing pine is not a bad idea because hemp will grow faster and we have a massive shortfall coming up. It is not that it is a bad idea; it is that the industry needs to develop, sell and market itself.

Even the government, the Labor Party and former minister Hon Alannah MacTiernan with her great support, in my view—probably more than me in terms of cannabis sativa—believe that the industry must compete in the marketplace. What the minister has said is critically important—that is, the industry has to develop. I have people say all the time, “If the government would just put \$1 billion into this industry, my industry would flourish.” It is generally true. If the government put \$1 billion into industrial hemp, it would probably flourish—no pun intended. If the government put \$1 billion into battery development, that would probably flourish, too. It must be on a competitive marketplace.

Industrial hemp grows well with lots of positives as a crop. It grows very big; it is almost a tree when it is at full height. Mind you, cannabis sativa, whether it is low or high THC, develops almost into a tree at its full extent, and all of it can be used in this process. The industry has to take that resource and produce and market it. In my view, it is not the role of government to take the place of development. I have been around long enough to see a number of industries come forward, and this certainly is not the first time we have had debates or discussions about industrial hemp. Those producing industrial hemp must invest in its future. Members may believe that it has a future; there is no doubt that it can have a future with a great role for industrial hemp. I would not mind going back to hemp ropes, to be honest, because those plastic imitation things that we use kill your hands. There are good uses for hemp,

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but the industry needs to step up, and, most importantly, develop a marketplace and put processing in place to meet that marketplace. Call me reactionary right wing, because it is pretty accurate, but I believe the marketplace develops and ultimately develops the production at the beginning of the process.

Too often we say, “If I just produce this, someone should find a marketplace for it, because I can produce lots of this.” That is true. Great swathes of Western Australia could be planted out in industrial hemp. A great crop could be produced—it is not complicated—but the marketplace comes first. The processing comes in the middle. You cannot just build it and they will come. The marketplace needs to be in place first, and the industry has to step up.

I do not want to see the government put \$1 billion into industrial hemp processing or marketing. I think the government—I cannot believe I am saying this on a Thursday morning—has done something of a reasonable job in the industrial hemp marketplace. I cannot believe those words will be recorded in *Hansard*, but apparently they will. This will not last all day!

Hon Stephen Dawson: We might quote you for our election material.

Hon Dr STEVE THOMAS: On one issue—you can borrow that one.

The reality is that the industry has to develop and it has to develop marketplace and processing. The issue for industrial hemp has always been processing. My south west has had plenty of people grow crops of industrial hemp. The issue has been processing. It needs a major benefactor to come in and invest in the processing component. It might be argued that the same thing should occur with sugar in the Ord, for example, or whatever is happening in the Ord Valley. I will not go into the technical details of why the Ord River development up north has been something of a white elephant. We can all watch the *Utopia* episode and work out what is going on.

The reality is that distortions of the marketplace by government rarely end well. I should not have to reference things that are happening in the coal and power industries to be able to demonstrate that. Distortions of the marketplace by government are generally not a good thing. The government can do lots of things to encourage development, so it can be supportive of industrial hemp as a product, and supportive of the development of processing. It can streamline approval processes, for example. There are lots of things the government can do, some of which it is doing, some of which are recommendations of the committee report put together by Hon Dr Brian Walker. That is all good stuff. That is what the government should be focused on. For industry, if it is going to develop into an industrial hemp industry that takes over some of the roles of other industries, the obvious, easy one is pine. Talking about a distorted marketplace, the pine industry exists in Western Australia because a state agreement act supplies a marketplace and it obviously fell over. Distorted marketplaces are not good. A marketplace has to be developed, taking over from other products. Talking about biodiesel, it is absolutely true that it is a good product but so are lots of other things. It is a good product in construction, but so are lots of other things. Lots of things about industrial hemp are good.

I will finish by saying I am pleased to see we are moving away from a discussion around high-THC cannabis sativa and talking about low-THC and industrial hemp. This is why. I will never forget doorknocking for the 2005 election in the seat of Capel. I doorknocked a house in Withers, which is tiger country for the Liberal Party—it is not as bad as Collie, but still hard. I met a family whose daughter went on one wild night out and was exposed to high-THC cannabis. Her life was just destroyed in one night. As much as people say that alcohol is a bigger problem, I have not seen anybody get drunk one night and then never again been able to function properly and have a future. I will never forget that. I am very pleased we are now talking about industrial hemp, which I think will have a much better outcome.

HON DR BRIAN WALKER (East Metropolitan) [10.52 am]: I was delighted to hear of this motion and was equally delighted to hear the wonderful contribution from Minister Jackie Jarvis. She was on the committee and is probably one of the most experienced people in the chamber, hopefully apart from myself, in dealing with matters of cannabis and hemp. I was very pleased to hear the government’s response to the hemp industry. To give credit where credit is due, I think it is about time but much more could always be done. We must be thankful for this but much more could be done.

However, one word bothered me in the last contribution made by my esteemed friend Hon Dr Steve Thomas. He said that one episode of THC caused a life to be destroyed. That is the first I have heard of that in many years of using it with my patients. I certainly have had many, many patients whose lives have been destroyed by one night of alcohol. THC on its own, apart from giving four hours of a hard time if people take too much, is not going to do a great deal more. It will certainly not send them paranoid for a lifetime. I would suggest that perhaps we ought to have a chat about the situation and see what else was going on because when cannabis is in the hands of criminals, of course we are going to get things that are not right. We need governmental input for our health, to look after our minors and to look after those who are vulnerable. I appreciate the government is involved in this and I will again give credit where credit is due.

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The problem I see is that we are basically dealing with fear—the fear of THC. I will give members an example of this. We can look at industrial hemp as a feed crop for cattle. The question then is: how much THC is going to be present in the meat? That is a very valid thing to be concerned about. Can we send people high by having a McDonald's hamburger? We can begin to calculate how much of the available THC from industrial hemp—even from high-THC hemp—given to cattle to eat, which are then slaughtered, is present in the meat we consume. I have not yet worked out the answer because I have not been able to calculate how many whole cows I would have to eat to get one high. It is not one cow; it would be several cows, but I do not know how many. The question of whether we would be bothered about having a small amount of THC in meat is absolutely out of this world. It is not at all something I would be concerned about, but it points out the problem we have in dealing with the hemp question, which is fear. Fear is inhibiting innovation and is part of the status quo thinking.

I have mentioned in this house before that the status quo is what keeps us from innovating and keeps us thinking about the past. I was very glad to hear the government response that it is looking differently at hemp for the future, taking an innovative approach. I was glad to hear of the excellent research from the Department of Primary Industries and Regional Development. However, we also have to look at hemp as an industrial crop, for example in the Pilbara, where it could be very useful helping Indigenous people to grow their own housing. That would give a whole lot more social responsibility and social success to people who have been thoroughly deregulated or abused in the past and are struggling to find their way in life. Also, having an industrial crop would mean the potential for a microclimate change. It has the potential to turn a miserable topsoil into one-metre of valuable topsoil. These measures can be of immense importance to agriculture in the future. Imagine what would happen if industrial hemp were rotated with canola or wheat. The benefits for farmers would be immense. It would potentially turn from a three-bag yield into an eight-bag yield, potentially competing with the eastern states. We would have a wonderful opportunity to revitalise areas of marginal agriculture. These things have to be looked at.

The problem is, when dealing with hemp, we are looking at the fears of THC resulting in legislation that has slowed innovation and research. I was very glad to hear the excellent research from DPIRD is ongoing. However, time is also short. Right now, we are seeing the long predicted impacts of climate change. For a long time, people refused to believe it, saying there was no such thing as climate change and they were natural swings in climate. We are now seeing hurricanes, tornadoes and droughts, and people are beginning to see the reality of climate change. Within our means, we have at least one crop that can be used to help alleviate microclimate issues to some small degree, at least in certain areas, for example, south west Western Australia. Every small step is a step in the right direction. There are barriers to be addressed but the essential thing is that as politicians it is our duty—it is incumbent upon us—to make things better and recognise when things are not good and make improvements, even small incremental changes that will improve the wellness of our society. In this, we can all agree. The government, opposition and crossbench would agree that this is our aim. That is why we were elected. It was not to sit here and talk nonsense. It was to serve the people. This is what we can do. I think hemp is an important tool in that.

That reminds me, on the question about how hemp could be used, we could look at the difference between using hemp and cotton for fabrics. Cotton requires a lot of water and there is pollution in managing freedom from disease and the difficulties in growing a crop. Even with high rainfall, hemp could replace the need for cotton. It could give us a future with fabrics that are better for us in every way—for the climate, the economy and our environment. Coming back to this, I will bring out two main points from this discussion. We need to battle against the concept of fear in our society. There is no place for fear in our society. We need to look at things with a cold, clear eye and look for our own good future. I will also mention again and again that the status quo is the enemy of progress. At all levels, in government and outside government, we need to look at the status quo as an enemy. Thinking about a different way of thinking beyond the status quo, I refer again to Minister Jackie Jarvis. She mentioned The Dam, an excellent place in Denmark with an outlook on life that gives us a fantastic set-up. It is a fantastic organisation, a place for good food and for cannabinoid-infused alcohol and a place where the environment is being cared for in beautiful surroundings. I highly recommend people consider it as a holiday target. We could also look at it from our own party political view and have a meeting there in good company with good friends with a good organisation, helping the local economy in one part of our great state.

It was said that industry needs to lead. I could not agree more. It is not about government telling industry what to do; that is a huge mistake. Industry needs to lead the way, but government should help by reducing barriers. This is what we need to be doing: reduce the barriers so that industry can take the lead, because it is up to industry to prove the case and make the market aware of this. I mentioned the fear of THC preventing the use of the whole plant, which means that the plant, for whatever use we want it is no longer economically viable because that part and this part cannot be used due to current legislation. That stifles innovation and business opportunities. That is something we ought to be acutely aware of in supporting our hemp industry. I am sure that the government, especially with the review of the Select Committee into Cannabis and Hemp report, will take this seriously. I cannot thank it enough for doing that excellent job.

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Finally, I am thinking about what stops the processing of a wonderful crop. It is the lack of an ability to sell the product. A product is not being sold because industry has failed yet to make a case for why we should use this in, for example, pet bedding, roadside dust suppression measures, clothing and laminates that are stronger than steel and able to make car bodies. Hemp can also be used as a substrate for making environmentally sustainable hemp batteries, which, as far as research goes, are more effective than lithium ion batteries, bearing in mind that battery development is increasing at pace and hemp has a place to play in that development. There is plenty of opportunity for this business, provided government gets out of the way. I recommend the motion to the house. I am glad to see support on both sides, and I stand here with thanks to my colleague for introducing this motion, which I hope all will agree to.

HON LORNA HARPER (East Metropolitan) [11.01 am]: I thank Hon Sophia Moermond for bringing this motion today, maybe not in the same way she is thinking about, but I think it shines a light on what the Cook Labor government has been doing with hemp. I am horrified to be saying on a Thursday morning that I agree with a point that the Leader of the Opposition made and I believe that with hemp, business is responsible —

Hon Dr Steve Thomas interjected.

Hon LORNA HARPER: I know! The sky has not fallen down.

Hon Dr Steve Thomas: Am I standing in a puddle of light?

Hon LORNA HARPER: My halo is slipping.

However, business will decide. This will be driven by business. As has been mentioned, I was on the select committee looking into medicinal cannabis and industrial hemp and we went on some trips to the south west et cetera to look at industrial hemp and the processes around it. Some of us in here managed to taste hemp oil directly from the field. It was basically processed, distilled—whatever process they do; I cannot remember as it was a while ago—and we got to taste that. That was interesting. We got to see the different hemp seeds. We went to a big barn place that was trying to produce hemp to make fibres et cetera. I remember them telling us how there was difficulty in selling it. That is when I first agreed that if there is no market, why make all this?

Hon Dr Steve Thomas: Look out, that is a right-wing trend you have suddenly gone down.

Hon LORNA HARPER: Shoosh.

Hon Tjorn Sibma: Hear, hear!

Hon Dr Steve Thomas interjected.

Hon LORNA HARPER: I just love men talking over the top of me; I just love it!

It is weird that somebody from my left-wing background would agree with it, but it is the case that business will decide. If there is no market, how could we be growing it? We also went to a field that had previously grown a crop with basically no to low-THC to be used as industrial hemp. That was harvested and then the field was left. More hemp just grew. The farmers were complaining because they would have to take it all down and get rid of it. They had to get rid of the whole field because it was not a controlled crop. It is very clear that to grow hemp there must be control with specific seeds used to ensure that the crop has the lowest form of THC. They had let it go to seed, which meant that there was no control. Nobody could know from one plant to the next what the THC level was. One thing I have noticed when people talk about industrial hemp is that they confuse it when talking about cannabis and the potential for THC stuff that will make someone high, basically. Really, we cannot. One of the things we learnt when looking at industrial hemp is the concern that potentially recreational hemp crops could be hidden amongst industrial hemp. The producer said, “Absolutely not”. The last thing recreational hemp growers who want high THC and put in all the chemicals and everything to make it a high THC crop want is an industrial hemp crop anywhere near it, because of cross-pollination with female plants and male plants. It is very interesting when you look into it, with the amount of cannabidiols, the different seed varieties, and what can be grown et cetera. It is extraordinarily interesting. That is one of the reasons that I like parts of this motion, because it also talks about what we have looked at in the select committee.

We looked very carefully at industrial hemp and sums. Hon Jackie Jarvis mentioned some of the recommendations of the select committee’s report and the outcomes of those recommendations. She was talking about recommendation 14, about how legislation should be fit for purpose and should not impose unjustified restrictions on industry et cetera. One of the issues she mentioned was that when we held the hearings—I can see this, because it is in the report—issues were raised with DPIRD around licensees and achieving them. As the honourable member mentioned, they were very clunky and a bit confusing, so we had conversations with them on more than one occasion and the department listened and responded really quickly. Since the commencement of the inquiry in 2021, licence numbers have dropped from approximately 90 to 59. Another three licences lapsed by mid-September. That is not because the costs have gone up, because the licence application fee stayed the same and the renewal fee is only about \$100. The department has now formed an internal working group encompassing regulatory, technical

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and industry development staff to anticipate and address industry concerns and to drive systemic improvement in relation to policy and regulation. That is a really big positive step forward and it is really helpful for the sector and for industrial hemp and industrial grade hemp growers, the ones who want to produce hempcrete, oil, fibres et cetera. It has undertaken a review of the licence application form and it is almost there. That was another issue raised about the confusion around this. DPIRD has reviewed its webpages and done everything it possibly can to assist hemp growers, but if there is no market, why would we continue?

The member talked about carbon and carbon sequestration of hemp. The Leader of the Opposition was very clear when asking why not grow a tree, because it takes in more carbon. When we went on our trips, I noticed that some of the information about water et cetera was based on European standards and European reports. As somebody who came from a country that was formerly in the European Union but, unfortunately, is no longer, I can tell members that the average number of days of rainfall a year in that country is 300. The average number of days of rainfall in the south west of Western Australia is—what?—30, 40 or 50, if we are lucky. I do not mean up north, where it rains more. We do not have the same conditions to grow the crops as other areas have. That has to be taken into consideration. What also has to be taken into consideration is that our farmers struggle. If there is a drought or a fire or too much rain or not enough rain, they struggle.

Generally, financially for farmers, it is a bit up and down. It is a boom-and-bust time for them occasionally. Farmers have to be very cautious and clear about when and what they sow. If hemp is not a crop that is right for them, and it is not fine for the soil or for their profit margin, they are just not going to grow it.

To finish up, I am very proud to say that our minister and our government are doing as much as they possibly can to support the industry, noting the recommendations in the report, but it really will be up to the industry to set what it wants to set and to find the markets for it to go forward. I believe that the government is doing a lot. I have nothing against hemp, hemp oil or the fibres. But if we find the market and then carry on, we will see more hemp. It is not to be confused with the drug stuff.

HON PIERRE YANG (North Metropolitan — Parliamentary Secretary) [11.11 am]: I will start by thanking Hon Sophia Moermond for bringing this motion to the house. I thank her for her advocacy in this space. I have listened intently to her contributions and her questions during question time over the past year or so. I want to say well done and commend her for advocating for something that she believes in. I will not wax lyrical too much. I simply commend the member for her work.

I want to look at the hemp plant. According to Wikipedia —

Hemp ... is a botanical class of *Cannabis sativa* cultivars grown specifically for industrial or medicinal use. It can be used to make a wide range of products. Along with bamboo, hemp is among the fastest growing plants on Earth.

As we heard from Hon Dr Steve Thomas, when he talked about it being a fast-growing plant —

It was also one of the first plants to be spun into usable fiber 50,000 years ago. It can be refined into a variety of commercial items, including paper, rope, textiles, clothing, biodegradable plastics, paint, insulation, biofuel, food, and animal feed.

Indeed, it has a lot of uses. According to section 3 of the Industrial Hemp Act 2004, an act passed by the previous Gallop Labor government, the definition states —

industrial hemp means cannabis, the leaves and flowering heads of which do not contain more than 1% of tetrahydrocannabinol;

Anything above that would not be classified as industrial hemp and would be subject to other legislation.

As I mentioned to the Minister for Agriculture and Food, Hon Jackie Jarvis, I have previously consumed organic hemp seeds, and here is a photo of the box. It is a very tasty seed. I sometimes mix them in my cereal, but I told Hon Sophia Moermond that I used to eat them as a snack. It is a very tasty seed indeed.

Over the past few years, I have been accused by Hon Tjorn Sibma—unfortunately, he is not in the chamber—of being an unreliable historian.

Hon Dr Steve Thomas: He's on urgent parliamentary business.

Hon PIERRE YANG: He is.

Hon Kyle McGinn: Unreliable historian?

Hon PIERRE YANG: Yes, a number of times. I refute such an incredulous accusation and hyperbole in the strongest sense. Nonetheless, I want to prove that I am not an unreliable historian, so I will take us back to the

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time when the hemp legislation was passed in 2004. Acting President (Hon Dr Sally Talbot), you might recall that Hon Kim Chance, the former Leader of the House and Minister for Agriculture, was a strong proponent of this legislation and it was under his leadership that this legislation was passed through the lower house. The minister who moved it in the other place was Hon Fran Logan, whom I had the pleasure and honour of serving in the fortieth Parliament. Hon Kim Chance was a strong proponent and supporter of the industry. He understood that there was a push by the community and he strongly supported the industry by facilitating the legislative framework for it. I will quote from the second reading speech of Hon Kim Chance —

There has been some debate about the commercial viability of a hemp industry in Western Australia. Hemp is produced by, among others, less developed countries with very low labour costs and often government subsidies, which obviously puts a Western Australian industry at a comparative disadvantage. Yet the proponents of an industry here are confident of its viability, and the Government can find no ground for standing in their way.

Such was the sentiment of the former Gallop Labor government in support of the community and that push.

In terms of the bipartisan support for the industry, unlike Sir Humphrey Appleby, who, in his 30-odd-year history in public service, had to serve 11 different governments that had polar opposite policies on issues like going into the common market, nationalising steel and capital punishment, Western Australian governments of all stripes and colours have been supporting the hemp industry. That is one thing that we can be very proud of. Even the Leader of the Opposition is in agreement with the Minister for Agriculture and Food, Hon Jackie Jarvis on a Thursday morning—it is an unbelievable development!

Hon Dr Brian Walker chaired the Select Committee into Cannabis and Hemp and a report was delivered in March this year. Chapters 11 and 12 are on industrial hemp. I thank the honourable member and the other members of committee for their work. The report is worthwhile reading. It is a very interesting read. They have come up with three important recommendations—recommendations 14, 15 and 16. The government equally provided a response and I will quickly touch on that as well. Recommendation 14 reads —

The Department of Primary Industry and Regional Development conduct a review of the Industrial Hemp Act 2004 to ensure the legislation is fit for purpose and does not impose unjustified restrictions on the industry, taking into account the limited opportunity for industrial hemp to be misused or redirected.

The government's response is that the recommendation is supported in principle. The next recommendation, recommendation 15, reads —

The Department of Primary Industry and Regional Development should advocate for the Commonwealth Government to amend the Narcotic Drugs Act 1967 and any other relevant legislation which will remove obstacles to the cultivation and commercial sale of industrial hemp under the Industrial Hemp Act 2004.

Again, the government advised that the recommendation is supported. The last recommendation of that report, in relation to industrial hemp, reads —

The Department of Primary Industry and Regional Development, and the Western Australian Government, continue to encourage and provide financial support for research of the industrial hemp industry.

Again, this recommendation is supported in principle by the Western Australian government.

I thank Hon Sophia Moermond for bringing the motion. I also thank Hon Dr Brian Walker for leading the Select Committee into Cannabis and Hemp. It was very, very worthwhile. I also spent a bit of time looking at the so-called *The missing budget paper: An economic case to legalise cannabis in Western Australia*, with an introduction by Hon Dr Brian Walker. I would be interested to see a similar missing budget paper on the future of the hemp industry in Western Australia. Perhaps I will encourage Hon Dr Brian Walker to look into that for the next budget cycle.

HON DAN CADDY (North Metropolitan) [11.21 am]: I want to start by recognising the honourable member and her honourable colleague for their ongoing advocacy in this area. The government supports the hemp industry and I do not have time to go into that. Hon Jackie Jarvis did that. But we also need to be cognisant of the difficulties and the limitations. I am not talking about being negative; I am talking about having a balanced view. The honourable members usually prosecute their argument on three bases: versatility of the product, environmental benefits and economic benefits. On the versatility of the product, there are no arguments there. Over 25 000 products worldwide are produced from hemp and so there is an argument, but we really need to be cognisant of the second and the third, the economic benefits and the environmental benefits, especially in a Western Australian context.

I have here a few pages of *Manjimup agriculture & food strategy: Hemp milling pre-feasibility study: Literature review*, which was done for the Shire of Manjimup in February 2018. I have chosen a local report, but I want to pick up on a couple of global things in here. I have a couple of points to make. At the time of this report, the number one hemp producer in the world was China. It is a highly labour-intensive industry. China was the world's single largest

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hemp producer and exporting country, accounting for about 20 per cent of global production. The advantage to China is the cheap labour costs and the lack of regulatory burdens on production and processing. It is important to realise that the labour costs make it beneficial for China.

The other country that is often held out as a beacon for the hemp industry is Canada. Indeed, Canada produces a fair amount of hemp, mainly for the hempseed industry. Only one per cent of the arable land in Canada is dedicated to hemp. That may be a large amount because Canada is a large country, but it is not a massive industry in any sense. This report that I am referring to says —

While there will likely be a small, dedicated niche market for hemp fibre in Canada, there is insufficient evidence to suggest that a large market demand will materialise ...

I think that is the cornerstone. It goes a bit to what Hon Dr Steve Thomas was saying. The economic argument needs to stack up before it can become viable.

I want to go to the environmentally friendly tag, because hemp is often put out there as being more environmentally friendly than other natural and synthetic fibres, and that is a basis of the arguments for hemp. But hemp pulp—just fact—is not as profitable as wood pulp. Hemp has more environmental concerns in certain areas. One is water consumption, another is soil erosion and another is soil nutrient depletion. In Australia, these are critical issues. We do not have the quality of soil of other parts of the world when it comes to nutrients. We certainly do not have the supply to water that other parts of the world have. Certainly, in the Kimberley water is not an issue, but we are talking about growing hemp in the south west. Soil erosion is a problem and it was a problem when I was a teenager on our farm and it is a problem everywhere. I think we need to take this into account.

Just quickly, transport is another key issue in WA. Because of the weight per volume of transporting hemp, compared with other materials such as wood, transport is also a significant environmental cost that is not factored into a lot of research.

Motion lapsed, pursuant to standing orders.