

## Background Statement:

### Renewable Chemical Production Tax Credits and Angel Investor Tax Credits

The 2014 report from the Battelle foundation commissioned by the Iowa Partnership for Economic Progress included an economic development “roadmap” for Iowa’s future growth and success.

One of the findings of the report was that while Iowa’s growth over the last decade has been strong, future growth will require taking advantage of new opportunities and sectors that promise to outpace national growth. IEDA believes that chemical production from biomass feedstocks represents such an opportunity.

Another of the findings of the report is that future growth will also depend on increasing the pace of business startups, accelerating entrepreneurship, and expanding access to venture capital.

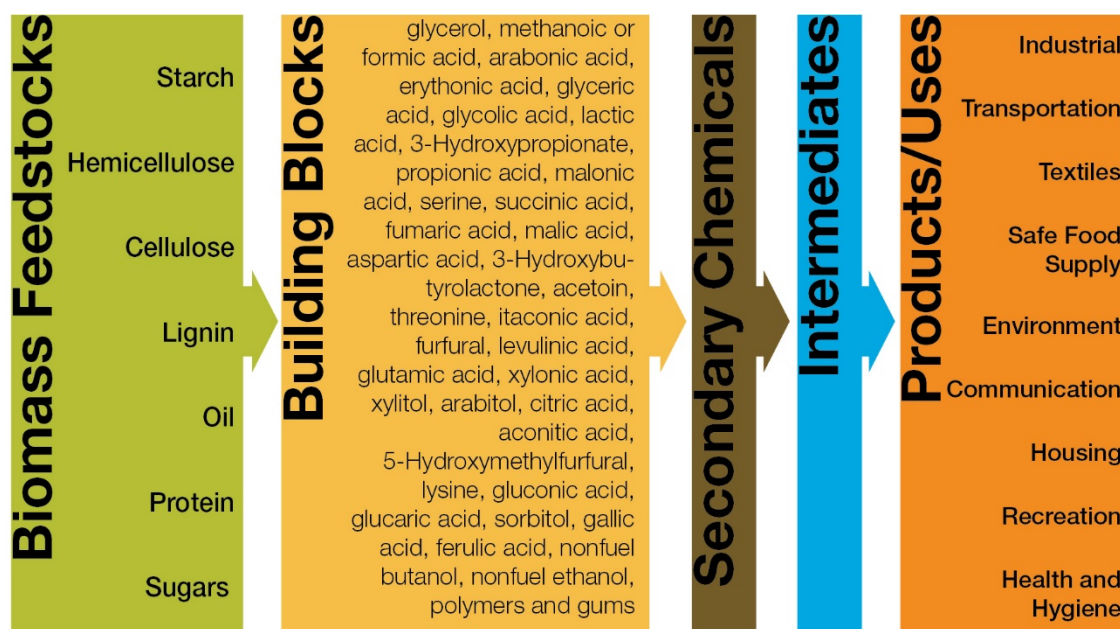
In this bill, IEDA proposes two new policies for Iowa’s future growth that are tightly aligned with the Battelle report’s findings:

- A new incentive for the production of Renewable Chemicals from biomass feedstocks.
- A more effective Angel Investor tax credit designed to be regionally competitive.

### Renewable Chemical Production Incentives

It is estimated that more than 3,500 U.S. jobs have already been created in the emerging renewable chemicals sector, and the potential exists for 20,000 new jobs by 2025. Because Iowa is ranked second in the nation in the available supply of biomass, it is uniquely positioned to take advantage of growth in this industry sector.

Many of the industrial facilities around the state currently producing food and fuel products from corn, soybeans, and other renewable products also produce certain co-products that can be further processed into higher value basic chemical compounds that can in turn be further processed into end-use consumer products such as plastics, textiles, paints, or pharmaceuticals.



The production of such biochemicals is perhaps the fastest growing segment of the bioscience industry and represents one of Iowa’s best opportunities for the development of a high-density industry cluster such as Silicon

Valley. In 2004, the federal Department of Energy studied the potential for high-value chemicals from biomass feedstocks and identified the 30 chemicals that hold the most market potential. This list of high-value renewable chemicals forms the foundation of the incentive and the backbone of IEDA's proposal. The report is available here: <http://www1.eere.energy.gov/bioenergy/pdfs/35523.pdf>.

In order to incentivize new startup companies and other ventures to take the biomass feedstocks currently produced in Iowa and manufacture these new, "building block" chemicals, IEDA proposes the creation of a renewable chemical tax credit.

The credit would have the following structure:

- Incentivizes the production of high-value "building block" chemicals.
- Incentive is based on weight: \$0.05 per pound produced up to individual limits.
- Must be produced from "biomass feedstocks" such as starch, sugar, oil, lignin, etc.
- Not available for the production of ethanol, biodiesel, or animal feed. Must create higher value products from the feedstocks.

The credit would have the following features:

- Placed under IEDA's business tax credit cap. No increase to that cap is proposed.
- Annual award amounts limited to \$1M for startups and \$500K for established businesses.
- Credit would be refundable but NOT transferrable.
- Only available to a company for 5 years.

Investing heavily in this sector now will yield a number of significant returns for the state in the future:

- The production of these biochemicals will accelerate innovation by creating new opportunities for research and development.
- New research and development will increase entrepreneurship by creating new ventures and new product lines.
- The already strong renewable fuels industry in Iowa will have new and more valuable markets for its lower value co-products.
- Iowa farmers will benefit from more stable prices because of the additional demand for the commodities that form the basis of Iowa's biomass feedstocks.
- The increased supply of biobased chemicals will help reduce carbon emissions in the long run by creating alternatives to the petrochemical products on the market today and will further cement Iowa's leadership in renewables.
- Claiming leadership in this sector will provide a unique marketing opportunity for the state nationally and internationally.

## Angel Investor Tax Credits

IEDA is currently authorized to issue up to \$2 million in investment tax credits per year for investments in "qualifying businesses and community based seed funds." Together, these two credits are sometimes referred to as "angel credits." However, they are not well designed or effective for this purpose. To date, this program has seen only half the authorized amount issued in any year which is an indication of both its ineffectiveness and its uncompetitive position in relation to neighboring states.

The following table briefly compares the Iowa credits to other states with similar incentives.

State	Credit %	Funding Level	Caps	Features
Wisconsin	25%	\$20.5M annually	\$2M per company	Transferable
Minnesota	25%	\$12M annually	\$1M per company	Refundable
Nebraska	35% 40% if in a distressed area	\$3M annually	\$1M per company	Refundable
Illinois	25%	\$10M annually	\$1M per company	Not refundable Not transferable
<b>Iowa</b>	<b>20%</b>	<b>\$2M annually</b>	<b>\$250,000 per taxpayer</b>	<b>Not transferrable Not refundable</b>

To improve these tax credits, IEDA proposes the following changes:

- Increase credit percentage from 20% to 25%. This is in-line with neighboring states (WI, MN, IL, NE, are all at 25% or above).
- Make credits refundable (but NOT transferrable). This will make the program more competitive with neighboring states. It will also make the investment more desirable to angel investors than the current credits and will offset for them the reduced maximum benefit also being proposed (i.e. \$250K to \$100K per taxpayer per year).
- Focus the credits on individual angel investors and not institutions and keep the angel credits from competing with the Innovation Fund Tax Credits for investment capital. Doing this means ending the ability of financial institutions, C corporations, and insurance companies to claim the Angel credits. The fund managers of the Innovation Fund program are likely to focus on big financial institutions and insurance companies. Because only \$2 million in funding is allocated and because the credit amounts are capped relatively low per taxpayer, IEDA believes the angel credits should be scaled for person-sized investing rather than institutional investing.
- Make the eligibility simpler and align it better with existing programs. Currently, the state offers programs like the Demonstration fund that assist brand new startups and Innovation Fund Tax Credits to assist more mature startups. However, there is a gap in the middle where more funding is needed than the state can provide through loans and grants but less than a bigger Venture fund is interested in. IEDA proposes to target the angel investor credits at this middle ground.
- Eliminate the “community-based seed fund” feature. These funds are capped at small dollar levels that make them economically inefficient to operate as a managed fund. In addition, investors can pool investments through LLCs and LLPs and still claim investments in the same businesses more efficiently.
- Cap individual credit level at \$100,000 per taxpayer per year and simplify cap structure. Currently, as much as \$250,000 can be claimed per year but it is structured as a \$50,000 cap per investment with a 5 investment cap.
- The carryforward period is reduced from five years to three years to reduce future liabilities.