



Preparing to License – Commercialization Workshop

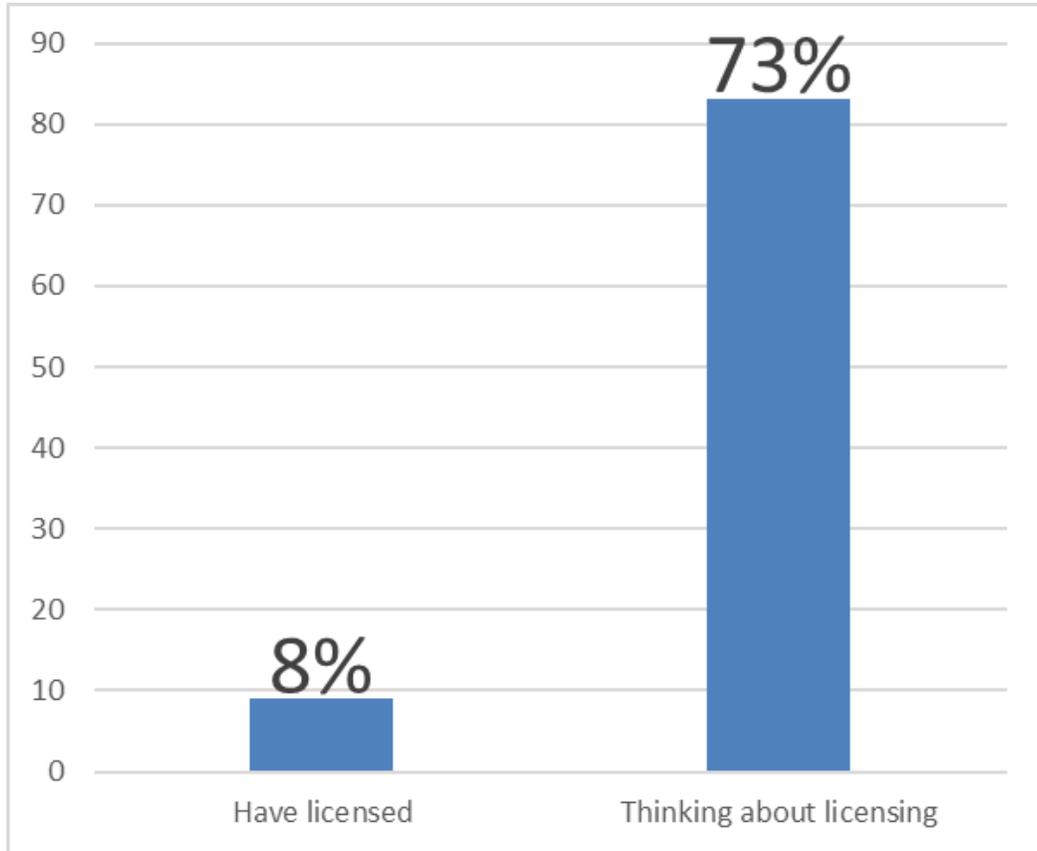
Welcome! The workshop will get started at 1PM.



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Registrant Responses Support Myth Bust!



- Myriad of different business models...
- Myth that one model is favored over another seems to have disappeared
- Figure out which strategy is best for your company and your target industry and provide validation to support your decision



Workshop Agenda



1:00 PM — 1:10 PM

Welcome & Updates on DOE Partnering Resources

*Carol Rabke | Tech to Market (T2M) Advisor - Partnering
Office of the SBIR/STTR Programs, DOE*

1:10 PM — 2:10 PM

What to Watch for When Licensing

*Jenny C. Servo | President
Dawnbreaker, Inc.*

2:10 PM – 2:40 PM

DOE SBIR Licensing Success Story – RiKarbon, Inc.

*Basu Saha | Founder
RiKarbon, Inc.*

2:40 PM – 3:40 PM

Clarivate – Intellectual Property Strategies |

*Philip Arvanitis | Practice Director – IP & Innovation Research
Brian King | Head of Government and Industry Relations
Ed White | VP and Principal Analyst - IP and Innovation Research*



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs



DOE Partnering Resource Updates

Carol Rabke, Ph.D.

Tech to Market (T2M) Advisor - Partnering

carol.rabke@science.doe.gov



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

You will need partners to successfully commercialize...



Phase II Awardee Events

- **Virtual Quarterly Commercialization Workshops** focuses on topics that are typical areas of weakness - manufacturing, licensing, financial modeling, preparing to pitch, intellectual property strategies, etc.
 - FY22 Q4 - **Commercialization and the Power of Partnering**
 - FY23 Q1 - **Preparing to Pitch**
 - FY23 Q2 - **Financial Modeling**
 - FY23 Q3 - **Navigating Phase III Contracting**
 - FY23 Q4 - **Licensing**
 - **FY24 Q1 - Manufacturing**
- **virtual Partner Pitch Program (vP³)** provides opportunity for Phase II technology to be promoted to potential strategic partners/investors and a platform where awardees can pitch in a non-threatening environment; registration for **FY24 cohort** will open in **January**



SBIR Partnering Platform



- **New [SBIR Partnering Platform](https://www.sbirpartnering.com/)** provides searchable database where SBIR/STTR applicants/awardees (**INNOVATORS**) can find potential **partners (PARTNERS)** and **SBIR/STTR funding** opportunities, and partners can access 1500+ vetted technologies:
 - *PARTNERS/INNOVATORS register independently*
 - *Keyword and AI searching; myriad of filtering options*
 - *Bookmark favorites; Confidential messaging*
 - *Newsfeed for applicable industry/stakeholder news*
 - **COMING SOON!** Network with other **INNOVATORS** in the *Innovator Community* section
- As a DOE SBIR/STTR applicant and/or awardee, register as an **INNOVATOR**; check out the [Platform Overview for Innovators](#) webinar



<https://www.sbirpartnering.com/>



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

DOE Disclaimer: By enabling and publishing the DOE SBIR Partnering Platform, DOE is not endorsing, sponsoring, or otherwise evaluating the qualifications of the individuals and organizations that appear on this platform as partners, resources, awardees or innovators.

Awardees can find funding opportunities & partners



🏠 My Dashboard

Features



Messages

View your conversations, reply to messages and send new messages to partners.

Chat >



Search

Search for partners and funding opportunities with keyword or AI-assisted recommendations.

Partners >

Funding >



My Profile

Edit your personal information and organization details, add technologies, or update your password.

Edit >

🔖 Your Saves

Manage, export, or set notifications for your saved SBIR awards here. Select an item to view additional details.



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Awardees search based on their unique needs



My Dashboard / Partner Search

Keyword Search AI-Powered

Partner Search

Search by keyword

Service Category (1) Clear All

View By State Partner Role Service Category Show 20 of 569 partners

1 2 3 4

Southwest Research

San Antonio, TX

Description
SwRI, headquartered in San Antonio, Texas, is a nonprofit, applied research and development organization serving industrial and government clients. SwRI consists of nine research centers in physical sciences.

Energy Advanced Materials
Advanced Instrumentation Artificial Intelligence

Transportation Advanced Computing

View Details

Aon – Intellectual Property Solutions

New York, NY <https://www.aon.com/>

| Service Category | Count |
|--|-------|
| <input checked="" type="checkbox"/> Commercialization Services | 27 |
| <input type="checkbox"/> Engineering Design | 160 |
| <input type="checkbox"/> Industry Stakeholder | 1 |
| <input type="checkbox"/> Manufacturing | 150 |
| <input type="checkbox"/> Technical | 2 |

| Partner Role | Count |
|--|-------|
| <input type="checkbox"/> Corporate Venture | 11 |
| <input type="checkbox"/> Incubator Accelerator | 9 |
| <input type="checkbox"/> Industry Stakeholder | 18 |
| <input type="checkbox"/> Investor | 20 |
| <input type="checkbox"/> Provider | 480 |



Registered Partners



3M
3M Ventures
Air Liquide
Air Liquide Venture (ALIAD)
AON Growth Ventures
BAE Systems
Baker Hughes
Bandgap Ventures
BASF
BASF Venture Capital
BHP Ventures
Blue Origin
BMW i Ventures
Booz Allen
Bosch Ventures
Chevron
Chevron Phillip Chemical
Chevron Technology Ventures
Clean Energy Business Network
Clean Energy Ventures
Constellation Brands, Inc.
Constellation Energy
DBE Surveying, LLC
Deep-Tech Showcase
Deploy360
DHS-CWMD
DOE
Dominion Energy Innovation

Dow Chemical
Dynasil Corporation
EDF Pulse Ventures
Energy Impact Partners
Empower Greentech Inc.
EPRI
Evok Innovations
GC Ventures
GSA
HalliburtonLabs
Haylon Technologies
Henkel Adhesives Technologies
Huntsman Advanced Materials
Hycamite TCD Technologies
INCA Engineering
Innovation Pathways
Intelsat general (IGC)
J2 Ventures
Johnson & Johnson
Kairos Ventures
KamperCrowe Investments
L3Harris, Inc.
Manufacturing Technology. Inc.
Materials Technology Institute
Mercedes-Benz
MetaMorph, Inc.
MITSUBISHI STEEL
NASA

Niterra Ventures
NOAA
NREL
OP Cleantech
ORNL
Peak Innovations Group LLC
Phillips 66
Pirate Wind Turbines
Playground Global
Plug Power
PNNL
Powerhouse Ventures
Praesum Communications
Prelude Ventures
Raytheon Technologies
Redwire
Renishaw plc
Resollant Consulting
Rhapsody Venture Partners
RMI Insights
Root Utility Network
SABIC Ventures
SAIC/DHS CWMD
SBA
Second Order Effects, Inc
SenseICs
Shell Exploration and Production, Inc
Shell Technology

Shell Ventures
Siemens Energy
Sigma Additive solutions
Silicon Foundry
SK Discovery
SLB New Energy
Snowpoint Ventures
Startup Leverage
STRENGTHEN.US
Syndicate708
TaiSan Technologies
TDK Ventures
Tech Coast Angels Orange County
TechEnergy Ventures
Techstars
The Engine
The Heritage Group Accelerator
The Ripple Center
U.S. Research Impact Alliance
Ultimate Defense Technologies
Ultratech Capital Partners
Upward Labs
US Army
Venture Lab Niterra Group
VoLo Earth Ventures
Walmart Ventures
Webco Industries
Zebulon Solutions



NEW Innovator Community Section!



Dashboard

Community

Search ▾

Logout

 My Dashboard


Community


News Feed

Features



Messages

View your conversations, reply to messages and send new messages to partners.

Chat >



Search

Search for partners and funding opportunities with keyword or AI-assisted recommendations.

Partners >

Funding >



My Profile

Edit your personal information and organization details, add technologies, or update your password.

Edit >

Your Saves

Manage, export, or set notifications for your saved SBIR awards here. Select an item to view additional details.



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Engage with other INNOVATORS

🏠 My Dashboard / Community

Community Social Feed

✎ Create Post

Filter by

All

All

Announcement

Looking for a Mentor

Looking for a SME

Looking to collaborate/subcontract on a particular topic and/or project

Phase II Diversity Supplement engagement

Sort by

Recent

📢 Announcements (past 30 days)

New Feature New Feature New Feature

17 hours ago | Michael B.

👍 1 🗨️ 0

👤 Michael B.  17 hours ago | admin

New Feature New Feature New Feature

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec nibh diam, venenatis non finibus sit amet, aliquet vitae metus. In ac purus ipsum. Suspendisse a fringilla mauris. Vestibulum placerat te...

Announcement

Partnering Resources

- Manufacturing Resources
 - Manufacturing USA (newer, state-of-the-art)
<https://www.manufacturingusa.com/institutes>
 - MEP centers (traditional)
<https://www.nist.gov/mep/centers>
- Engineering Design Resources*
- Test/Certification Resources*
- Commercialization Service Resources
 - *Check State and local resources, too – see,*
<https://www.sbir.gov/resources>



Other DOE Partnering Resources



- Looking for SMEs, facilities, collaborators at National Labs? Visit <https://www.labpartnering.org/>
 - *Another way to find SMEs, collaborators, subcontractors - review related research being done at research institutes (universities, colleges); check publications*
- Looking for facilities for testing, integration and/or demonstration at National Labs
 - [**Energy Systems Integration Facility \(ESIF\)**](#), National Renewable Energy Lab (NREL)
 - [**Grid Research Integration and Deployment Center**](#), Oak Ridge National Laboratory (ORNL)
 - [**Electric Grid Test Bed**](#), Idaho National Laboratory (INL)
- Several [**additional DOE Resources**](#) are available:
 - [**American-Made Challenges**](#)
 - [**Lab-Embedded Entrepreneurship Program \(LEEP\)**](#)
 - [**OTT/OCED/EERE Voucher Program**](#)



Choosing a Lab

The Department of Energy (DOE) owns twenty national laboratories that combine decades of experience with billions of dollars in research and development to address matters of national security, environmental stewardship, economic competitiveness and energy sustainability. The technologies and capabilities developed and maintained to support core mission work can have concomitant benefits to businesses of all sizes, universities, and non-profits through technology transfer mechanisms. Learn about the National labs below and their partnering opportunities.

The numbers in each blue circle, only indicate experts, facilities, technologies, stories and patents, which are available on the Lab Partnering website. To enquire about other opportunities or the full breadth and width of a specific lab's capabilities please contact the lab directly.

Search



| Lab | Experts | Facilities | Technologies | Stories | Patents |
|--|---------|------------|--------------|---------|---------|
|  Ames National Laboratory Ames, Iowa | 19 | 5 | 38 | 12 | 706 |
|  Argonne National Laboratory Lemont, Illinois | 71 | 59 | 90 | 16 | 1008 |
|  Brookhaven National Laboratory Upton, New York | 20 | 21 | 71 | 6 | 1733 |
|  Fermi National Accelerator Laboratory Batavia, Illinois | 12 | 1 | 1 | 10 | 81 |
|  Idaho National Laboratory Idaho Falls, Idaho | 77 | 31 | 151 | 21 | 646 |
|  Kansas City National Security Campus | | | | | |

Choosing a Lab

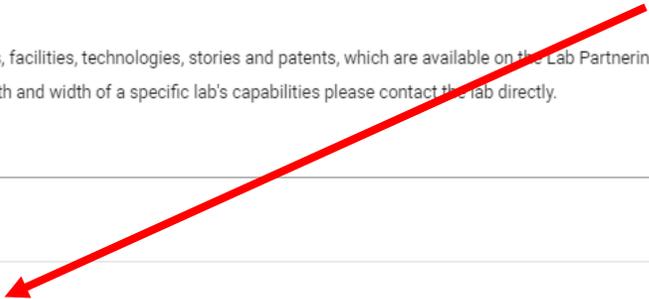
The Department of Energy (DOE) owns twenty national laboratories that combine decades of experience with billion-dollar investments in research and development, competitiveness and energy sustainability. The technologies and capabilities developed and maintained to support national security and economic growth are transferred to industry and non-profits through technology transfer mechanisms. Learn about the National labs below and their partnering opportunities.

The numbers in each blue circle, only indicate experts, facilities, technologies, stories and patents, which are available on the Lab Partnering website. To enquire about other opportunities or the full breadth and width of a specific lab's capabilities please contact the lab directly.

Search

Lab

-  **Ames National Laboratory**
Ames, Iowa
-  **Argonne National Laboratory**
Lemont, Illinois
-  **Brookhaven National Laboratory**
Upton, New York
-  **Fermi National Accelerator Laboratory**
Batavia, Illinois
-  **Idaho National Laboratory**
Idaho Falls, Idaho
-  **Kansas City National Security Campus**





Argonne National Laboratory 🌱

CHANGE LAB ▾

Lemont, Illinois

CONTACT

As a U.S. Department of Energy Office Science national laboratory, Argonne conducts research and development in many areas of basic and applied science and engineering:

- Basic science: seeks to understand how nature works. This research includes experimental and theoretical work in materials science, physics, chemistry, biology, high-energy physics, and mathematics and computer science, including high performance computing.
- Applied science and engineering helps to find practical solutions to society's problems. These programs focus primarily on energy resources, environmental management and national security.

Experts | Facilities | Technologies | Stories | Patents

The following experts from the Argonne National Laboratory are available to answer questions about technologies of interest to innovators and investors.

 **Daniel Abraham**

Expert | Chemical and Biotechnology | Diagnostics & Testing | Energy Storage | Materials Discovery and Characterization | Mitigation | Other

He is well known for his expertise in the field of lithium batteries at Argonne National Laboratory. Since graduating with a doctorate in metallurgical engineering from the University of Illinois at Urbana-Champaign, he has been with the lab with his early research on safe storage of nuclear waste arising from efforts to recycle spent nuclear fuel (nuclear technology). Since joining the Energy Storage team in 2001, he led the effort to identify performance degradation mechanisms in lithium-ion cells and develop new ch...

 **Shabbir Ahmed**

Expert | Autonomous Systems | Chemical and Biotechnology | Diagnostics & Testing | Energy Storage | Materials Discovery and Characterization | Mitigation | Nuclear Energy

He is a chemical engineer at Argonne National Laboratory with specializations in process analysis and modeling, and experimental validation of breadboard reactor systems.

...ntal stewardship, economic ...d non-profits through technology

Stories Patents

| Experts | Facilities | Technologies | Stories | Patents |
|---------|------------|--------------|---------|---------|
| 20 | 21 | 71 | 6 | 1733 |
| 12 | 1 | 1 | 10 | 81 |
| 77 | 31 | 151 | 21 | 646 |

QUESTIONS/CONCERNS - REACH OUT

We value your feedback to help us improve
the DOE SBIR/STTR Programs

Interested in understanding your individual
partnering needs

carol.rabke@science.doe.gov
585.576.7981

<https://science.osti.gov/sbir>



<https://www.sbirpartnering.com/>

What to Watch for When Licensing

Jenny C. Servo | President

Dawnbreaker, Inc.



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

DOE SBIR Licensing Success Story – RiKarbon, Inc.

Basu Saha | Founder

RiKarbon, Inc.



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Clarivate – Intellectual Property Strategies

Clarivate IP Strategy Team

Philip Arvanitis | Practice Director – IP & Innovation Research

Brian King | Head of Government and Industry Relations

Ed White | VP and Principal Analyst - IP and Innovation Research



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Important DOE SBIR/STTR Updates

FY24 Phase I, Release 2 Dates

New Application Requirements

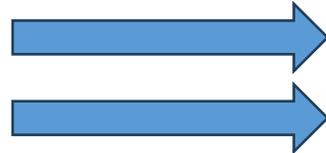
DOE Applicant & Awardee Resources



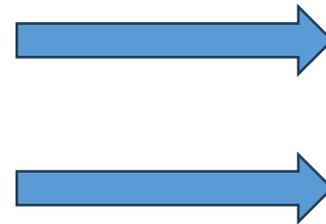
U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

FY 2024 Funding Opportunities



| Phase I | Release 1 | Release 2 |
|---|---|---|
| Topics Issued | Monday, July 10, 2023 | Monday, November 6, 2023 |
| Document | Phase I Release 1 Topics | Phase I Release 2 Topics |
| Phase 0 Application Assistance (free for first time applicants) starts | Monday, July 10, 2023 | Monday, November 6, 2023 |
| Topic Webinar, week of | Webinar 1: Topics 1-15 Slides Webinar 2: Topics 16-25 Slides Webinar 3: Topics 26-36 Slides | Webinar 1: Topics 1,9-10 & 23-28 Slides Webinar 2: Topics 11-22 Slides Webinar 3: Topics 2-8 & 29-30 Slides |
| FOA Issued | Monday, August 7, 2023 | Monday, December 11, 2023 |
| Document | DOE-FOA-0003110 | |
| FOA Webinar | Friday, August 11, 2023 Slides | Friday, December 15, 2023* |
| Letters of Intent (LOI) Due | Monday, August 28, 2023 5:00pm ET | Wednesday, January 3, 2024 5:00pm ET |
| Non-responsive LOI Feedback Provided | Monday, September 18, 2023 | Tuesday, January 23, 2024 |
| Full Applications Due | Tuesday, October 10, 2023 11:59pm ET | Wednesday, February 21, 2024 11:59pm ET |
| Award Notification | Tuesday, January 2, 2024** | Monday, May 20, 2024** |
| Projected Grant Start Date | Monday, February 12, 2024 | Monday, July 1, 2024 |



Application Assistance



[Phase 0 application assistance](#) for first-time DOE applicants
(begins when topics are released)

Email us!

General questions: sbir-sttr@science.doe.gov

Get Connected!

Subscribe to our mailing list: <https://science.osti.gov/sbir>

Stay Connected!



Recorded Topic and FOA Webinars

Application Process “Ask Us Anything” Webinars



Being on our mailing list is the most important way to stay up to date on our funding opportunities!



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

DOE Application Review Criteria

Technical Merit

Ability to Carry Out
the Project

Impact

PIER Plan

- Idea is novel
- Must be R&D!
- Responsiveness to the topic & subtopic
- Solid work plan to prove feasibility
- Team composed of the right expertise
- Societal & Scientific Impact; Commercial opportunity
- [Solid plan](#) for promoting equity and inclusion (*new FY24!* – [review webinar](#))

Phase II Cybersecurity Self-Assessment

- New Phase II application requirement that uses Cybersecurity and Infrastructure Security Agency's (CISA) Cybersecurity Performance Goals (CPG) Checklist for the self-assessment; <https://www.cisa.gov/resources-tools/resources/cisa-cpg-checklist>
- Review [overview webinar](#) held on November 1 and [slides](#)
- Cybersecurity self-assessment is evaluated as part of DOE's assessment of risk; DOE may elect not to fund applications that present unacceptably high levels of risk
- Questions - contact Florence Carr (new cybersecurity specialist) - florence.carr@science.doe.gov



DOE SBIR/STTR Resources



Early-Stage
Innovation
SBIR & STTR

Commercialization
Private Funding



Applicant Resources

Sequential Phase IIs

Phase 0 Application Assistance

Phase I Commercialization Program

Phase Shift I & Phase Shift II

TABA funds

Partnering Resources and Phase II Workshops

Diversity Supplement for Phase II Awardees

Other DOE Resources



Early-Stage
Innovation
SBIR & STTR

Commercialization
Private Funding



Partnering with National Laboratories
National Labs – POCs and Core Capabilities
Technology Commercialization Fund (TCF)

Demonstration Facilities: Idaho, NREL, ORNL
Office of Clean Energy Demonstrations
Loan Programs Office

Lab-Embedded Entrepreneurship Program (LEEP)
OTT/OCED/EERE Voucher Program
American-Made Challenges
National Energy Research Scientific Computing Center (NERSC)



U.S. DEPARTMENT OF
ENERGY

Office of SBIR/STTR
Programs

Questions??

We value your feedback to help us improve
the DOE SBIR/STTR Programs

Interested in understanding your individual
partnering needs

carol.rabke@science.doe.gov
585.576.7981

eileen.chant@science.doe.gov

dave.mccarthy@science.doe.gov

florence.carr@science.doe.gov



<https://www.sbirpartnering.com/>





Looking for PARTNERS?



<https://www.sbirpartnering.com/>



What to Watch for When Licensing

PRESENTED BY

Jenny C. Servo, Ph.D.



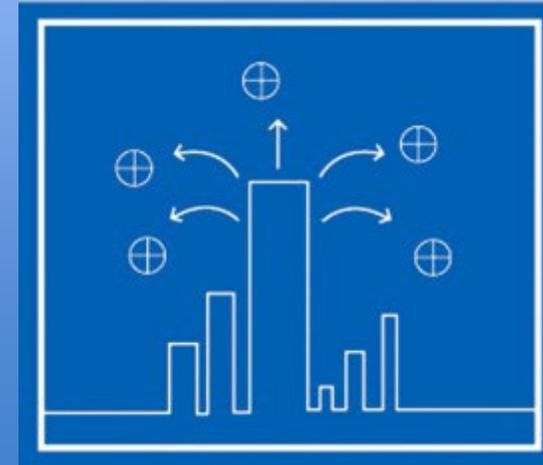
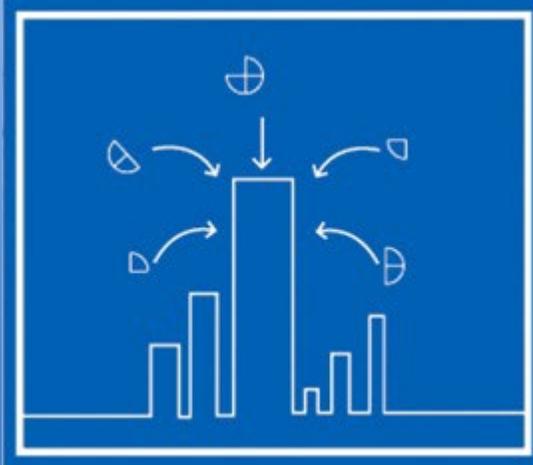
Topics



- **Definitions**
 - Licensing in, licensing out, licensor, licensee
- **How to make money from licensing?**
- **Types of Licenses**
- **Preparation for licensing**
- **Clauses that can trip you up**
- **Elements of a licensing package**
 - Business opportunity preview
 - Assessment of potential licensees
 - Negotiation issues

Terminology

- **Licensing-in:** A firm obtains a license to expand its IP assets
 - Licensee
- **Licensing-out:** A firm spins out its IP for use by others
 - Licensor



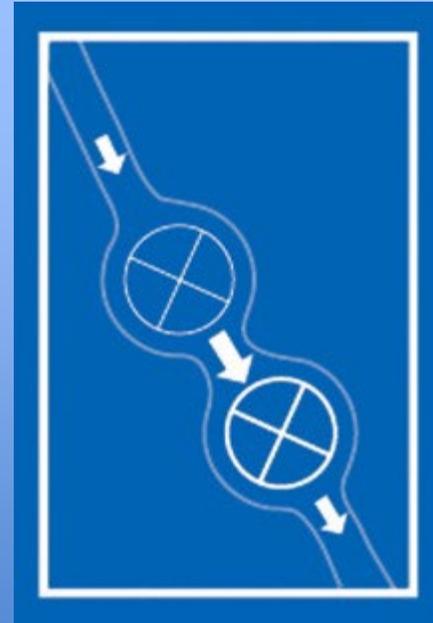
Why Companies License-in



Reduce cost
of R&D



Share financial
risk on pioneer
technologies

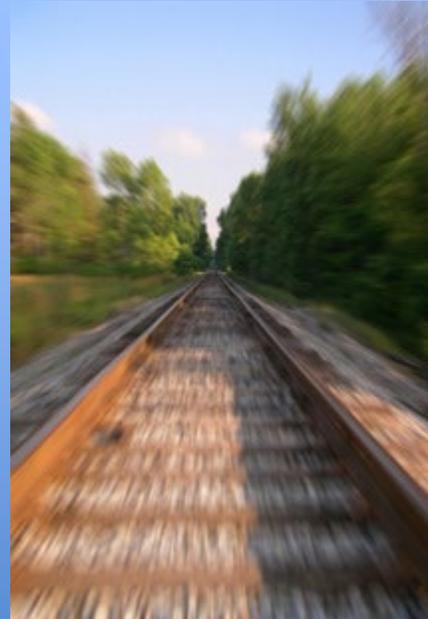


Pump more through
existing distribution
channels

Why Companies License-in



Decrease
Production costs



More rapidly
develop market
penetration



Prevent new
Approaches entering
market



Implications

You need to understand the specific needs of potential licensees

- Demonstrate to potential licensee, how a relationship with your firm can potential help meet their objectives



Outsourcing R&D

- Patent searches
- Relationships with federal labs, universities, agents, manufacturers
- Trade Shows
- Licensing Executive Society (LES)



Licensee's Perspective

- **Technology Acquisition Process**

- Identification of need
- Technology sourcing
- Technology assessment
- License negotiations
- Financing
- Transfer of Technology
- Implementation
- Termination of License



Synergy with Licensees Strengths

- **Technology Concerns**

- Does it build on their technology strengths

- **Market Concerns**

- Potential sales and profit
- Use of marketing, sales, and distribution channels
- Enhance competitive advantage

- **Overall Concerns**

- What corporate resources will be required
 - Numbers and types of employees
 - Manufacturing costs
 - Additional funding required



Technology Assessment

- **Market Potential**
 - Market size
 - Stage of market development
 - Economic health
 - Competitive advantage
- **Strength of IP**
 - Pioneer patent
 - Degree of development
- **Synergy with Licensee's Strategy**
 - Synergy with marketing, sales, distribution
 - Synergy with technology
- **Industry Standards**



What Does Each Party Bring?

- Intellectual Property
- Prototype
- Production plan
- Certifications
- Customers
- Facility

Licensor

Licensee

- \$ for scale up
- Marketing/Sales
- Production
- Name recognition
- Intellectual property

What is a License?

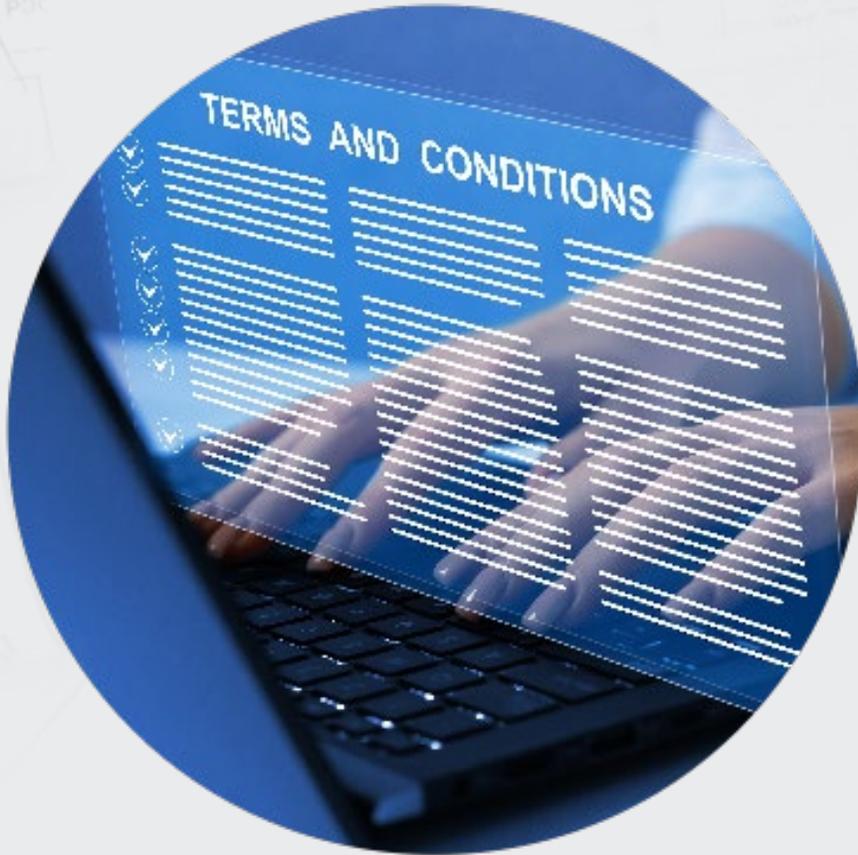
*“Permission granted by an owner or inventor, generally for a consideration to a person, firm, or corporation to **use** the owner’s proprietary information, invention, or material.”*



Licenses



Variations in “Use”



- Evaluation
- Manufacture
- Use
- Lease
- Distribution
- Combination thereof
 - *Licensor retains ownership/title of IP*

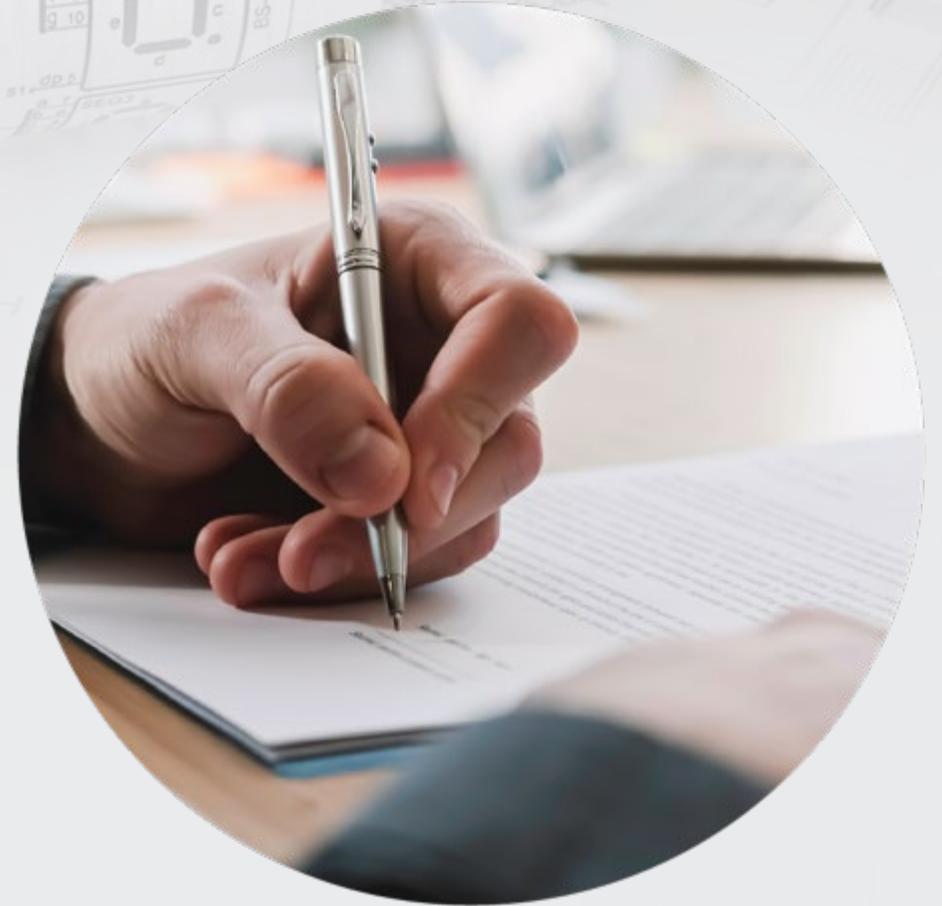
Definition of Licensed Property

- With registered items (copyright, trademark, patents) be sure to include the registration number
- One license can cover single or multiple products
 - *The more restrictive the license, the smaller the royalty*



Licensors Title

- **Do you, the licensor, have clear title?**
 - Is there a university involved
 - Are there co-inventors?
 - Special issues with biologicals
- **Consider a “right-to-use” study in order to assure clear title**



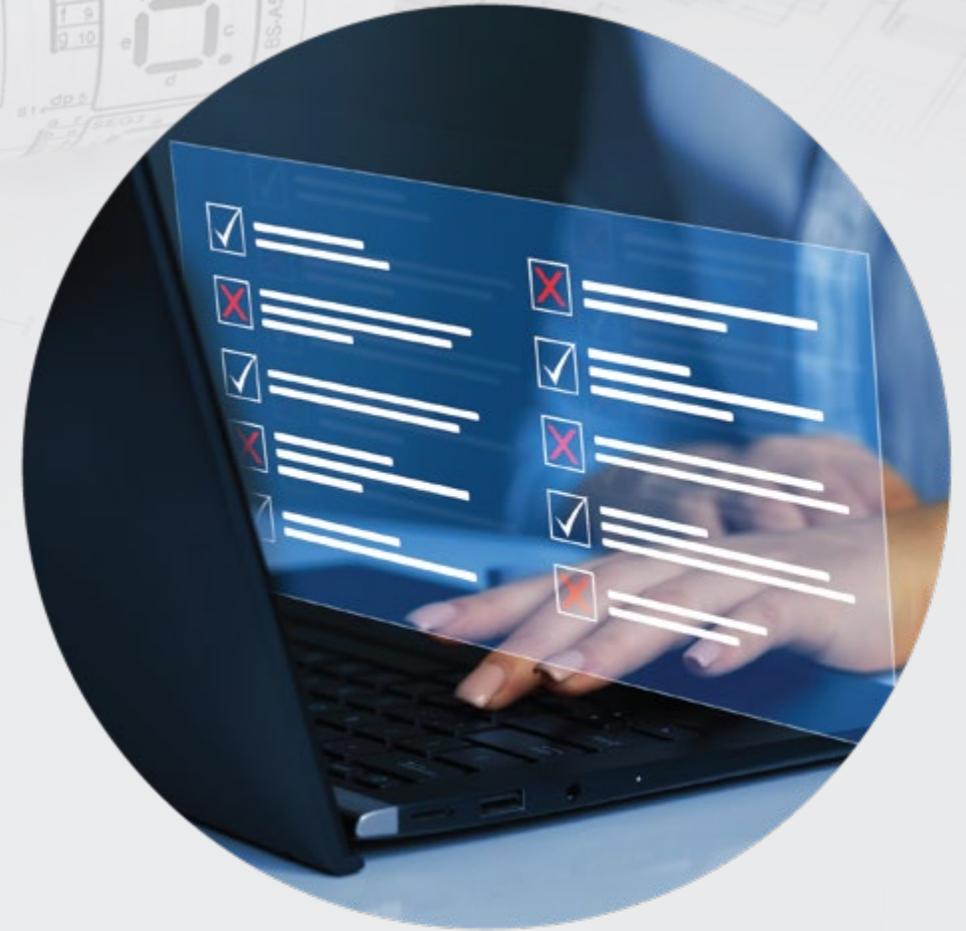
Who is the Licensee?



- **Do the terms of the license extend to**
 - Subsidiaries
 - Related companies and affiliates
 - Strictly the company named

Exclusive Licenses

- **Will the terms restrict your rights to continue to conduct R&D in this field?**
 - Assure that licensor rights are expressly clarified in the license
- **Consider granting an exclusive license with a clause to revert to non-exclusive if performance criteria are not met**
 - Also consider, losing license for non-performance



Territory

- **Can vary in scope**
 - Highly restrictive – use at one site
 - Very lenient – Global
- **Best to provide rights only to a territory where licensee has appropriate sales, marketing, and distribution channels**

Issues



Licenses

- **Indemnification**

- **One party to a contract holds the other party harmless in the event that a lawsuit is brought by a third party**

- If you accept the indemnity, you are saying that you are legally responsible and will act as a shield

- **Things to consider**

- Is the indemnity limited to certain types of claims, certain geographic regions, a specific dollar amount
- Special issues with open-source software



Licensee/Licensors Indemnification

- “Licensor shall indemnify Licensee and hold Licensee harmless from any damages and liabilities (including reasonable attorneys’ fees and costs)....”
- “Licensee shall indemnify Licensor and hold Licensor harmless from any damages and liabilities (including reasonable attorneys’ fees and costs)....”

Sample, partial clauses taken from License Your Invention by Attorney Richard Stim

Such clauses should be negotiated, and full implication understood

Issues

- **“Best or reasonable efforts” clause**
 - This is an indication of how much effort the licensee shall put into promoting the licensed technology
 - Very weak clause from a licensor’s perspective
 - Alternatives desirable from licensor’s perspective
 - Quantified performance criteria
 - Upfront payment to assure performance
 - Requirements for minimum annual royalties
 - Conversion from exclusive to non-exclusive license for failure to perform
 - Reversion of all right, title and interest to assignor

Issues



**MERGERS AND
ACQUISITIONS**

- **Assignability**
 - **A clarification of the party to whom the rights are assigned**
 - Affiliates, acquirers, subsidiaries
 - Do you know who owns whom?
 - **What happens to those rights in the case of a merger/acquisition**
 - **What happens to those rights in the case of a bankruptcy?**

Assignability Clauses

- **Restrictive clause**

- “Licensee will not assign, transfer, or encumber its interest in this agreement, or the rights granted to Licensee without the prior written consent of Licensor...”

- **Less restrictive clause**

- “Licensee can assign its interest in this Agreement to a third party whereby the third party buys or otherwise acquires all the assets of the licensee to which the agreement relates...”



Excerpts from Companion to Licensing Negotiations - Robert Goldscheider

Issues

- **Sublicensing**

- Provides the licensee with the right to sublicense or transfer rights to another to make or sell your invention
- Why would licensee want to do this?
 - Spin-offs
 - Sales and distribution in other countries
- How can licensor protect itself?
 - Require prior written approval



Sublicensing Clauses

- **No rights without approval**
 - “The exclusive license granted does not include the right to sublicense without the prior written approval of Licensee....”
- **Approved with conditions**
 - “Licensor grants licensee the right to grant sub-licenses in the licensed territory provided that
 - Each sub-license has a grant which is consistent with...”

Excerpts from Companion to Licensing Negotiations - Robert Goldscheider

Issues

- **Termination**

- The conclusion of a license
- Can occur based on

- **Fixed time**
- **At will**
- **Contract problems**
- **Bankruptcy**



Termination

- **Based on time**
 - Upon expiration of the term of this Agreement... Licensee shall surrender or deliver to Licensor...”
- **Based on time**
 - Upon expiration of earlier termination of this Agreement, Licensee and any sublicensee will immediately and without notice deliver to Licensor...”

Excerpts from Companion to Licensing Negotiations - Robert Goldscheider

Termination

- **Breach**

- “...if Licensee shall violate any of its material obligations under this Agreement, Licensor shall have the right to terminate this agreement...”

- **Licensee’s Abandonment**

- “If Licensor notifies Licensee of failure to carry out the terms of this Agreement so as to exploit the Technology as granted herein for any 12 consecutive month period...”



Excerpts from Companion to Licensing Negotiations - Robert Goldscheider

Issues

- **Improvements**

- Improvements are enhancements to the licensed technology that could be made by either party
- Define the domain of relevant improvements at the outset
 - Restrictive - relates to licensed technology and are patentable
 - Less restrictive - Any advances that relate to licensed technology whether or not they are patentable



Issues

- **Grant-backs**

- Provides rights to licensor of original technology to improvements

- Cross-license, assign, or grants back rights to improvements in the technology that the licensee may make
- Licensee may restrict licensor's right to sublicense improvements; may request reduction in royalties in exchange



Improvements and Grantbacks

- **Improvements**
 - “Licensor and licensee shall cooperate closely with one another ...Licensor shall have a world-wide, royalty-free, irrevocable, nonexclusive and noassignable license..”
- **Improvements**
 - “Licensee and Licensor will have a royalty-free license to use all of these improvements and modifications...”



Improvements and Grantbacks



- **Grantbacks by Licensee**

- To the extent that Licensee develops technology outside the scope of licensor’s intellectual property rights ... licensee will not be obligated to pay royalties to licensor

- **Definitions**

- “Licensee’s Improvement Patents” will mean all patents and patent applications of all countries owned, acquired, or controlled by licensee during the term...provided that the claims thereof cover inventions falling within the scope of one or more of licensed patent claims.....”

How to Make Money with Licensing?



Royalties

- **Time Considerations**
 - Constant rate
 - Change over time
 - Minimum and/or maximum payments
- **Upfront Development Fees**
 - Usually booked against future royalties
- **Benchmark Against Industry Standards**



Royalties Based on Gross Receipts

- **Percentage of gross revenues received from the sale of licensed products incorporating the licensed technology during a specified period or time**
 - **Good for licensor, bad for licensee as it does not take into account sales costs**



Royalties Based on Net Sales



- Royalties are based on money collected from royalty-generating sales less various costs of the licensee including taxes, shipping, insurance, commissions, import/export duties, and discounts, rebates, and credits for returned products.
- What constitutes “net sales” should be defined in the licensing agreement
- It is also desirable from a licensor’s perspective that there be either a cap placed on such costs or a minimum royalty payment.

Non-Sales Royalties

- **Up-front payment or fee**
- **Recurring fees**
 - Independent of royalties, may increase or decrease
- **Milestone payments**
 - Prototype
 - Successful test results
 - Receipt of regulatory approval
- **Minimum royalties independent of sales**



Preparing for Negotiations

- **Prepare a Licensing Package**
 - Business Opportunity Preview
 - Addresses licensee's concerns regarding market
 - Assessment of Potential Licensees
 - Negotiation Issues



Business Opportunity Preview™

- **First part of a business plan (with a spin)**
 - Company and Technology
 - Customers
 - Market
 - Competitors
- **Strategic advantage to potential licensee**
 - Executive Summary



Assessment of Potential Licensees

- **Starting point - Define potential domain**
 - Who is citing your patents? Your research?
 - Who provides raw materials to this industry
 - Whose business will change by your entry
 - Positively - savings, new products
 - Negatively - leapfrog
 - **Who has competing products**
- **Quickly determine**
 - Financial health
 - Reputation



Assessment of Potential Licensees



- **Evaluate and contrast potential candidates**
 - Evaluate Core competencies
 - R&D
 - Manufacturing
 - Marketing, sales, distribution
 - Evaluate strategic direction
 - Tools used to achieve strategic goals
 - Outsourcing R&D, acquisition mergers, divestiture
 - Issues facing potential licensee
 - Strategic advantage of your technology to licensee

Negotiation Issues

- Relevant Intellectual Property
- Partitioning the Opportunity
- Rights You Wish to Retain
- Consulting and Development Role
- What are you willing to provide
- What licensee would need to provide



Licenses



Preparing to License – Lesson Learned

Basudeb Saha, Ph.D.
RiKarbon, Inc.
www.rikarbon.com



© RiKarbon, Inc.

Revolutionizing Carbon

Outline

- **RiCarbon Introduction**
- **Lesson learned from a successful licensing agreement**
 - Why considered licensing
 - Key terminology and lesson learned
 - Pros & Cons



RiCarbon Snapshot

Value Proposition

High-performance oils upcycled from agricultural waste

Unique Solution

Proven at pilot; 8 patent-pending on processes/composition

Large Market

9 B\$ global addressable market in personal care and lubricants

Customer Traction

Secured purchase LOI & license agreement

Business Plan

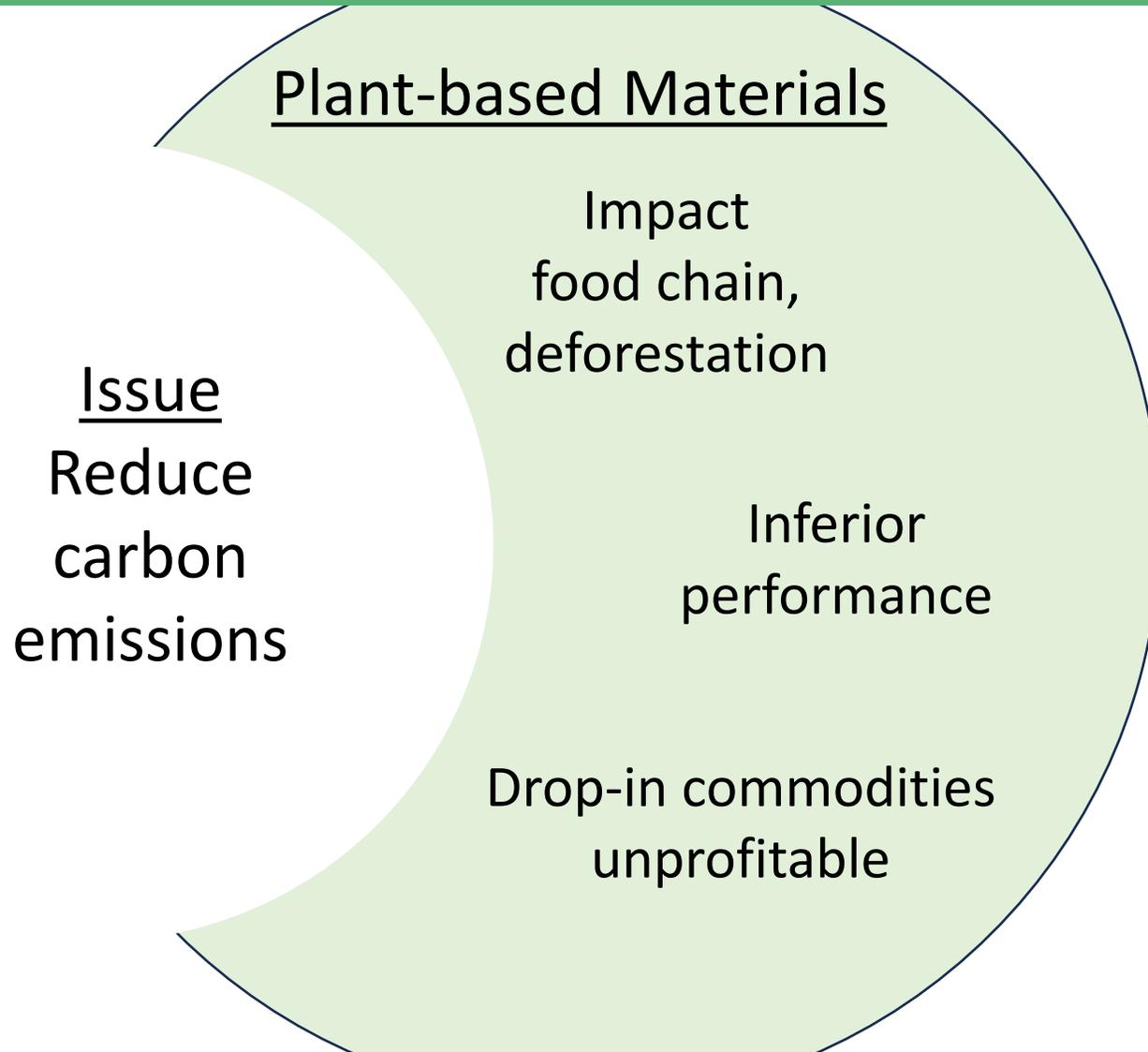
Specialty materials company with 10X valuation of EDITDA

Next Step

Raising investment to manufacture and satisfy customer



Contributing to Practical Decarbonization



RiKarbon

Non-food Biomass Feedstocks



High Value Performance Products



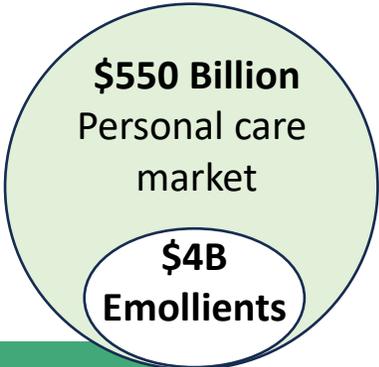
RiCarbon Markets

Personal Care / Cosmetic Emollients



Skin Care
Hair Care
Cosmetics

- Consumers prefer natural
- Increasing regulatory pressure
- Incumbent product deselection



UpSycal[®] Emollients
Dry, non-greasy, shiny, silky feel
Colorless & odorless
Formulation flexibility, stability & performance benefits

Lubricant Base Oil



Automotive
Hydraulic fluids
Compressor fluids
Food-grade
Marine

- Poor carbon footprint of PAOs and crude oils
- Bio-based oils performance limitations



UpSycal[®] Bio-PAO
PAO-like properties
2 – 4 cSt viscosity range



The Agreement Announced

<https://www.basf.com/global/en/media/news-releases/2022/09/p-22-347.html>

BASF – RiKarbon

Joint News Release

September 21, 2022



BASF announced innovation partnership with RiKarbon on emollients derived from bio-waste

- Partnership builds on **successful product innovation and scale up demonstration of RiKarbon Inc.** for new green emollients from bio-waste for personal care formulations
- **BASF to leverage its customer access and manufacturing capabilities** to scale-up RiKarbon's technology

Partnership enabled successful commercialization of our technology during initial Phase II performance period



Revolutionizing Carbon

Where Started?

- Connected from a startup pitch presentation at the Chemical Venture Conf
- Signed necessary confidential agreements
- Signed product development agreement
- Delivered agreed milestones – very important
- Received exclusive supply order for product
 - Through toll manufacturing
 - Price agreed
 - Vol determined
 - Toller was not able to meet the timeline
- **Technology license negotiation started – took ~six months to execute**



Key Terminology and Our Lesson -1

➤ **Licensed IP, Licensed patent, Licensed product**

Licensed patent = The patent and/or patent applications under consideration

Licensed IP = Licensed patents and know-how

Licensed product = All products or only one product or a few specific products
Define properties/specifications of the product(s) under consideration

Exclusive vs non-exclusive



Key Terminology and Our Lesson - 2

➤ **Territory, Field of use**

Territory = Country or countries where at least one patent that falls under the Licensed IP is granted and still active

Field of Use = Define field of use for exclusive vs non-exclusive patents/ patent IP



Key Terminology and Our Lesson - 3

➤ Fees, Royalty, Net sales, Minimum Royalty

Fees = Upfront payment for exclusivity

Royalty = A certain percentage on Net Sales

Pay attention to “**Before the licensed patent**”

“**During the Licensed patent**”

“**After the licensed patent**”

Net Sales = Gross amount invoiced by Licensee, its agents, its affiliates ***minus* Deduction**

Deduction = costs for distribution, discounts, taxes, credits or refunds.....

Minimum Royalty = Minimum amount to be paid by quarter irrespective of Net Sales



Key Terminology and Our Lesson - 4

➤ Patent Prosecution and Maintenance

- Patent prosecution is expensive
- Think carefully which country to cover
- Who will pay
- IF licensor to pay, this cost should be considered in the royalty rate negotiation



Key Terminology and Our Lesson - 5

➤ **Enforcement**

- The licensed patent/IP/product is infringed by a third party in the field of use in the territory
- A third party alleges the licensed patent/IP is invalid and/or the licensed product's manufacture infringes the third party's IP right in the field of use in the territory
- Licensor to defend any such allegation/infringement
- Licensee may initiate the legal proceeding against such infringer upon Licensor's approval
- **Make sure it is clear who will pay the cost**



Technology License – Pros & Cons

Pros

- Facilitate fast market entry
- Create partnership
- Enhance valuation
- Provide some immediate cash
- Validate technology merits
- Convert a potential infringer into a collaborator

Cons

- Create a new competition
- Licensed patent placed in back-shelf
- Litigation risks
- Investment risks

Thank you

RiKarbon, Inc.
info@rikarbon.com
www.rikarbon.com





IP solutions you can trust to transform your business

Clarivate intellectual property solutions and services

Harnessing disparate capabilities across a fragmented market

Expertise

6,500+

Clarivate employees dedicated to IP

5M

patents and 1.5M+ trademarks renewed

40

patent offices use Clarivate data for their prior art examination

Data

141M+

quality-checked trademark records

143M+

global patent records normalized and enhanced

9M+

IP cases from 3,817 courts worldwide, including case law data for 6+ m marks and 1.5+m patent cases

Software

1600+

corporations and law firms use our solutions to manage their IP

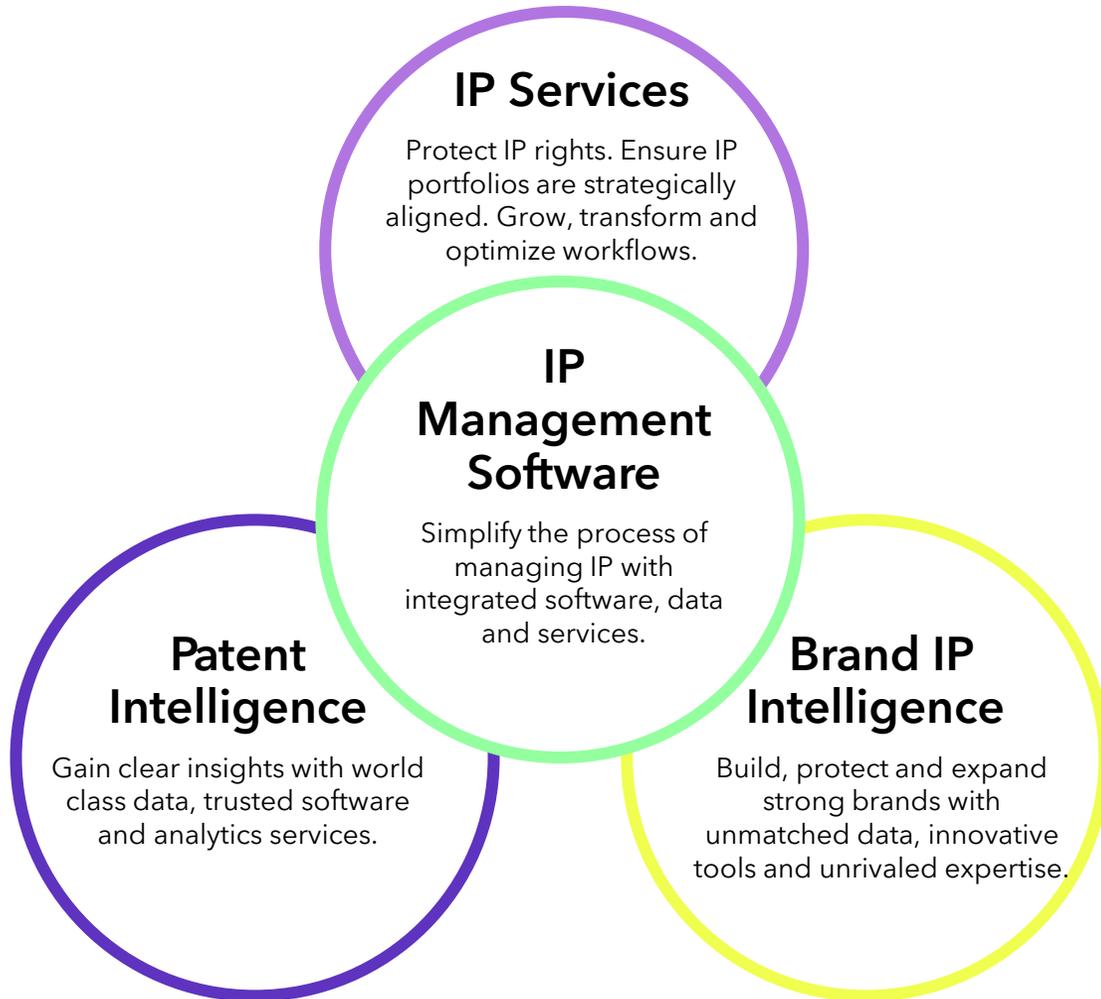
40,000+

IP professionals use Clarivate software to make better decisions

The result

A unique combination of strengths

The Clarivate IP portfolio



IP Maintenance & Administrative Services

Patent & Trademark Recordals
Patent & Trademark Maintenance
European Patent Validation
Assigned Paralegals

Data Validation
Docketing
Filing and Prosecution
Invoice Management
Connect

Patent Intelligence

Derwent™
Innography™
incoPat
Darts-ip™

Patent search
Patent watch
Patent analytics
Patent data and APIs

Brand IP Intelligence

CompuMark™
Darts-ip™
Brand Landscape Analyzer
Trademark Watch Analyzer

Trademark search
Trademark watch
Litigation intelligence
Industrial design & copyright services

IP Management Software

IPfolio™
Unycom™
Memotech™
The IP Management System
Ipendo™

FoundationIP™
Inprotech™
Patrawin™
Connect

Our customers



10/10

Largest tech companies

[View source](#)



97/100

Top global brands

[View source](#)



48/50

Largest R&D spenders globally

[View source](#)



8/10

Top sustainable manufacturers

[View source](#)

